APPENDIX H

RI LABORATORY DATA

PART 6

L1151886-L1204945

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

October 29, 2019

PES Environmental, Inc.- WA

Sample Delivery Group:	L1151886
Samples Received:	10/19/2019
Project Number:	1413.001.02.501E
Description:	American Linen
Site:	AMERICAN LINEN
Report To:	Brian O'Neal/Bill Haldeman
	1215 Fourth Ave., Suite 1350
	Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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MW-123-101819 L1151886-01 GW

Collected by: K. Zygas | Collected date/time: 10/18/19 09:55 | Received date/time: 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1368516	1	10/24/19 17:52	10/24/19 17:52	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1365799	1	10/19/19 15:43	10/19/19 15:43	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1368322	1	10/25/19 13:47	10/25/19 13:47	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366331	10	10/25/19 08:01	10/28/19 11:15	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1366962	1	10/22/19 08:04	10/22/19 08:04	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 19:23	10/26/19 19:23	ACG	Mt. Juliet, TN

MW-125-101819 L1151886-02 GW

Collected by: K. Zygas | Collected date/time: 10/18/19 11:05 | Received date/time: 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1368516	1	10/24/19 18:00	10/24/19 18:00	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1365799	1	10/19/19 16:34	10/19/19 16:34	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1368322	1	10/25/19 14:06	10/25/19 14:06	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366331	20	10/25/19 08:01	10/28/19 11:19	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1368064	1	10/24/19 23:09	10/24/19 23:09	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1366962	1	10/22/19 08:07	10/22/19 08:07	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 19:43	10/26/19 19:43	ACG	Mt. Juliet, TN

W-MW-02-101819 L1151886-03 GW

Collected by: K. Zygas | Collected date/time: 10/18/19 12:10 | Received date/time: 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1368516	1	10/24/19 18:07	10/24/19 18:07	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1365799	1	10/19/19 17:00	10/19/19 17:00	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1368322	1	10/25/19 14:25	10/25/19 14:25	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366331	20	10/25/19 08:01	10/28/19 11:22	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1368064	10	10/24/19 23:55	10/24/19 23:55	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1366962	10	10/22/19 08:59	10/22/19 08:59	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 20:02	10/26/19 20:02	ACG	Mt. Juliet, TN

MW-104-101819 L1151886-04 GW

Collected by: K. Zygas | Collected date/time: 10/18/19 13:00 | Received date/time: 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1368516	1	10/24/19 18:16	10/24/19 18:16	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1365799	1	10/19/19 17:26	10/19/19 17:26	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1368322	1	10/25/19 15:55	10/25/19 15:55	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366331	10	10/25/19 08:01	10/28/19 11:25	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1368064	1	10/25/19 00:23	10/25/19 00:23	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1366962	1	10/22/19 08:26	10/22/19 08:26	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 20:22	10/26/19 20:22	ACG	Mt. Juliet, TN

MW-106-101819 L1151886-05 GW

Collected by: K. Zygas | Collected date/time: 10/18/19 15:15 | Received date/time: 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1368516	1	10/24/19 18:24	10/24/19 18:24	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1365799	1	10/19/19 17:38	10/19/19 17:38	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1368322	1	10/25/19 16:09	10/25/19 16:09	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366331	10	10/25/19 08:01	10/28/19 11:29	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1368064	1	10/25/19 00:50	10/25/19 00:50	ADM	Mt. Juliet, TN

MW-106-101819 L1151886-05 GW

Collected by: K. Zygas
Collected date/time: 10/18/19 15:15
Received date/time: 10/19/19 08:45

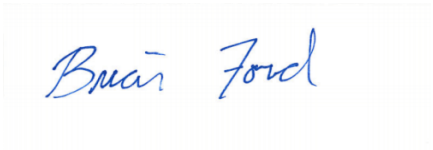
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method RSK175	WG1366962	1	10/22/19 08:30	10/22/19 08:30	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 20:42	10/26/19 20:42	ACG	Mt. Juliet, TN

TB-101819 L1151886-06 GW

Collected by: K. Zygas
Collected date/time: 10/18/19 15:30
Received date/time: 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1368064	1	10/24/19 19:11	10/24/19 19:11	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 15:48	10/26/19 15:48	ACG	Mt. Juliet, TN

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



Brian Ford
Project Manager

Sample Delivery Group (SDG) Narrative

VOC pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1151886-03	W-MW-02-101819	8260C

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	409000		2710	20000	1	10/24/2019 17:52	WG1368516

Sample Narrative:

L1151886-01 WG1368516: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	22900		51.9	1000	1	10/19/2019 15:43	WG1365799
Nitrate	U		22.7	100	1	10/19/2019 15:43	WG1365799
Sulfate	5610		77.4	5000	1	10/19/2019 15:43	WG1365799

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5560		102	1000	1	10/25/2019 13:47	WG1368322

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5140		150	1000	10	10/28/2019 11:15	WG1366331
Manganese	1860		2.50	50.0	10	10/28/2019 11:15	WG1366331

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	4380		0.287	0.678	1	10/22/2019 08:04	WG1366962
Ethane	U		0.296	1.29	1	10/22/2019 08:04	WG1366962
Ethene	U		0.422	1.27	1	10/22/2019 08:04	WG1366962

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.19	J	1.05	25.0	1	10/26/2019 19:23	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 19:23	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 19:23	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 19:23	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 19:23	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 19:23	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 19:23	WG1370189
Bromomethane	U	J0	0.157	2.50	1	10/26/2019 19:23	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 19:23	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 19:23	WG1370189
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 19:23	WG1370189
Carbon disulfide	U		0.101	0.500	1	10/26/2019 19:23	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 19:23	WG1370189
Chlorobenzene	U		0.140	0.500	1	10/26/2019 19:23	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 19:23	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 19:23	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 19:23	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 19:23	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 19:23	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 19:23	WG1370189

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 19:23	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 19:23	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 19:23	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 19:23	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 19:23	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 19:23	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 19:23	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 19:23	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 19:23	WG1370189
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 19:23	WG1370189
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/26/2019 19:23	WG1370189
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/26/2019 19:23	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 19:23	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 19:23	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 19:23	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 19:23	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 19:23	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 19:23	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 19:23	WG1370189
Di-isopropyl ether	0.163	J	0.0924	0.500	1	10/26/2019 19:23	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 19:23	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 19:23	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 19:23	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 19:23	WG1370189
Iodomethane	U	J0	0.377	10.0	1	10/26/2019 19:23	WG1370189
Isopropylbenzene	U	J0	0.126	0.500	1	10/26/2019 19:23	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 19:23	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 19:23	WG1370189
Methylene Chloride	U		1.07	2.50	1	10/26/2019 19:23	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 19:23	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 19:23	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 19:23	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 19:23	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 19:23	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 19:23	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 19:23	WG1370189
1,1,2-Trichlorotrifluoroethane	U	J0	0.164	0.500	1	10/26/2019 19:23	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 19:23	WG1370189
Toluene	U		0.412	0.500	1	10/26/2019 19:23	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 19:23	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 19:23	WG1370189
1,1,1-Trichloroethane	U	J0	0.0940	0.500	1	10/26/2019 19:23	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 19:23	WG1370189
Trichloroethene	U	J0	0.153	0.500	1	10/26/2019 19:23	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 19:23	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 19:23	WG1370189
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 19:23	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 19:23	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 19:23	WG1370189
Vinyl acetate	U		0.645	5.00	1	10/26/2019 19:23	WG1370189
Vinyl chloride	U		0.118	0.500	1	10/26/2019 19:23	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 19:23	WG1370189
(S) Toluene-d8	*97.6*			*80.0-120*		*10/26/2019 19:23*	WG1370189
(S) 4-Bromofluorobenzene	*93.7*			*77.0-126*		*10/26/2019 19:23*	WG1370189
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*10/26/2019 19:23*	WG1370189

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	481000		2710	20000	1	10/24/2019 18:00	WG1368516

Sample Narrative:
L1151886-02 WG1368516: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	10900		51.9	1000	1	10/19/2019 16:34	WG1365799
Nitrate	31.9	J	22.7	100	1	10/19/2019 16:34	WG1365799
Sulfate	17100		77.4	5000	1	10/19/2019 16:34	WG1365799

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	15300		102	1000	1	10/25/2019 14:06	WG1368322

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	11700		300	2000	20	10/28/2019 11:19	WG1366331
Manganese	3670		5.00	100	20	10/28/2019 11:19	WG1366331

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/24/2019 23:09	WG1368064
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*78.0-120*		*10/24/2019 23:09*	WG1368064

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	997		0.287	0.678	1	10/22/2019 08:07	WG1366962
Ethane	U		0.296	1.29	1	10/22/2019 08:07	WG1366962
Ethene	U		0.422	1.27	1	10/22/2019 08:07	WG1366962

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.79	J	1.05	25.0	1	10/26/2019 19:43	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 19:43	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 19:43	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 19:43	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 19:43	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 19:43	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 19:43	WG1370189
Bromomethane	U	J0	0.157	2.50	1	10/26/2019 19:43	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 19:43	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 19:43	WG1370189
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 19:43	WG1370189
Carbon disulfide	U		0.101	0.500	1	10/26/2019 19:43	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 19:43	WG1370189

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/26/2019 19:43	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 19:43	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 19:43	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 19:43	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 19:43	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 19:43	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 19:43	WG1370189
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 19:43	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 19:43	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 19:43	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 19:43	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 19:43	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 19:43	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 19:43	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 19:43	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 19:43	WG1370189
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 19:43	WG1370189
cis-1,2-Dichloroethene	0.496	J	0.0933	0.500	1	10/26/2019 19:43	WG1370189
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/26/2019 19:43	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 19:43	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 19:43	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 19:43	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 19:43	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 19:43	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 19:43	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 19:43	WG1370189
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 19:43	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 19:43	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 19:43	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 19:43	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 19:43	WG1370189
Iodomethane	U	J0	0.377	10.0	1	10/26/2019 19:43	WG1370189
Isopropylbenzene	U	J0	0.126	0.500	1	10/26/2019 19:43	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 19:43	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 19:43	WG1370189
Methylene Chloride	U		1.07	2.50	1	10/26/2019 19:43	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 19:43	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 19:43	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 19:43	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 19:43	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 19:43	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 19:43	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 19:43	WG1370189
1,1,2-Trichlorotrifluoroethane	U	J0	0.164	0.500	1	10/26/2019 19:43	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 19:43	WG1370189
Toluene	U		0.412	0.500	1	10/26/2019 19:43	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 19:43	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 19:43	WG1370189
1,1,1-Trichloroethane	U	J0	0.0940	0.500	1	10/26/2019 19:43	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 19:43	WG1370189
Trichloroethene	U	J0	0.153	0.500	1	10/26/2019 19:43	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 19:43	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 19:43	WG1370189
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 19:43	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 19:43	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 19:43	WG1370189

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	10/26/2019 19:43	WG1370189
Vinyl chloride	U		0.118	0.500	1	10/26/2019 19:43	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 19:43	WG1370189
(S) Toluene-d8	*95.8*			*80.0-120*		*10/26/2019 19:43*	WG1370189
(S) 4-Bromofluorobenzene	*91.8*			*77.0-126*		*10/26/2019 19:43*	WG1370189
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*10/26/2019 19:43*	WG1370189

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	1230000		2710	20000	1	10/24/2019 18:07	WG1368516

Sample Narrative:

L1151886-03 WG1368516: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	89500		51.9	1000	1	10/19/2019 17:00	WG1365799
Nitrate	U		22.7	100	1	10/19/2019 17:00	WG1365799
Sulfate	U		77.4	5000	1	10/19/2019 17:00	WG1365799

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	37600		102	1000	1	10/25/2019 14:25	WG1368322

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	20500		300	2000	20	10/28/2019 11:22	WG1366331
Manganese	3820		5.00	100	20	10/28/2019 11:22	WG1366331

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		316	1000	10	10/24/2019 23:55	WG1368064
(S) a,a,a-Trifluorotoluene(FID)	*97.4*			*78.0-120*		*10/24/2019 23:55*	WG1368064

Sample Narrative:

L1151886-03 WG1368064: Elevated RL due to foamy matrix.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	32100		2.87	6.78	10	10/22/2019 08:59	WG1366962
Ethane	42.0		2.96	12.9	10	10/22/2019 08:59	WG1366962
Ethene	U		4.22	12.7	10	10/22/2019 08:59	WG1366962

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.54	J	1.05	25.0	1	10/26/2019 20:02	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 20:02	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 20:02	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 20:02	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 20:02	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 20:02	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 20:02	WG1370189
Bromomethane	U	J0	0.157	2.50	1	10/26/2019 20:02	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 20:02	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 20:02	WG1370189

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 20:02	WG1370189
Carbon disulfide	0.262	J	0.101	0.500	1	10/26/2019 20:02	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 20:02	WG1370189
Chlorobenzene	U		0.140	0.500	1	10/26/2019 20:02	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 20:02	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 20:02	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 20:02	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 20:02	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 20:02	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 20:02	WG1370189
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 20:02	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 20:02	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 20:02	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 20:02	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 20:02	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 20:02	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 20:02	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 20:02	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 20:02	WG1370189
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 20:02	WG1370189
cis-1,2-Dichloroethene	2.07		0.0933	0.500	1	10/26/2019 20:02	WG1370189
trans-1,2-Dichloroethene	0.278	J	0.152	0.500	1	10/26/2019 20:02	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 20:02	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 20:02	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 20:02	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 20:02	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 20:02	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 20:02	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 20:02	WG1370189
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 20:02	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 20:02	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 20:02	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 20:02	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 20:02	WG1370189
Iodomethane	U	J0	0.377	10.0	1	10/26/2019 20:02	WG1370189
Isopropylbenzene	U	J0	0.126	0.500	1	10/26/2019 20:02	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 20:02	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 20:02	WG1370189
Methylene Chloride	U		1.07	2.50	1	10/26/2019 20:02	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 20:02	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 20:02	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 20:02	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 20:02	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 20:02	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 20:02	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 20:02	WG1370189
1,1,2-Trichlorotrifluoroethane	U	J0	0.164	0.500	1	10/26/2019 20:02	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 20:02	WG1370189
Toluene	1.79		0.412	0.500	1	10/26/2019 20:02	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 20:02	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 20:02	WG1370189
1,1,1-Trichloroethane	U	J0	0.0940	0.500	1	10/26/2019 20:02	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 20:02	WG1370189
Trichloroethene	U	J0	0.153	0.500	1	10/26/2019 20:02	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 20:02	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 20:02	WG1370189

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 20:02	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 20:02	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 20:02	WG1370189
Vinyl acetate	U		0.645	5.00	1	10/26/2019 20:02	WG1370189
Vinyl chloride	3.56		0.118	0.500	1	10/26/2019 20:02	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 20:02	WG1370189
(S) Toluene-d8	*91.6*			*80.0-120*		*10/26/2019 20:02*	WG1370189
(S) 4-Bromofluorobenzene	*89.3*			*77.0-126*		*10/26/2019 20:02*	WG1370189
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*10/26/2019 20:02*	WG1370189

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	203000		2710	20000	1	10/24/2019 18:16	WG1368516

Sample Narrative:
L1151886-04 WG1368516: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	13500		51.9	1000	1	10/19/2019 17:26	WG1365799
Nitrate	U		22.7	100	1	10/19/2019 17:26	WG1365799
Sulfate	5970		77.4	5000	1	10/19/2019 17:26	WG1365799

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2300	B	102	1000	1	10/25/2019 15:55	WG1368322

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1330		150	1000	10	10/28/2019 11:25	WG1366331
Manganese	268		2.50	50.0	10	10/28/2019 11:25	WG1366331

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/25/2019 00:23	WG1368064
(S) a,a,a-Trifluorotoluene(FID)	*96.6*			*78.0-120*		*10/25/2019 00:23*	WG1368064

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	316		0.287	0.678	1	10/22/2019 08:26	WG1366962
Ethane	U		0.296	1.29	1	10/22/2019 08:26	WG1366962
Ethene	23.7		0.422	1.27	1	10/22/2019 08:26	WG1366962

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.88	J	1.05	25.0	1	10/26/2019 20:22	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 20:22	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 20:22	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 20:22	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 20:22	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 20:22	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 20:22	WG1370189
Bromomethane	U	J0	0.157	2.50	1	10/26/2019 20:22	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 20:22	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 20:22	WG1370189
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 20:22	WG1370189
Carbon disulfide	U		0.101	0.500	1	10/26/2019 20:22	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 20:22	WG1370189

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/26/2019 20:22	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 20:22	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 20:22	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 20:22	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 20:22	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 20:22	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 20:22	WG1370189
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 20:22	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 20:22	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 20:22	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 20:22	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 20:22	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 20:22	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 20:22	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 20:22	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 20:22	WG1370189
1,1-Dichloroethene	0.799		0.188	0.500	1	10/26/2019 20:22	WG1370189
cis-1,2-Dichloroethene	16.3		0.0933	0.500	1	10/26/2019 20:22	WG1370189
trans-1,2-Dichloroethene	0.329	J	0.152	0.500	1	10/26/2019 20:22	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 20:22	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 20:22	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 20:22	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 20:22	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 20:22	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 20:22	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 20:22	WG1370189
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 20:22	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 20:22	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 20:22	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 20:22	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 20:22	WG1370189
Iodomethane	U	J0	0.377	10.0	1	10/26/2019 20:22	WG1370189
Isopropylbenzene	U	J0	0.126	0.500	1	10/26/2019 20:22	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 20:22	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 20:22	WG1370189
Methylene Chloride	U		1.07	2.50	1	10/26/2019 20:22	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 20:22	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 20:22	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 20:22	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 20:22	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 20:22	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 20:22	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 20:22	WG1370189
1,1,2-Trichlorotrifluoroethane	U	J0	0.164	0.500	1	10/26/2019 20:22	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 20:22	WG1370189
Toluene	U		0.412	0.500	1	10/26/2019 20:22	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 20:22	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 20:22	WG1370189
1,1,1-Trichloroethane	U	J0	0.0940	0.500	1	10/26/2019 20:22	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 20:22	WG1370189
Trichloroethene	1.54	J0	0.153	0.500	1	10/26/2019 20:22	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 20:22	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 20:22	WG1370189
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 20:22	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 20:22	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 20:22	WG1370189

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	10/26/2019 20:22	WG1370189
Vinyl chloride	33.2		0.118	0.500	1	10/26/2019 20:22	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 20:22	WG1370189
(S) Toluene-d8	*94.7*			*80.0-120*		*10/26/2019 20:22*	WG1370189
(S) 4-Bromofluorobenzene	*91.6*			*77.0-126*		*10/26/2019 20:22*	WG1370189
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*10/26/2019 20:22*	WG1370189

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	276000		2710	20000	1	10/24/2019 18:24	WG1368516

Sample Narrative:
L1151886-05 WG1368516: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	25800		51.9	1000	1	10/19/2019 17:38	WG1365799
Nitrate	U		22.7	100	1	10/19/2019 17:38	WG1365799
Sulfate	17000		77.4	5000	1	10/19/2019 17:38	WG1365799

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2320	B	102	1000	1	10/25/2019 16:09	WG1368322

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2640		150	1000	10	10/28/2019 11:29	WG1366331
Manganese	792		2.50	50.0	10	10/28/2019 11:29	WG1366331

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/25/2019 00:50	WG1368064
(S) a,a,a-Trifluorotoluene(FID)	*94.0*			*78.0-120*		*10/25/2019 00:50*	WG1368064

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	47.2		0.287	0.678	1	10/22/2019 08:30	WG1366962
Ethane	U		0.296	1.29	1	10/22/2019 08:30	WG1366962
Ethene	U		0.422	1.27	1	10/22/2019 08:30	WG1366962

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.01	J	1.05	25.0	1	10/26/2019 20:42	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 20:42	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 20:42	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 20:42	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 20:42	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 20:42	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 20:42	WG1370189
Bromomethane	U	J0	0.157	2.50	1	10/26/2019 20:42	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 20:42	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 20:42	WG1370189
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 20:42	WG1370189
Carbon disulfide	U		0.101	0.500	1	10/26/2019 20:42	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 20:42	WG1370189

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/26/2019 20:42	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 20:42	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 20:42	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 20:42	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 20:42	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 20:42	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 20:42	WG1370189
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 20:42	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 20:42	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 20:42	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 20:42	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 20:42	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 20:42	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 20:42	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 20:42	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 20:42	WG1370189
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 20:42	WG1370189
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/26/2019 20:42	WG1370189
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/26/2019 20:42	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 20:42	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 20:42	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 20:42	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 20:42	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 20:42	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 20:42	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 20:42	WG1370189
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 20:42	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 20:42	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 20:42	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 20:42	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 20:42	WG1370189
Iodomethane	U	J0	0.377	10.0	1	10/26/2019 20:42	WG1370189
Isopropylbenzene	U	J0	0.126	0.500	1	10/26/2019 20:42	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 20:42	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 20:42	WG1370189
Methylene Chloride	U		1.07	2.50	1	10/26/2019 20:42	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 20:42	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 20:42	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 20:42	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 20:42	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 20:42	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 20:42	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 20:42	WG1370189
1,1,2-Trichlorotrifluoroethane	U	J0	0.164	0.500	1	10/26/2019 20:42	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 20:42	WG1370189
Toluene	U		0.412	0.500	1	10/26/2019 20:42	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 20:42	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 20:42	WG1370189
1,1,1-Trichloroethane	U	J0	0.0940	0.500	1	10/26/2019 20:42	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 20:42	WG1370189
Trichloroethene	U	J0	0.153	0.500	1	10/26/2019 20:42	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 20:42	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 20:42	WG1370189
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 20:42	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 20:42	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 20:42	WG1370189

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	10/26/2019 20:42	WG1370189
Vinyl chloride	U		0.118	0.500	1	10/26/2019 20:42	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 20:42	WG1370189
(S) Toluene-d8	*94.4*			*80.0-120*		*10/26/2019 20:42*	WG1370189
(S) 4-Bromofluorobenzene	*92.6*			*77.0-126*		*10/26/2019 20:42*	WG1370189
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*10/26/2019 20:42*	WG1370189

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/24/2019 19:11	WG1368064
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*78.0-120*		*10/24/2019 19:11*	WG1368064

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	10/26/2019 15:48	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 15:48	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 15:48	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 15:48	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 15:48	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 15:48	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 15:48	WG1370189
Bromomethane	U	J0	0.157	2.50	1	10/26/2019 15:48	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 15:48	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 15:48	WG1370189
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 15:48	WG1370189
Carbon disulfide	U		0.101	0.500	1	10/26/2019 15:48	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 15:48	WG1370189
Chlorobenzene	U		0.140	0.500	1	10/26/2019 15:48	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 15:48	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 15:48	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 15:48	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 15:48	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 15:48	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 15:48	WG1370189
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 15:48	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 15:48	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 15:48	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 15:48	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 15:48	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 15:48	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 15:48	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 15:48	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 15:48	WG1370189
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 15:48	WG1370189
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/26/2019 15:48	WG1370189
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/26/2019 15:48	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 15:48	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 15:48	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 15:48	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 15:48	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 15:48	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 15:48	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 15:48	WG1370189
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 15:48	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 15:48	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 15:48	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 15:48	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 15:48	WG1370189
Iodomethane	U	J0	0.377	10.0	1	10/26/2019 15:48	WG1370189
Isopropylbenzene	U	J0	0.126	0.500	1	10/26/2019 15:48	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 15:48	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 15:48	WG1370189

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/26/2019 15:48	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 15:48	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 15:48	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 15:48	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 15:48	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 15:48	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 15:48	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 15:48	WG1370189
1,1,2-Trichlorotrifluoroethane	U	J0	0.164	0.500	1	10/26/2019 15:48	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 15:48	WG1370189
Toluene	U		0.412	0.500	1	10/26/2019 15:48	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 15:48	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 15:48	WG1370189
1,1,1-Trichloroethane	U	J0	0.0940	0.500	1	10/26/2019 15:48	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 15:48	WG1370189
Trichloroethene	U	J0	0.153	0.500	1	10/26/2019 15:48	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 15:48	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 15:48	WG1370189
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 15:48	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 15:48	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 15:48	WG1370189
Vinyl acetate	U		0.645	5.00	1	10/26/2019 15:48	WG1370189
Vinyl chloride	U		0.118	0.500	1	10/26/2019 15:48	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 15:48	WG1370189
(S) Toluene-d8	*93.2*			*80.0-120*		*10/26/2019 15:48*	WG1370189
(S) 4-Bromofluorobenzene	*91.8*			*77.0-126*		*10/26/2019 15:48*	WG1370189
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*10/26/2019 15:48*	WG1370189

Method Blank (MB)

(MB) R3464818-1 10/24/19 17:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1152061-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152061-01 10/24/19 18:41 • (DUP) R3464818-3 10/24/19 18:49

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	469000	470000	1	0.229		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1152362-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152362-01 10/24/19 20:25 • (DUP) R3464818-4 10/24/19 20:33

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	265000	265000	1	0.149		20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3464818-2 10/24/19 18:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	98700	98.7	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3462972-1 10/19/19 09:09

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

L1151823-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1151823-01 10/19/19 12:44 • (DUP) R3462972-3 10/19/19 12:57

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	171000	175000	1	2.03	E	15
Nitrate	2750	2820	1	2.74		15
Sulfate	322000	325000	1	0.903	E	15

L1151886-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1151886-05 10/19/19 17:38 • (DUP) R3462972-6 10/19/19 17:51

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	25800	25000	1	3.14		15
Nitrate	U	0.000	1	0.000		15
Sulfate	17000	16600	1	2.28		15

Laboratory Control Sample (LCS)

(LCS) R3462972-2 10/19/19 09:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40300	101	80.0-120	
Nitrate	8000	8290	104	80.0-120	
Sulfate	40000	40500	101	80.0-120	

L1151823-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1151823-02 10/19/19 13:10 • (MS) R3462972-4 10/19/19 13:48 • (MSD) R3462972-5 10/19/19 14:01

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	702000	717000	713000	29.2	20.9	1	80.0-120	E V	E V	0.580	15
Nitrate	5000	ND	4940	4900	98.7	98.1	1	80.0-120			0.638	15
Sulfate	50000	461000	474000	471000	25.0	20.1	1	80.0-120	E V	E V	0.519	15

L1151886-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1151886-05 10/19/19 17:38 • (MS) R3462972-7 10/19/19 18:04

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	25800	72800	94.0	1	80.0-120	
Nitrate	5000	U	4980	99.6	1	80.0-120	
Sulfate	50000	17000	64700	95.5	1	80.0-120	

Method Blank (MB)

(MB) R3465280-1 10/25/19 12:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	375	J	102	1000

L1151886-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1151886-03 10/25/19 14:25 • (DUP) R3465280-3 10/25/19 14:44

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	37600	37200	1	0.882		20

L1152055-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1152055-05 10/25/19 17:41 • (DUP) R3465280-6 10/25/19 17:53

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	3590	3600	1	0.445		20

Laboratory Control Sample (LCS)

(LCS) R3465280-2 10/25/19 12:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC	75000	73300	97.7	85.0-115	

L1152055-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152055-01 10/25/19 16:24 • (MS) R3465280-4 10/25/19 16:43 • (MSD) R3465280-5 10/25/19 16:59

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	1950	50400	50400	96.8	96.9	1	80.0-120			0.0794	20

L1152055-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152055-02 10/25/19 19:48 • (MS) R3465280-7 10/25/19 20:04 • (MSD) R3465280-8 10/25/19 20:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	1900	51400	51100	99.0	98.5	1	80.0-120			0.468	20

Method Blank (MB)

(MB) R3465732-1 10/27/19 22:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		15.0	100
Manganese	0.390	J	0.250	5.00

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

(LCS) R3465732-2 10/27/19 22:25 • (LCSD) R3465732-3 10/27/19 22:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Iron	5000	4830	4960	96.6	99.3	80.0-120			2.79	20
Manganese	50.0	49.7	51.1	99.3	102	80.0-120			2.82	20

L1151885-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1151885-05 10/27/19 22:32 • (MS) R3465732-5 10/27/19 22:39 • (MSD) R3465732-6 10/27/19 22:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	5000	103	5010	4950	98.1	96.9	1	75.0-125			1.14	20
Manganese	50.0	8.50	57.3	57.0	97.5	97.0	1	75.0-125			0.462	20

Method Blank (MB)

(MB) R3464797-2 10/24/19 15:39

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*96.4*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3464797-1 10/24/19 14:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5930	108	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*105*	*78.0-120*	

Method Blank (MB)

(MB) R3463477-1 10/22/19 07:49

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

L1151886-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1151886-04 10/22/19 08:26 • (DUP) R3463477-2 10/22/19 08:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	316	321	1	1.61		20
Ethane	U	0.000	1	0.000		20
Ethene	23.7	23.2	1	1.94		20

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

(LCS) R3463477-7 10/22/19 09:11 • (LCSD) R3463477-8 10/22/19 09:15

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	74.2	72.1	109	106	85.0-115			2.95	20
Ethane	129	130	129	101	99.8	85.0-115			1.02	20
Ethene	127	135	133	107	104	85.0-115			2.16	20

L1152024-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152024-01 10/22/19 07:52 • (MS) R3463477-3 10/22/19 09:01 • (MSD) R3463477-4 10/22/19 09:04

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Methane	67.8	U	73.2	78.3	108	115	1	85.0-115			6.81	20
Ethane	129	U	124	134	95.7	104	1	85.0-115			7.96	20
Ethene	127	U	130	140	102	110	1	85.0-115			7.32	20

L1152055-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152055-02 10/22/19 08:40 • (MS) R3463477-5 10/22/19 09:06 • (MSD) R3463477-6 10/22/19 09:08

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Methane	67.8	756	758	774	3.08	26.5	1	85.0-115	V	V	2.08	20
Ethane	129	U	133	129	103	100	1	85.0-115			2.41	20

L1152055-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152055-02 10/22/19 08:40 • (MS) R3463477-5 10/22/19 09:06 • (MSD) R3463477-6 10/22/19 09:08

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ethene	127	U	138	135	109	106	1	85.0-115			2.50	20

Method Blank (MB)

(MB) R3465451-2 10/26/19 12:44

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3465451-2 10/26/19 12:44

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.982	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	0.356	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*95.5*			*80.0-120*
(S) 4-Bromofluorobenzene	*92.7*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3465451-1 10/26/19 12:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	146	117	19.0-160	
Acrylonitrile	125	168	134	55.0-149	
Benzene	25.0	23.8	95.2	70.0-123	
Bromobenzene	25.0	27.7	111	73.0-121	
Bromodichloromethane	25.0	23.4	93.6	75.0-120	
Bromochloromethane	25.0	26.6	106	76.0-122	
Bromoform	25.0	24.6	98.4	68.0-132	
Bromomethane	25.0	16.1	64.4	10.0-160	
n-Butylbenzene	25.0	29.4	118	73.0-125	
sec-Butylbenzene	25.0	26.3	105	75.0-125	
tert-Butylbenzene	25.0	24.7	98.8	76.0-124	
Carbon disulfide	25.0	22.7	90.8	61.0-128	
Carbon tetrachloride	25.0	21.5	86.0	68.0-126	
Chlorobenzene	25.0	24.1	96.4	80.0-121	
Chlorodibromomethane	25.0	24.8	99.2	77.0-125	
Chloroethane	25.0	28.4	114	47.0-150	
Chloroform	25.0	22.7	90.8	73.0-120	
Chloromethane	25.0	25.8	103	41.0-142	
2-Chlorotoluene	25.0	26.9	108	76.0-123	
4-Chlorotoluene	25.0	26.6	106	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	25.6	102	58.0-134	
1,2-Dibromoethane	25.0	25.6	102	80.0-122	
Dibromomethane	25.0	26.4	106	80.0-120	
1,2-Dichlorobenzene	25.0	27.8	111	79.0-121	
1,3-Dichlorobenzene	25.0	28.5	114	79.0-120	
1,4-Dichlorobenzene	25.0	27.8	111	79.0-120	
Dichlorodifluoromethane	25.0	22.5	90.0	51.0-149	
1,1-Dichloroethane	25.0	27.6	110	70.0-126	
1,2-Dichloroethane	25.0	28.4	114	70.0-128	
1,1-Dichloroethene	25.0	24.2	96.8	71.0-124	
cis-1,2-Dichloroethene	25.0	24.0	96.0	73.0-120	
trans-1,2-Dichloroethene	25.0	22.5	90.0	73.0-120	
1,2-Dichloropropane	25.0	29.5	118	77.0-125	
1,1-Dichloropropene	25.0	24.6	98.4	74.0-126	
1,3-Dichloropropane	25.0	27.0	108	80.0-120	
cis-1,3-Dichloropropene	25.0	24.9	99.6	80.0-123	
trans-1,3-Dichloropropene	25.0	26.8	107	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	33.7	135	33.0-144	
2,2-Dichloropropane	25.0	23.0	92.0	58.0-130	
Di-isopropyl ether	25.0	29.5	118	58.0-138	

Laboratory Control Sample (LCS)

(LCS) R3465451-1 10/26/19 12:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	22.5	90.0	79.0-123	
Hexachloro-1,3-butadiene	25.0	31.4	126	54.0-138	
2-Hexanone	125	172	138	67.0-149	
n-Hexane	25.0	29.8	119	57.0-133	
Iodomethane	125	104	83.2	33.0-147	
Isopropylbenzene	25.0	21.3	85.2	76.0-127	
p-Isopropyltoluene	25.0	27.1	108	76.0-125	
2-Butanone (MEK)	125	139	111	44.0-160	
Methylene Chloride	25.0	22.5	90.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	142	114	68.0-142	
Methyl tert-butyl ether	25.0	25.3	101	68.0-125	
Naphthalene	25.0	23.9	95.6	54.0-135	
n-Propylbenzene	25.0	25.2	101	77.0-124	
Styrene	25.0	23.9	95.6	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	23.3	93.2	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	25.9	104	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	21.4	85.6	69.0-132	
Tetrachloroethene	25.0	22.9	91.6	72.0-132	
Toluene	25.0	23.7	94.8	79.0-120	
1,2,3-Trichlorobenzene	25.0	27.3	109	50.0-138	
1,2,4-Trichlorobenzene	25.0	30.0	120	57.0-137	
1,1,1-Trichloroethane	25.0	21.4	85.6	73.0-124	
1,1,2-Trichloroethane	25.0	24.5	98.0	80.0-120	
Trichloroethene	25.0	22.2	88.8	78.0-124	
Trichlorofluoromethane	25.0	26.9	108	59.0-147	
1,2,3-Trichloropropane	25.0	26.0	104	73.0-130	
1,2,4-Trimethylbenzene	25.0	25.9	104	76.0-121	
1,2,3-Trimethylbenzene	25.0	26.6	106	77.0-120	
1,3,5-Trimethylbenzene	25.0	25.0	100	76.0-122	
Vinyl acetate	125	164	131	11.0-160	
Vinyl chloride	25.0	32.6	130	67.0-131	
Xylenes, Total	75.0	68.0	90.7	79.0-123	
(S) Toluene-d8			*93.8*	*80.0-120*	
(S) 4-Bromofluorobenzene			*91.0*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*101*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

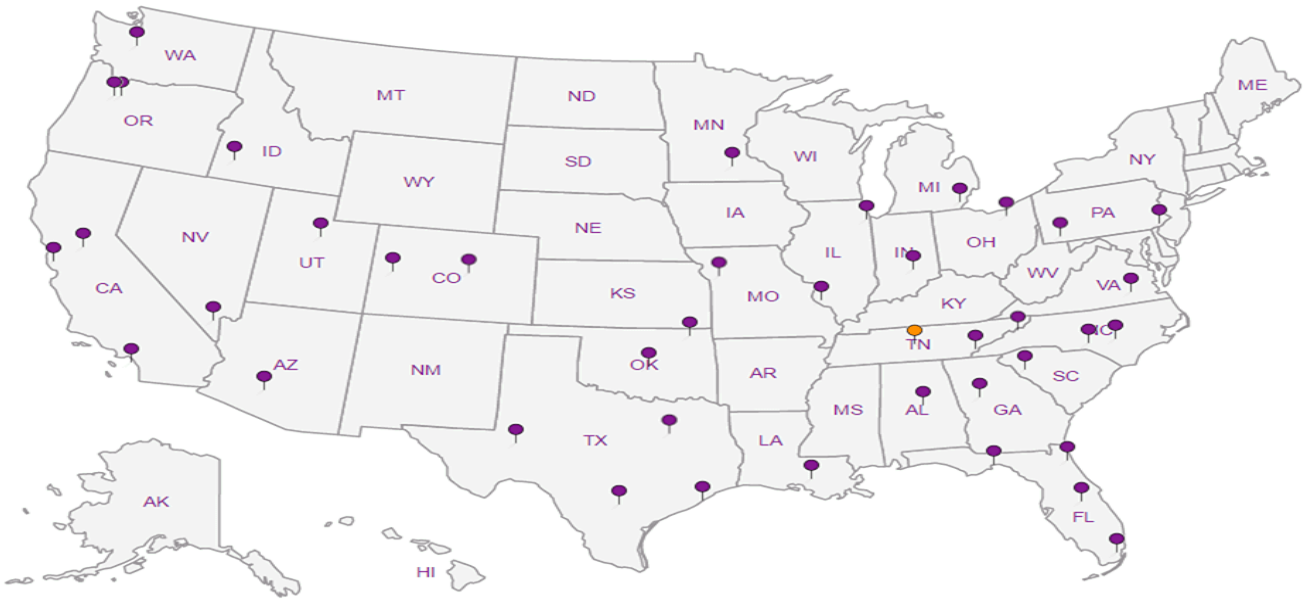
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



PES-Seattle

Billing Information: PES-Seattle

Report to: Bill Haldeman/Brian O'neal

Email To: on file

Project Description: American Linen

City/State Collected: Seattle, WA

Phone: on file

Fax:

Client Project # 1413.001.02.501E

Lab Project # PESENVSWA-ALP

Collected by (print): K. Zygas

Site/Facility ID # American Linen

P.O. #

Collected by (signature): K. Zygas

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

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

L # 1151886
E127

Acctnum: PESENVSWA
Template:
Prelogin:
TSR: Brian Ford
PB:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Pres Chk	**NO3,SO4,Chloride**48 hour hold	NWTPHGX	VOCs (V8260LLC)	Total Fe Mn 6020	TOC	Alkalinity	EEM (RSK175LL)	Remarks	Sample # (lab only)
MW-123-101819	Grab	GW	75	10/18/19	0955	9	(2)	X		X	X	X	X	X		-01
MW125-101819		GW	28		1105	12		X	X	X	X	X	X	X		-02
W-MW-02-101819		GW	75		1210	12		X	X	X	X	X	X	X		-03
MW104-101819		GW	124		1300	9	(2)	X	X	X	X	X	X	X		-04
MW106-101819	↓	GW	135		1515	12		X	X	X	X	X	X	X		-05
TB-101819	—	GW	—	↓	1530	1			X	X						-06
		GW														
		GW														
		GW														
		GW														

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 12 75 8600 8238

Sample Receipt Checklist
COC Seal Present/Intact: X NP ___ Y ___ N
COC Signed/Accurate: ✓ Y ___ N
Bottles arrive intact: ✓ Y ___ N
Correct bottles used: ✓ Y ___ N
Sufficient volume sent: ✓ Y ___ N
If Applicable
VOA Zero Headspace: ✓ Y ___ N
Preservation Correct/Checked: ✓ Y ___ N

RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	If preservation required by Login: Date/Time
K. Zygas	10/18/19	1600		1	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: ~~A3m~~ °C 5.1-.2=4.9 Bottles Received: 57	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 10/19/19 Time: 8:45	Hold: Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 04, 2019

PES Environmental, Inc.- WA

Sample Delivery Group:	L1152333
Samples Received:	10/22/2019
Project Number:	1413 001 02 501E
Description:	ALS
Site:	1413 001 02 501E
Report To:	Brian O'Neal/Bill Haldeman 1215 Fourth Ave., Suite 1350 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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GEI-1-102119 L1152333-01 GW

Collected by: Chris Deboer | Collected date/time: 10/21/19 11:11 | Received date/time: 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 21:24	10/24/19 21:24	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 02:15	10/23/19 02:15	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1368783	1	10/24/19 22:09	10/24/19 22:09	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:13	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 12:12	10/23/19 12:12	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	10	10/24/19 11:33	10/24/19 11:33	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 05:43	10/29/19 05:43	ADM	Mt. Juliet, TN

GEI-2-102119 L1152333-02 GW

Collected by: Chris Deboer | Collected date/time: 10/21/19 12:04 | Received date/time: 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 21:38	10/24/19 21:38	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 02:31	10/23/19 02:31	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1368783	50	10/24/19 23:36	10/24/19 23:36	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:17	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 13:03	10/23/19 13:03	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	10	10/24/19 11:39	10/24/19 11:39	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 06:03	10/29/19 06:03	ADM	Mt. Juliet, TN

FMW-131-102119 L1152333-03 GW

Collected by: Chris Deboer | Collected date/time: 10/21/19 13:15 | Received date/time: 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 21:46	10/24/19 21:46	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 02:48	10/23/19 02:48	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 13:31	10/26/19 13:31	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:20	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 13:15	10/23/19 13:15	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 06:23	10/29/19 06:23	ADM	Mt. Juliet, TN

MW-112-102119 L1152333-04 GW

Collected by: Chris Deboer | Collected date/time: 10/21/19 14:35 | Received date/time: 10/22/19 08:45

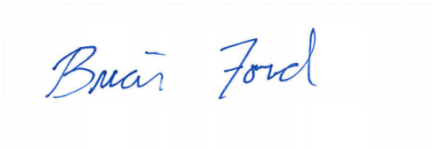
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 21:55	10/24/19 21:55	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 03:04	10/23/19 03:04	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 13:54	10/26/19 13:54	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:24	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1373020	1	11/02/19 23:35	11/02/19 23:35	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 13:29	10/23/19 13:29	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 06:43	10/29/19 06:43	ADM	Mt. Juliet, TN

TRIPBLANK-102119 L1152333-05 GW

Collected by: Chris Deboer | Collected date/time: 10/21/19 00:00 | Received date/time: 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 04:02	10/29/19 04:02	ADM	Mt. Juliet, TN

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



Brian Ford
Project Manager

Sample Delivery Group (SDG) Narrative

VOC pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1152333-04	MW-112-102119	NWTPHGX

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	589000		2710	20000	1	10/24/2019 21:24	WG1369144

Sample Narrative:

L1152333-01 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14700		51.9	1000	1	10/23/2019 02:15	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 02:15	WG1367181
Sulfate	2760	J	77.4	5000	1	10/23/2019 02:15	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7550		102	1000	1	10/24/2019 22:09	WG1368783

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	16500		15.0	100	1	10/26/2019 16:13	WG1368592
Manganese	2820		0.250	5.00	1	10/26/2019 16:13	WG1368592

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	21400		2.87	6.78	10	10/24/2019 11:33	WG1368615
Ethane	U		0.296	1.29	1	10/23/2019 12:12	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 12:12	WG1367825

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.45	J J4	1.05	25.0	1	10/29/2019 05:43	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 05:43	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 05:43	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 05:43	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 05:43	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 05:43	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 05:43	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 05:43	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 05:43	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 05:43	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 05:43	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 05:43	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 05:43	WG1371177
Chlorobenzene	U		0.140	0.500	1	10/29/2019 05:43	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 05:43	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 05:43	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 05:43	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 05:43	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 05:43	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 05:43	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 05:43	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 05:43	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 05:43	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 05:43	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 05:43	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 05:43	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 05:43	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 05:43	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 05:43	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 05:43	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 05:43	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 05:43	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 05:43	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 05:43	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 05:43	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 05:43	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 05:43	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 05:43	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 05:43	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 05:43	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 05:43	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 05:43	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 05:43	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 05:43	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 05:43	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 05:43	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 05:43	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 05:43	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 05:43	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 05:43	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 05:43	WG1371177
Naphthalene	0.239	J	0.174	2.50	1	10/29/2019 05:43	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 05:43	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 05:43	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 05:43	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 05:43	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 05:43	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 05:43	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 05:43	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 05:43	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 05:43	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 05:43	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 05:43	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 05:43	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 05:43	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 05:43	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 05:43	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 05:43	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 05:43	WG1371177
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 05:43	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 05:43	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 05:43	WG1371177
(S) Toluene-d8	*94.8*			*80.0-120*		*10/29/2019 05:43*	WG1371177
(S) 4-Bromofluorobenzene	*109*			*77.0-126*		*10/29/2019 05:43*	WG1371177
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*10/29/2019 05:43*	WG1371177

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	512000		2710	20000	1	10/24/2019 21:38	WG1369144

Sample Narrative:

L1152333-02 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	24800		51.9	1000	1	10/23/2019 02:31	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 02:31	WG1367181
Sulfate	47800		77.4	5000	1	10/23/2019 02:31	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	343000		5100	50000	50	10/24/2019 23:36	WG1368783

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	13200		15.0	100	1	10/26/2019 16:17	WG1368592
Manganese	496		0.250	5.00	1	10/26/2019 16:17	WG1368592

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	10000		2.87	6.78	10	10/24/2019 11:39	WG1368615
Ethane	59.2		0.296	1.29	1	10/23/2019 13:03	WG1367825
Ethene	27.5		0.422	1.27	1	10/23/2019 13:03	WG1367825

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.37	J J4	1.05	25.0	1	10/29/2019 06:03	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 06:03	WG1371177
Benzene	3.80		0.0896	0.500	1	10/29/2019 06:03	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 06:03	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 06:03	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 06:03	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 06:03	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 06:03	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 06:03	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 06:03	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 06:03	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 06:03	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 06:03	WG1371177
Chlorobenzene	U		0.140	0.500	1	10/29/2019 06:03	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 06:03	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 06:03	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 06:03	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 06:03	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 06:03	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 06:03	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 06:03	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 06:03	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 06:03	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 06:03	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 06:03	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 06:03	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 06:03	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 06:03	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 06:03	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 06:03	WG1371177
cis-1,2-Dichloroethene	20.1		0.0933	0.500	1	10/29/2019 06:03	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 06:03	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 06:03	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 06:03	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 06:03	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 06:03	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 06:03	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 06:03	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 06:03	WG1371177
Di-isopropyl ether	0.194	J J0	0.0924	0.500	1	10/29/2019 06:03	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 06:03	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 06:03	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 06:03	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 06:03	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 06:03	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 06:03	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 06:03	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 06:03	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 06:03	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 06:03	WG1371177
Methyl tert-butyl ether	0.252	J	0.102	0.500	1	10/29/2019 06:03	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 06:03	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 06:03	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 06:03	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 06:03	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 06:03	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 06:03	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 06:03	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 06:03	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 06:03	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 06:03	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 06:03	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 06:03	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 06:03	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 06:03	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 06:03	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 06:03	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 06:03	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 06:03	WG1371177
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 06:03	WG1371177
Vinyl chloride	88.2		0.118	0.500	1	10/29/2019 06:03	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 06:03	WG1371177
(S) Toluene-d8	*94.4*			*80.0-120*		*10/29/2019 06:03*	WG1371177
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*10/29/2019 06:03*	WG1371177
(S) 1,2-Dichloroethane-d4	*98.9*			*70.0-130*		*10/29/2019 06:03*	WG1371177

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	108000		2710	20000	1	10/24/2019 21:46	WG1369144

Sample Narrative:
L1152333-03 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	6000		51.9	1000	1	10/23/2019 02:48	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 02:48	WG1367181
Sulfate	2560	J	77.4	5000	1	10/23/2019 02:48	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1910	B	102	1000	1	10/26/2019 13:31	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	608		15.0	100	1	10/26/2019 16:20	WG1368592
Manganese	589		0.250	5.00	1	10/26/2019 16:20	WG1368592

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	45.6		0.287	0.678	1	10/23/2019 13:15	WG1367825
Ethane	U		0.296	1.29	1	10/23/2019 13:15	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 13:15	WG1367825

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.58	J J4	1.05	25.0	1	10/29/2019 06:23	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 06:23	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 06:23	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 06:23	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 06:23	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 06:23	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 06:23	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 06:23	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 06:23	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 06:23	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 06:23	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 06:23	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 06:23	WG1371177
Chlorobenzene	U		0.140	0.500	1	10/29/2019 06:23	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 06:23	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 06:23	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 06:23	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 06:23	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 06:23	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 06:23	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 06:23	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 06:23	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 06:23	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 06:23	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 06:23	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 06:23	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 06:23	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 06:23	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 06:23	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 06:23	WG1371177
cis-1,2-Dichloroethene	10.5		0.0933	0.500	1	10/29/2019 06:23	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 06:23	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 06:23	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 06:23	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 06:23	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 06:23	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 06:23	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 06:23	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 06:23	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 06:23	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 06:23	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 06:23	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 06:23	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 06:23	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 06:23	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 06:23	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 06:23	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 06:23	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 06:23	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 06:23	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 06:23	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 06:23	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 06:23	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 06:23	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 06:23	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 06:23	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 06:23	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 06:23	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 06:23	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 06:23	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 06:23	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 06:23	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 06:23	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 06:23	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 06:23	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 06:23	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 06:23	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 06:23	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 06:23	WG1371177
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 06:23	WG1371177
Vinyl chloride	0.140	J	0.118	0.500	1	10/29/2019 06:23	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 06:23	WG1371177
(S) Toluene-d8	*97.4*			*80.0-120*		*10/29/2019 06:23*	WG1371177
(S) 4-Bromofluorobenzene	*109*			*77.0-126*		*10/29/2019 06:23*	WG1371177
(S) 1,2-Dichloroethane-d4	*99.4*			*70.0-130*		*10/29/2019 06:23*	WG1371177

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	58600		2710	20000	1	10/24/2019 21:55	WG1369144

Sample Narrative:

L1152333-04 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	5470		51.9	1000	1	10/23/2019 03:04	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 03:04	WG1367181
Sulfate	1820	J	77.4	5000	1	10/23/2019 03:04	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	11100		102	1000	1	10/26/2019 13:54	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1700		15.0	100	1	10/26/2019 16:24	WG1368592
Manganese	169		0.250	5.00	1	10/26/2019 16:24	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	96.6	B J	31.6	100	1	11/02/2019 23:35	WG1373020
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*78.0-120*		*11/02/2019 23:35*	WG1373020

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	388		0.287	0.678	1	10/23/2019 13:29	WG1367825
Ethane	5.75		0.296	1.29	1	10/23/2019 13:29	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 13:29	WG1367825

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.72	J J4	1.05	25.0	1	10/29/2019 06:43	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 06:43	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 06:43	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 06:43	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 06:43	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 06:43	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 06:43	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 06:43	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 06:43	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 06:43	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 06:43	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 06:43	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 06:43	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/29/2019 06:43	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 06:43	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 06:43	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 06:43	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 06:43	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 06:43	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 06:43	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 06:43	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 06:43	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 06:43	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 06:43	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 06:43	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 06:43	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 06:43	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 06:43	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 06:43	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 06:43	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 06:43	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 06:43	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 06:43	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 06:43	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 06:43	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 06:43	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 06:43	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 06:43	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 06:43	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 06:43	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 06:43	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 06:43	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 06:43	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 06:43	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 06:43	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 06:43	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 06:43	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 06:43	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 06:43	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 06:43	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 06:43	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 06:43	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 06:43	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 06:43	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 06:43	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 06:43	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 06:43	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 06:43	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 06:43	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 06:43	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 06:43	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 06:43	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 06:43	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 06:43	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 06:43	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 06:43	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 06:43	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 06:43	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 06:43	WG1371177

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 06:43	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 06:43	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 06:43	WG1371177
(S) Toluene-d8	*96.1*			*80.0-120*		*10/29/2019 06:43*	WG1371177
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*10/29/2019 06:43*	WG1371177
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*10/29/2019 06:43*	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	1.05	25.0	1	10/29/2019 04:02	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 04:02	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 04:02	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 04:02	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 04:02	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 04:02	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 04:02	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 04:02	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 04:02	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 04:02	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 04:02	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 04:02	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 04:02	WG1371177
Chlorobenzene	U		0.140	0.500	1	10/29/2019 04:02	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 04:02	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 04:02	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 04:02	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 04:02	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 04:02	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 04:02	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 04:02	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 04:02	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 04:02	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 04:02	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 04:02	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 04:02	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 04:02	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 04:02	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 04:02	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 04:02	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 04:02	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 04:02	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 04:02	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 04:02	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 04:02	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 04:02	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 04:02	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 04:02	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 04:02	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 04:02	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 04:02	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 04:02	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 04:02	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 04:02	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 04:02	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 04:02	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 04:02	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 04:02	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 04:02	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 04:02	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 04:02	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 04:02	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 04:02	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 04:02	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 04:02	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 04:02	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 04:02	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 04:02	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 04:02	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 04:02	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 04:02	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 04:02	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 04:02	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 04:02	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 04:02	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 04:02	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 04:02	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 04:02	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 04:02	WG1371177
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 04:02	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 04:02	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 04:02	WG1371177
(S) Toluene-d8	*98.4*			*80.0-120*		*10/29/2019 04:02*	WG1371177
(S) 4-Bromofluorobenzene	*110*			*77.0-126*		*10/29/2019 04:02*	WG1371177
(S) 1,2-Dichloroethane-d4	*96.8*			*70.0-130*		*10/29/2019 04:02*	WG1371177

Method Blank (MB)

(MB) R3464935-1 10/24/19 21:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1152333-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152333-01 10/24/19 21:24 • (DUP) R3464935-2 10/24/19 21:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	589000	589000	1	0.0563		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1152791-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152791-01 10/24/19 23:11 • (DUP) R3464935-4 10/24/19 23:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	519000	520000	1	0.243		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3464935-3 10/24/19 22:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	98500	98.5	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3463970-1 10/22/19 09:41

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

L1152322-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152322-01 10/22/19 14:34 • (DUP) R3463970-9 10/23/19 03:53

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	6100	6720	1	9.68		15
Nitrate	210	233	1	10.7		15
Sulfate	89600	0.000	1	200	J3	15

L1152340-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1152340-02 10/23/19 04:26 • (DUP) R3463970-10 10/23/19 05:15

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	20200	19800	1	1.66		15
Nitrate	U	0.000	1	0.000		15
Sulfate	26800	26800	1	0.133		15

Laboratory Control Sample (LCS)

(LCS) R3463970-2 10/22/19 09:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	37700	94.3	80.0-120	
Nitrate	8000	7790	97.4	80.0-120	
Sulfate	40000	37800	94.4	80.0-120	

L1152324-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1152324-03 10/23/19 03:21 • (MS) R3463970-8 10/23/19 03:37

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	1960	53800	104	1	80.0-120	
Nitrate	5000	110	5070	99.1	1	80.0-120	
Sulfate	50000	ND	55900	104	1	80.0-120	

L1152346-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152346-01 10/23/19 06:37 • (MS) R3463970-11 10/23/19 06:54 • (MSD) R3463970-12 10/23/19 07:10

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	2070	48300	48100	92.4	92.1	1	80.0-120			0.294	15
Nitrate	5000	ND	4600	4730	90.7	93.4	1	80.0-120			2.84	15
Sulfate	50000	29900	75600	75300	91.4	90.9	1	80.0-120			0.297	15

Method Blank (MB)

(MB) R3465005-1 10/24/19 10:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	277	J	102	1000

L1152303-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1152303-03 10/24/19 18:56 • (DUP) R3465005-3 10/24/19 19:07

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	1770	1750	1	1.42		20

L1152333-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152333-01 10/24/19 22:09 • (DUP) R3465005-6 10/24/19 22:23

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	7550	7550	1	0.106		20

Laboratory Control Sample (LCS)

(LCS) R3465005-2 10/24/19 11:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	75000	71900	95.8	85.0-115	

L1152303-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152303-04 10/24/19 20:21 • (MS) R3465005-4 10/24/19 20:40 • (MSD) R3465005-5 10/24/19 20:56

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	50000	1480	49000	49100	95.1	95.3	1	80.0-120			0.224	20

L1153269-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1153269-02 10/25/19 00:08 • (MS) R3465005-7 10/25/19 00:25 • (MSD) R3465005-8 10/25/19 00:42

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	50000	1200	50700	48800	98.9	95.3	1	80.0-120			3.68	20

Method Blank (MB)

(MB) R3466121-1 10/26/19 11:45

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	434	J	102	1000

L1152741-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1152741-04 10/26/19 15:20 • (DUP) R3466121-3 10/26/19 15:34

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	ND	300	1	0.000		20

L1152823-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1152823-04 10/26/19 20:20 • (DUP) R3466121-6 10/26/19 20:39

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	5510	5450	1	1.04		20

Laboratory Control Sample (LCS)

(LCS) R3466121-2 10/26/19 12:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC	75000	73300	97.7	85.0-115	

L1152741-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152741-06 10/26/19 17:52 • (MS) R3466121-4 10/26/19 18:20 • (MSD) R3466121-5 10/26/19 18:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	ND	48400	48500	96.4	96.7	1	80.0-120			0.310	20

L1152823-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152823-08 10/27/19 00:02 • (MS) R3466121-7 10/27/19 00:26 • (MSD) R3466121-8 10/27/19 00:53

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	168	50800	50800	101	101	1	80.0-120			0.0788	20

Method Blank (MB)

(MB) R3465394-1 10/26/19 15:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		15.0	100
Manganese	0.346	J	0.250	5.00

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

(LCS) R3465394-2 10/26/19 15:21 • (LCSD) R3465394-3 10/26/19 15:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Iron	5000	5100	4990	102	99.9	80.0-120			2.20	20
Manganese	50.0	51.5	50.9	103	102	80.0-120			1.15	20

L1152302-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152302-01 10/26/19 15:28 • (MS) R3465394-5 10/26/19 15:35 • (MSD) R3465394-6 10/26/19 15:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	5000	158	5230	4990	101	96.6	1	75.0-125			4.76	20
Manganese	50.0	5.28	56.9	54.1	103	97.6	1	75.0-125			5.01	20

Method Blank (MB)

(MB) R3467812-2 11/02/19 22:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	97.6	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3467812-1 11/02/19 20:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4900	89.1	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*78.0-120*	

Method Blank (MB)

(MB) R3464142-1 10/23/19 11:04

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

L1152333-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1152333-03 10/23/19 13:15 • (DUP) R3464142-2 10/23/19 13:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	45.6	42.6	1	6.80		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

L1152347-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152347-01 10/23/19 14:09 • (DUP) R3464142-3 10/23/19 14:25

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	1810	1930	1	6.42		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

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

(LCS) R3464142-4 10/23/19 14:27 • (LCSD) R3464142-5 10/23/19 14:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	69.4	71.2	102	105	85.0-115			2.56	20
Ethane	129	125	127	96.9	98.4	85.0-115			1.59	20
Ethene	127	131	133	103	105	85.0-115			1.52	20

Method Blank (MB)

(MB) R3464593-1 10/24/19 11:26

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678

L1152823-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1152823-06 10/24/19 11:56 • (DUP) R3464593-2 10/24/19 12:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	731	765	1	4.55		20

L1152959-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1152959-09 10/24/19 13:31 • (DUP) R3464593-3 10/24/19 13:37

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

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

(LCS) R3464593-4 10/24/19 13:42 • (LCSD) R3464593-5 10/24/19 13:54

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	64.6	68.2	95.3	101	85.0-115			5.42	20

Method Blank (MB)

(MB) R3466378-3 10/29/19 03:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3466378-3 10/29/19 03:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*97.6*			*80.0-120*
(S) 4-Bromofluorobenzene	*107*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3466378-1 10/29/19 02:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	91.7	73.4	19.0-160	J4
Acrylonitrile	125	90.2	72.2	55.0-149	J4
Benzene	25.0	27.6	110	70.0-123	
Bromobenzene	25.0	23.0	92.0	73.0-121	
Bromodichloromethane	25.0	30.2	121	75.0-120	J4
Bromochloromethane	25.0	29.1	116	76.0-122	
Bromoform	25.0	22.1	88.4	68.0-132	
Bromomethane	25.0	25.1	100	10.0-160	
n-Butylbenzene	25.0	26.1	104	73.0-125	
sec-Butylbenzene	25.0	24.5	98.0	75.0-125	
tert-Butylbenzene	25.0	25.3	101	76.0-124	
Carbon disulfide	25.0	24.5	98.0	61.0-128	
Carbon tetrachloride	25.0	30.0	120	68.0-126	
Chlorobenzene	25.0	24.6	98.4	80.0-121	
Chlorodibromomethane	25.0	26.6	106	77.0-125	
Chloroethane	25.0	23.2	92.8	47.0-150	
Chloroform	25.0	27.3	109	73.0-120	
Chloromethane	25.0	16.4	65.6	41.0-142	
2-Chlorotoluene	25.0	25.1	100	76.0-123	
4-Chlorotoluene	25.0	25.2	101	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	24.8	99.2	58.0-134	
1,2-Dibromoethane	25.0	23.3	93.2	80.0-122	
Dibromomethane	25.0	29.6	118	80.0-120	
1,2-Dichlorobenzene	25.0	23.2	92.8	79.0-121	
1,3-Dichlorobenzene	25.0	23.6	94.4	79.0-120	
1,4-Dichlorobenzene	25.0	22.6	90.4	79.0-120	
Dichlorodifluoromethane	25.0	27.2	109	51.0-149	
1,1-Dichloroethane	25.0	24.5	98.0	70.0-126	
1,2-Dichloroethane	25.0	26.6	106	70.0-128	
1,1-Dichloroethene	25.0	28.4	114	71.0-124	
cis-1,2-Dichloroethene	25.0	26.6	106	73.0-120	
trans-1,2-Dichloroethene	25.0	27.7	111	73.0-120	
1,2-Dichloropropane	25.0	24.0	96.0	77.0-125	
1,1-Dichloropropene	25.0	29.6	118	74.0-126	
1,3-Dichloropropane	25.0	24.7	98.8	80.0-120	
cis-1,3-Dichloropropene	25.0	29.6	118	80.0-123	
trans-1,3-Dichloropropene	25.0	26.7	107	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	17.0	68.0	33.0-144	
2,2-Dichloropropane	25.0	30.5	122	58.0-130	
Di-isopropyl ether	25.0	17.5	70.0	58.0-138	

Laboratory Control Sample (LCS)

(LCS) R3466378-1 10/29/19 02:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	24.6	98.4	79.0-123	
Hexachloro-1,3-butadiene	25.0	26.8	107	54.0-138	
2-Hexanone	125	97.6	78.1	67.0-149	
n-Hexane	25.0	22.1	88.4	57.0-133	
Iodomethane	125	152	122	33.0-147	
Isopropylbenzene	25.0	25.1	100	76.0-127	
p-Isopropyltoluene	25.0	25.3	101	76.0-125	
2-Butanone (MEK)	125	90.9	72.7	44.0-160	
Methylene Chloride	25.0	22.8	91.2	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	88.6	70.9	68.0-142	
Methyl tert-butyl ether	25.0	25.7	103	68.0-125	
Naphthalene	25.0	24.4	97.6	54.0-135	
n-Propylbenzene	25.0	25.9	104	77.0-124	
Styrene	25.0	23.9	95.6	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	24.8	99.2	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	21.8	87.2	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	26.2	105	69.0-132	
Tetrachloroethene	25.0	27.3	109	72.0-132	
Toluene	25.0	26.3	105	79.0-120	
1,2,3-Trichlorobenzene	25.0	26.2	105	50.0-138	
1,2,4-Trichlorobenzene	25.0	25.6	102	57.0-137	
1,1,1-Trichloroethane	25.0	31.7	127	73.0-124	J4
1,1,2-Trichloroethane	25.0	26.3	105	80.0-120	
Trichloroethene	25.0	29.1	116	78.0-124	
Trichlorofluoromethane	25.0	29.1	116	59.0-147	
1,2,3-Trichloropropane	25.0	24.5	98.0	73.0-130	
1,2,4-Trimethylbenzene	25.0	24.7	98.8	76.0-121	
1,2,3-Trimethylbenzene	25.0	23.8	95.2	77.0-120	
1,3,5-Trimethylbenzene	25.0	24.7	98.8	76.0-122	
Vinyl acetate	125	88.5	70.8	11.0-160	
Vinyl chloride	25.0	21.0	84.0	67.0-131	
Xylenes, Total	75.0	72.0	96.0	79.0-123	
(S) Toluene-d8			*99.9*	*80.0-120*	
(S) 4-Bromofluorobenzene			*105*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*98.5*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

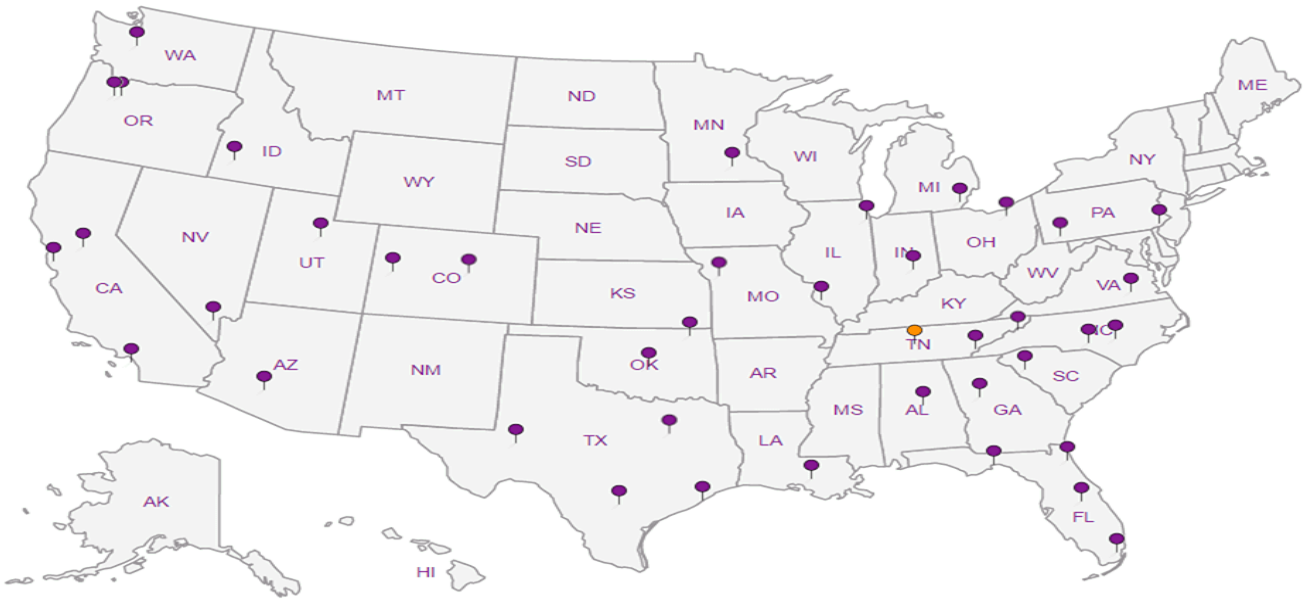
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



PES-Seattle

Billing Information: PES-Seattle

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

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

Report to: Bill Haldeman/Brian O'neal

Email To: on file

Project Description: ALS

City/State Collected: Seattle, WA

Phone: on file
Fax:

Client Project # 1413 001 02 SOIE

Lab Project # PESENVSWA-ALP

L# 1152333

E150

Collected by (print): Chris DeBoer

Site/Facility ID # 1413 001 02 SOIE

P.O. #

Acctnum: PESENVSWA

Collected by (signature): Chris DeBoer

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Template:

Prelogin:

TSR: Brian Ford

PB:

Shipped Via:

Immediately Packed on Ice N ___ Y X

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	**NO3,SO4,Chloride**48 hour hold	NWTPHGX	VOCs (V8260LLC)	Total Fe Mn 6020	TOC	Alkalinity	EEM (RSK175LL)	Remarks	Sample # (lab only)
GEI-1-102119	Grab	GW	32'	10/21/19	1111	12	X		X	X	X	X	X		-01
GEI-2-102119		GW	55'		1204	15	X		X	X	X	X	X		02
FMW-131-102119		GW	68'		1315	15	X		X	X	X	X	X		03
MW12-102119		GW	80'		1435	15	X	X	X	X	X	X	X		04
TRIP BLANK-102119	—	GW	—	—	—	1		X	X						
TRIPBLANK-102119	—	GW	—	—	—			X	X						05
		GW													
		GW													
		GW													
		GW													

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 1775 8600 9728 7

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y __N
COC Signed/Accurate: Y __N
Bottles arrive intact: Y __N
Correct bottles used: Y __N
Sufficient volume sent: Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
[illegible] mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Chris DeBoer	10/21/19	1520		1
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				2.4-2=2.2 38
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
				10/22/19 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 04, 2019

PES Environmental, Inc.- WA

Sample Delivery Group:	L1152340
Samples Received:	10/22/2019
Project Number:	1413.001.02.501E
Description:	American Linen

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By: Brian Ford

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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MW-138-102119 L1152340-01 GW

Collected by: Chris Deboer | Collected date/time: 10/21/19 10:05 | Received date/time: 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 22:03	10/24/19 22:03	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 04:10	10/23/19 04:10	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370125	1	10/26/19 12:44	10/26/19 12:44	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:35	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1373020	1	11/02/19 23:56	11/02/19 23:56	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 13:40	10/23/19 13:40	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 07:04	10/29/19 07:04	ADM	Mt. Juliet, TN

MW-302-102119 L1152340-02 GW

Collected by: Chris Deboer | Collected date/time: 10/21/19 11:25 | Received date/time: 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 22:11	10/24/19 22:11	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 04:26	10/23/19 04:26	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370125	1	10/26/19 13:00	10/26/19 13:00	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:39	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 04:46	10/31/19 04:46	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 13:42	10/23/19 13:42	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 07:24	10/29/19 07:24	ADM	Mt. Juliet, TN

MW-304-102119 L1152340-03 GW

Collected by: Chris Deboer | Collected date/time: 10/21/19 12:50 | Received date/time: 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 22:20	10/24/19 22:20	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 05:32	10/23/19 05:32	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370125	1	10/26/19 13:15	10/26/19 13:15	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:42	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 05:08	10/31/19 05:08	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 13:57	10/23/19 13:57	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 07:44	10/29/19 07:44	ADM	Mt. Juliet, TN

MW-303-102119 L1152340-04 GW

Collected by: Chris Deboer | Collected date/time: 10/21/19 13:15 | Received date/time: 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 22:29	10/24/19 22:29	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 05:48	10/23/19 05:48	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370125	1	10/26/19 13:28	10/26/19 13:28	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:46	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 05:29	10/31/19 05:29	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 14:00	10/23/19 14:00	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 08:05	10/29/19 08:05	ADM	Mt. Juliet, TN

R-MW5-102119 L1152340-05 GW

Collected by: Chris Deboer | Collected date/time: 10/21/19 10:25 | Received date/time: 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 22:47	10/24/19 22:47	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 06:05	10/23/19 06:05	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370125	1	10/26/19 13:45	10/26/19 13:45	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:49	JPD	Mt. Juliet, TN

R-MW5-102119 L1152340-05 GW

Collected by: Chris Deboer
Collected date/time: 10/21/19 10:25
Received date/time: 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 05:51	10/31/19 05:51	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 14:04	10/23/19 14:04	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 08:25	10/29/19 08:25	ADM	Mt. Juliet, TN

TRIP BLANK-102119 L1152340-06 GW

Collected by: Chris Deboer
Collected date/time: 10/21/19 00:00
Received date/time: 10/22/19 08:45

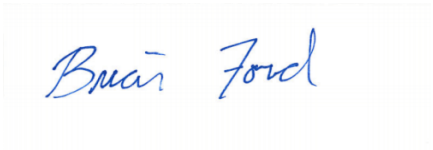
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/30/19 23:45	10/30/19 23:45	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 04:22	10/29/19 04:22	ADM	Mt. Juliet, TN

FMW-129-102119 L1152340-07 GW

Collected by: Chris Deboer
Collected date/time: 10/21/19 12:25
Received date/time: 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 22:55	10/24/19 22:55	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 06:21	10/23/19 06:21	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370125	1	10/26/19 15:12	10/26/19 15:12	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:52	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1373020	1	11/03/19 00:18	11/03/19 00:18	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 14:07	10/23/19 14:07	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 08:45	10/29/19 08:45	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371769	10	10/29/19 19:10	10/29/19 19:10	ADM	Mt. Juliet, TN

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



Brian Ford
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	129000		2710	20000	1	10/24/2019 22:03	WG1369144

Sample Narrative:
L1152340-01 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	14200		51.9	1000	1	10/23/2019 04:10	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 04:10	WG1367181
Sulfate	51900		77.4	5000	1	10/23/2019 04:10	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1100	B	102	1000	1	10/26/2019 12:44	WG1370125

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3830		15.0	100	1	10/26/2019 16:35	WG1368592
Manganese	504		0.250	5.00	1	10/26/2019 16:35	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	92.7	B J	31.6	100	1	11/02/2019 23:56	WG1373020
(S) a,a,a-Trifluorotoluene(FID)	*96.4*			*78.0-120*		*11/02/2019 23:56*	WG1373020

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	101		0.287	0.678	1	10/23/2019 13:40	WG1367825
Ethane	U		0.296	1.29	1	10/23/2019 13:40	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 13:40	WG1367825

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.23	J J4	1.05	25.0	1	10/29/2019 07:04	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 07:04	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 07:04	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 07:04	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 07:04	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 07:04	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 07:04	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 07:04	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 07:04	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 07:04	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 07:04	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 07:04	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 07:04	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/29/2019 07:04	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 07:04	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 07:04	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 07:04	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 07:04	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 07:04	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 07:04	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 07:04	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 07:04	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 07:04	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 07:04	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 07:04	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 07:04	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 07:04	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 07:04	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 07:04	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 07:04	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 07:04	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 07:04	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 07:04	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 07:04	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 07:04	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 07:04	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 07:04	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 07:04	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 07:04	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 07:04	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 07:04	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 07:04	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 07:04	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 07:04	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 07:04	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 07:04	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 07:04	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 07:04	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 07:04	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 07:04	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 07:04	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 07:04	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 07:04	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 07:04	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 07:04	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 07:04	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 07:04	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 07:04	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 07:04	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 07:04	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 07:04	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 07:04	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 07:04	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 07:04	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 07:04	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 07:04	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 07:04	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 07:04	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 07:04	WG1371177

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 07:04	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 07:04	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 07:04	WG1371177
(S) Toluene-d8	*100*			*80.0-120*		*10/29/2019 07:04*	WG1371177
(S) 4-Bromofluorobenzene	*109*			*77.0-126*		*10/29/2019 07:04*	WG1371177
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*10/29/2019 07:04*	WG1371177

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	311000		2710	20000	1	10/24/2019 22:11	WG1369144

Sample Narrative:

L1152340-02 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	20200		51.9	1000	1	10/23/2019 04:26	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 04:26	WG1367181
Sulfate	26800		77.4	5000	1	10/23/2019 04:26	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	8100		102	1000	1	10/26/2019 13:00	WG1370125

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2260		15.0	100	1	10/26/2019 16:39	WG1368592
Manganese	295		0.250	5.00	1	10/26/2019 16:39	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	98.5	B J	31.6	100	1	10/31/2019 04:46	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*78.0-120*		*10/31/2019 04:46*	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	129		0.287	0.678	1	10/23/2019 13:42	WG1367825
Ethane	3.74		0.296	1.29	1	10/23/2019 13:42	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 13:42	WG1367825

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.19	J J4	1.05	25.0	1	10/29/2019 07:24	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 07:24	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 07:24	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 07:24	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 07:24	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 07:24	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 07:24	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 07:24	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 07:24	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 07:24	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 07:24	WG1371177
Carbon disulfide	0.357	J	0.101	0.500	1	10/29/2019 07:24	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 07:24	WG1371177

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/29/2019 07:24	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 07:24	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 07:24	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 07:24	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 07:24	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 07:24	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 07:24	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 07:24	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 07:24	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 07:24	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 07:24	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 07:24	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 07:24	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 07:24	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 07:24	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 07:24	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 07:24	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 07:24	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 07:24	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 07:24	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 07:24	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 07:24	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 07:24	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 07:24	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 07:24	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 07:24	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 07:24	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 07:24	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 07:24	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 07:24	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 07:24	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 07:24	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 07:24	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 07:24	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 07:24	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 07:24	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 07:24	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 07:24	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 07:24	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 07:24	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 07:24	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 07:24	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 07:24	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 07:24	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 07:24	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 07:24	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 07:24	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 07:24	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 07:24	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 07:24	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 07:24	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 07:24	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 07:24	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 07:24	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 07:24	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 07:24	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 07:24	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 07:24	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 07:24	WG1371177
(S) Toluene-d8	*101*			*80.0-120*		*10/29/2019 07:24*	WG1371177
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*10/29/2019 07:24*	WG1371177
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*		*10/29/2019 07:24*	WG1371177

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	153000		2710	20000	1	10/24/2019 22:20	WG1369144

Sample Narrative:
L1152340-03 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	12100		51.9	1000	1	10/23/2019 05:32	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 05:32	WG1367181
Sulfate	16200		77.4	5000	1	10/23/2019 05:32	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4240		102	1000	1	10/26/2019 13:15	WG1370125

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5820		15.0	100	1	10/26/2019 16:42	WG1368592
Manganese	455		0.250	5.00	1	10/26/2019 16:42	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	97.9	B J	31.6	100	1	10/31/2019 05:08	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	*95.9*			*78.0-120*		*10/31/2019 05:08*	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	31.9		0.287	0.678	1	10/23/2019 13:57	WG1367825
Ethane	U		0.296	1.29	1	10/23/2019 13:57	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 13:57	WG1367825

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.66	J J4	1.05	25.0	1	10/29/2019 07:44	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 07:44	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 07:44	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 07:44	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 07:44	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 07:44	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 07:44	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 07:44	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 07:44	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 07:44	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 07:44	WG1371177
Carbon disulfide	0.290	J	0.101	0.500	1	10/29/2019 07:44	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 07:44	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/29/2019 07:44	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 07:44	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 07:44	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 07:44	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 07:44	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 07:44	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 07:44	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 07:44	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 07:44	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 07:44	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 07:44	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 07:44	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 07:44	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 07:44	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 07:44	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 07:44	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 07:44	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 07:44	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 07:44	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 07:44	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 07:44	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 07:44	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 07:44	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 07:44	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 07:44	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 07:44	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 07:44	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 07:44	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 07:44	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 07:44	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 07:44	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 07:44	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 07:44	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 07:44	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 07:44	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 07:44	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 07:44	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 07:44	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 07:44	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 07:44	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 07:44	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 07:44	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 07:44	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 07:44	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 07:44	WG1371177
Toluene	0.728		0.412	0.500	1	10/29/2019 07:44	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 07:44	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 07:44	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 07:44	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 07:44	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 07:44	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 07:44	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 07:44	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 07:44	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 07:44	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 07:44	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 07:44	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 07:44	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 07:44	WG1371177
(S) Toluene-d8	*102*			*80.0-120*		*10/29/2019 07:44*	WG1371177
(S) 4-Bromofluorobenzene	*111*			*77.0-126*		*10/29/2019 07:44*	WG1371177
(S) 1,2-Dichloroethane-d4	*99.7*			*70.0-130*		*10/29/2019 07:44*	WG1371177

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	144000		2710	20000	1	10/24/2019 22:29	WG1369144

Sample Narrative:
L1152340-04 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	15200		51.9	1000	1	10/23/2019 05:48	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 05:48	WG1367181
Sulfate	62200		77.4	5000	1	10/23/2019 05:48	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4760		102	1000	1	10/26/2019 13:28	WG1370125

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3060		15.0	100	1	10/26/2019 16:46	WG1368592
Manganese	289		0.250	5.00	1	10/26/2019 16:46	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	99.6	B J	31.6	100	1	10/31/2019 05:29	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	*96.2*			*78.0-120*		*10/31/2019 05:29*	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	95.7		0.287	0.678	1	10/23/2019 14:00	WG1367825
Ethane	6.17		0.296	1.29	1	10/23/2019 14:00	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 14:00	WG1367825

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.03	J J4	1.05	25.0	1	10/29/2019 08:05	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 08:05	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 08:05	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 08:05	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 08:05	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 08:05	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 08:05	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 08:05	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 08:05	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 08:05	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 08:05	WG1371177
Carbon disulfide	0.224	J	0.101	0.500	1	10/29/2019 08:05	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 08:05	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/29/2019 08:05	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 08:05	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 08:05	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 08:05	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 08:05	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 08:05	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 08:05	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 08:05	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 08:05	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 08:05	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 08:05	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 08:05	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 08:05	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 08:05	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 08:05	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 08:05	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 08:05	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 08:05	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 08:05	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 08:05	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 08:05	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 08:05	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 08:05	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 08:05	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 08:05	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 08:05	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 08:05	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 08:05	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 08:05	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 08:05	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 08:05	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 08:05	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 08:05	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 08:05	WG1371177
2-Butanone (MEK)	1.48	J J0	1.28	5.00	1	10/29/2019 08:05	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 08:05	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 08:05	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 08:05	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 08:05	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 08:05	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 08:05	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 08:05	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 08:05	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 08:05	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 08:05	WG1371177
Toluene	1.63		0.412	0.500	1	10/29/2019 08:05	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 08:05	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 08:05	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 08:05	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 08:05	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 08:05	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 08:05	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 08:05	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 08:05	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 08:05	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 08:05	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 08:05	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 08:05	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 08:05	WG1371177
(S) Toluene-d8	*99.7*			*80.0-120*		*10/29/2019 08:05*	WG1371177
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*10/29/2019 08:05*	WG1371177
(S) 1,2-Dichloroethane-d4	*98.2*			*70.0-130*		*10/29/2019 08:05*	WG1371177

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	112000		2710	20000	1	10/24/2019 22:47	WG1369144

Sample Narrative:

L1152340-05 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	41400		51.9	1000	1	10/23/2019 06:05	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 06:05	WG1367181
Sulfate	18600		77.4	5000	1	10/23/2019 06:05	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4440		102	1000	1	10/26/2019 13:45	WG1370125

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3000		15.0	100	1	10/26/2019 16:49	WG1368592
Manganese	1200		0.250	5.00	1	10/26/2019 16:49	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	95.3	B J	31.6	100	1	10/31/2019 05:51	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	*96.2*			*78.0-120*		*10/31/2019 05:51*	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	194		0.287	0.678	1	10/23/2019 14:04	WG1367825
Ethane	U		0.296	1.29	1	10/23/2019 14:04	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 14:04	WG1367825

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	1.05	25.0	1	10/29/2019 08:25	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 08:25	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 08:25	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 08:25	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 08:25	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 08:25	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 08:25	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 08:25	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 08:25	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 08:25	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 08:25	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 08:25	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 08:25	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/29/2019 08:25	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 08:25	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 08:25	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 08:25	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 08:25	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 08:25	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 08:25	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 08:25	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 08:25	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 08:25	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 08:25	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 08:25	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 08:25	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 08:25	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 08:25	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 08:25	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 08:25	WG1371177
cis-1,2-Dichloroethene	0.302	J	0.0933	0.500	1	10/29/2019 08:25	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 08:25	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 08:25	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 08:25	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 08:25	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 08:25	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 08:25	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 08:25	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 08:25	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 08:25	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 08:25	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 08:25	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 08:25	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 08:25	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 08:25	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 08:25	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 08:25	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 08:25	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 08:25	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 08:25	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 08:25	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 08:25	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 08:25	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 08:25	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 08:25	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 08:25	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 08:25	WG1371177
Tetrachloroethene	0.523		0.199	0.500	1	10/29/2019 08:25	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 08:25	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 08:25	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 08:25	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 08:25	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 08:25	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 08:25	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 08:25	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 08:25	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 08:25	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 08:25	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 08:25	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 08:25	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 08:25	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 08:25	WG1371177
(S) Toluene-d8	*100*			*80.0-120*		*10/29/2019 08:25*	WG1371177
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*10/29/2019 08:25*	WG1371177
(S) 1,2-Dichloroethane-d4	*97.9*			*70.0-130*		*10/29/2019 08:25*	WG1371177

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	97.4	B J	31.6	100	1	10/30/2019 23:45	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	*97.5*			*78.0-120*		*10/30/2019 23:45*	WG1371615

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	1.05	25.0	1	10/29/2019 04:22	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 04:22	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 04:22	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 04:22	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 04:22	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 04:22	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 04:22	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 04:22	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 04:22	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 04:22	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 04:22	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 04:22	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 04:22	WG1371177
Chlorobenzene	U		0.140	0.500	1	10/29/2019 04:22	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 04:22	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 04:22	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 04:22	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 04:22	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 04:22	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 04:22	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 04:22	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 04:22	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 04:22	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 04:22	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 04:22	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 04:22	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 04:22	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 04:22	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 04:22	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 04:22	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 04:22	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 04:22	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 04:22	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 04:22	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 04:22	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 04:22	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 04:22	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 04:22	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 04:22	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 04:22	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 04:22	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 04:22	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 04:22	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 04:22	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 04:22	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 04:22	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 04:22	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 04:22	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	10/29/2019 04:22	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 04:22	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 04:22	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 04:22	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 04:22	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 04:22	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 04:22	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 04:22	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 04:22	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 04:22	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 04:22	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 04:22	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 04:22	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 04:22	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 04:22	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 04:22	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 04:22	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 04:22	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 04:22	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 04:22	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 04:22	WG1371177
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 04:22	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 04:22	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 04:22	WG1371177
(S) Toluene-d8	*97.5*			*80.0-120*		*10/29/2019 04:22*	WG1371177
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*10/29/2019 04:22*	WG1371177
(S) 1,2-Dichloroethane-d4	*97.1*			*70.0-130*		*10/29/2019 04:22*	WG1371177

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	209000		2710	20000	1	10/24/2019 22:55	WG1369144

Sample Narrative:
L1152340-07 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	23600		51.9	1000	1	10/23/2019 06:21	WG1367181
Nitrate	639		22.7	100	1	10/23/2019 06:21	WG1367181
Sulfate	82400		77.4	5000	1	10/23/2019 06:21	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1520	B	102	1000	1	10/26/2019 15:12	WG1370125

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	18900		15.0	100	1	10/26/2019 16:52	WG1368592
Manganese	648		0.250	5.00	1	10/26/2019 16:52	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	141	B	31.6	100	1	11/03/2019 00:18	WG1373020
(S) a,a,a-Trifluorotoluene(FID)	*96.5*			*78.0-120*		*11/03/2019 00:18*	WG1373020

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	53.5		0.287	0.678	1	10/23/2019 14:07	WG1367825
Ethane	5.31		0.296	1.29	1	10/23/2019 14:07	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 14:07	WG1367825

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	1.05	25.0	1	10/29/2019 08:45	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 08:45	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 08:45	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 08:45	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 08:45	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 08:45	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 08:45	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 08:45	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 08:45	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 08:45	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 08:45	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 08:45	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 08:45	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/29/2019 08:45	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 08:45	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 08:45	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 08:45	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 08:45	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 08:45	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 08:45	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 08:45	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 08:45	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 08:45	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 08:45	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 08:45	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 08:45	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 08:45	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 08:45	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 08:45	WG1371177
1,1-Dichloroethene	1.62		0.188	0.500	1	10/29/2019 08:45	WG1371177
cis-1,2-Dichloroethene	350		0.933	5.00	10	10/29/2019 19:10	WG1371769
trans-1,2-Dichloroethene	1.61		0.152	0.500	1	10/29/2019 08:45	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 08:45	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 08:45	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 08:45	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 08:45	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 08:45	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 08:45	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 08:45	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 08:45	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 08:45	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 08:45	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 08:45	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 08:45	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 08:45	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 08:45	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 08:45	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 08:45	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 08:45	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 08:45	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 08:45	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 08:45	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 08:45	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 08:45	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 08:45	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 08:45	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 08:45	WG1371177
Tetrachloroethene	114		0.199	0.500	1	10/29/2019 08:45	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 08:45	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 08:45	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 08:45	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 08:45	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 08:45	WG1371177
Trichloroethene	198		0.153	0.500	1	10/29/2019 08:45	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 08:45	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 08:45	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 08:45	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 08:45	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 08:45	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 08:45	WG1371177
Vinyl chloride	0.259	J	0.118	0.500	1	10/29/2019 08:45	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 08:45	WG1371177
(S) Toluene-d8	*98.7*			*80.0-120*		*10/29/2019 08:45*	WG1371177
(S) Toluene-d8	*105*			*80.0-120*		*10/29/2019 19:10*	WG1371769
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*10/29/2019 08:45*	WG1371177
(S) 4-Bromofluorobenzene	*99.1*			*77.0-126*		*10/29/2019 19:10*	WG1371769
(S) 1,2-Dichloroethane-d4	*98.1*			*70.0-130*		*10/29/2019 08:45*	WG1371177
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*10/29/2019 19:10*	WG1371769

Method Blank (MB)

(MB) R3464935-1 10/24/19 21:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		2710	20000

Sample Narrative:
BLANK: Endpoint pH 4.5

L1152333-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152333-01 10/24/19 21:24 • (DUP) R3464935-2 10/24/19 21:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	589000	589000	1	0.0563		20

Sample Narrative:
OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

L1152791-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152791-01 10/24/19 23:11 • (DUP) R3464935-4 10/24/19 23:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	519000	520000	1	0.243		20

Sample Narrative:
OS: Endpoint pH 4.5 headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3464935-3 10/24/19 22:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	98500	98.5	85.0-115	

Sample Narrative:
LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3463970-1 10/22/19 09:41

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

L1152322-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152322-01 10/22/19 14:34 • (DUP) R3463970-9 10/23/19 03:53

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	6100	6720	1	9.68		15
Nitrate	210	233	1	10.7		15
Sulfate	89600	0.000	1	200	J3	15

L1152340-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1152340-02 10/23/19 04:26 • (DUP) R3463970-10 10/23/19 05:15

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	20200	19800	1	1.66		15
Nitrate	U	0.000	1	0.000		15
Sulfate	26800	26800	1	0.133		15

Laboratory Control Sample (LCS)

(LCS) R3463970-2 10/22/19 09:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	37700	94.3	80.0-120	
Nitrate	8000	7790	97.4	80.0-120	
Sulfate	40000	37800	94.4	80.0-120	

L1152324-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1152324-03 10/23/19 03:21 • (MS) R3463970-8 10/23/19 03:37

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	1960	53800	104	1	80.0-120	
Nitrate	5000	110	5070	99.1	1	80.0-120	
Sulfate	50000	ND	55900	104	1	80.0-120	

L1152346-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152346-01 10/23/19 06:37 • (MS) R3463970-11 10/23/19 06:54 • (MSD) R3463970-12 10/23/19 07:10

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	2070	48300	48100	92.4	92.1	1	80.0-120			0.294	15
Nitrate	5000	ND	4600	4730	90.7	93.4	1	80.0-120			2.84	15
Sulfate	50000	29900	75600	75300	91.4	90.9	1	80.0-120			0.297	15

Method Blank (MB)

(MB) R3466124-1 10/26/19 10:58

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	304	J	102	1000

L1152340-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1152340-05 10/26/19 13:45 • (DUP) R3466124-3 10/26/19 14:00

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	4440	4380	1	1.36		20

L1152670-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1152670-03 10/26/19 16:56 • (DUP) R3466124-6 10/26/19 17:09

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	964	990	1	2.65	J	20

Laboratory Control Sample (LCS)

(LCS) R3466124-2 10/26/19 11:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC	75000	72500	96.7	85.0-115	

L1152412-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152412-05 10/26/19 15:27 • (MS) R3466124-4 10/26/19 15:47 • (MSD) R3466124-5 10/26/19 16:03

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	2760	52200	50600	98.9	95.7	1	80.0-120			3.15	20

L1152670-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152670-06 10/26/19 18:52 • (MS) R3466124-7 10/26/19 19:09 • (MSD) R3466124-8 10/26/19 19:29

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	1110	48600	50000	94.9	97.7	1	80.0-120			2.86	20

Method Blank (MB)

(MB) R3465394-1 10/26/19 15:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		15.0	100
Manganese	0.346	J	0.250	5.00

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

(LCS) R3465394-2 10/26/19 15:21 • (LCSD) R3465394-3 10/26/19 15:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Iron	5000	5100	4990	102	99.9	80.0-120			2.20	20
Manganese	50.0	51.5	50.9	103	102	80.0-120			1.15	20

L1152302-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152302-01 10/26/19 15:28 • (MS) R3465394-5 10/26/19 15:35 • (MSD) R3465394-6 10/26/19 15:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	5000	158	5230	4990	101	96.6	1	75.0-125			4.76	20
Manganese	50.0	5.28	56.9	54.1	103	97.6	1	75.0-125			5.01	20

Method Blank (MB)

(MB) R3467099-2 10/30/19 23:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	103		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3467099-1 10/30/19 22:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5290	96.2	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*78.0-120*	

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

Method Blank (MB)

(MB) R3467812-2 11/02/19 22:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	97.6	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3467812-1 11/02/19 20:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4900	89.1	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*78.0-120*	

Method Blank (MB)

(MB) R3464142-1 10/23/19 11:04

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

L1152333-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1152333-03 10/23/19 13:15 • (DUP) R3464142-2 10/23/19 13:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	45.6	42.6	1	6.80		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

L1152347-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152347-01 10/23/19 14:09 • (DUP) R3464142-3 10/23/19 14:25

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	1810	1930	1	6.42		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

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

(LCS) R3464142-4 10/23/19 14:27 • (LCSD) R3464142-5 10/23/19 14:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	69.4	71.2	102	105	85.0-115			2.56	20
Ethane	129	125	127	96.9	98.4	85.0-115			1.59	20
Ethene	127	131	133	103	105	85.0-115			1.52	20

Method Blank (MB)

(MB) R3466378-3 10/29/19 03:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3466378-3 10/29/19 03:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*97.6*			*80.0-120*
(S) 4-Bromofluorobenzene	*107*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3466378-1 10/29/19 02:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	91.7	73.4	19.0-160	J4
Acrylonitrile	125	90.2	72.2	55.0-149	J4
Benzene	25.0	27.6	110	70.0-123	
Bromobenzene	25.0	23.0	92.0	73.0-121	
Bromodichloromethane	25.0	30.2	121	75.0-120	J4
Bromochloromethane	25.0	29.1	116	76.0-122	
Bromoform	25.0	22.1	88.4	68.0-132	
Bromomethane	25.0	25.1	100	10.0-160	
n-Butylbenzene	25.0	26.1	104	73.0-125	
sec-Butylbenzene	25.0	24.5	98.0	75.0-125	
tert-Butylbenzene	25.0	25.3	101	76.0-124	
Carbon disulfide	25.0	24.5	98.0	61.0-128	
Carbon tetrachloride	25.0	30.0	120	68.0-126	
Chlorobenzene	25.0	24.6	98.4	80.0-121	
Chlorodibromomethane	25.0	26.6	106	77.0-125	
Chloroethane	25.0	23.2	92.8	47.0-150	
Chloroform	25.0	27.3	109	73.0-120	
Chloromethane	25.0	16.4	65.6	41.0-142	
2-Chlorotoluene	25.0	25.1	100	76.0-123	
4-Chlorotoluene	25.0	25.2	101	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	24.8	99.2	58.0-134	
1,2-Dibromoethane	25.0	23.3	93.2	80.0-122	
Dibromomethane	25.0	29.6	118	80.0-120	
1,2-Dichlorobenzene	25.0	23.2	92.8	79.0-121	
1,3-Dichlorobenzene	25.0	23.6	94.4	79.0-120	
1,4-Dichlorobenzene	25.0	22.6	90.4	79.0-120	
Dichlorodifluoromethane	25.0	27.2	109	51.0-149	
1,1-Dichloroethane	25.0	24.5	98.0	70.0-126	
1,2-Dichloroethane	25.0	26.6	106	70.0-128	
1,1-Dichloroethene	25.0	28.4	114	71.0-124	
cis-1,2-Dichloroethene	25.0	26.6	106	73.0-120	
trans-1,2-Dichloroethene	25.0	27.7	111	73.0-120	
1,2-Dichloropropane	25.0	24.0	96.0	77.0-125	
1,1-Dichloropropene	25.0	29.6	118	74.0-126	
1,3-Dichloropropane	25.0	24.7	98.8	80.0-120	
cis-1,3-Dichloropropene	25.0	29.6	118	80.0-123	
trans-1,3-Dichloropropene	25.0	26.7	107	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	17.0	68.0	33.0-144	
2,2-Dichloropropane	25.0	30.5	122	58.0-130	
Di-isopropyl ether	25.0	17.5	70.0	58.0-138	

Laboratory Control Sample (LCS)

(LCS) R3466378-1 10/29/19 02:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	24.6	98.4	79.0-123	
Hexachloro-1,3-butadiene	25.0	26.8	107	54.0-138	
2-Hexanone	125	97.6	78.1	67.0-149	
n-Hexane	25.0	22.1	88.4	57.0-133	
Iodomethane	125	152	122	33.0-147	
Isopropylbenzene	25.0	25.1	100	76.0-127	
p-Isopropyltoluene	25.0	25.3	101	76.0-125	
2-Butanone (MEK)	125	90.9	72.7	44.0-160	
Methylene Chloride	25.0	22.8	91.2	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	88.6	70.9	68.0-142	
Methyl tert-butyl ether	25.0	25.7	103	68.0-125	
Naphthalene	25.0	24.4	97.6	54.0-135	
n-Propylbenzene	25.0	25.9	104	77.0-124	
Styrene	25.0	23.9	95.6	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	24.8	99.2	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	21.8	87.2	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	26.2	105	69.0-132	
Tetrachloroethene	25.0	27.3	109	72.0-132	
Toluene	25.0	26.3	105	79.0-120	
1,2,3-Trichlorobenzene	25.0	26.2	105	50.0-138	
1,2,4-Trichlorobenzene	25.0	25.6	102	57.0-137	
1,1,1-Trichloroethane	25.0	31.7	127	73.0-124	J4
1,1,2-Trichloroethane	25.0	26.3	105	80.0-120	
Trichloroethene	25.0	29.1	116	78.0-124	
Trichlorofluoromethane	25.0	29.1	116	59.0-147	
1,2,3-Trichloropropane	25.0	24.5	98.0	73.0-130	
1,2,4-Trimethylbenzene	25.0	24.7	98.8	76.0-121	
1,2,3-Trimethylbenzene	25.0	23.8	95.2	77.0-120	
1,3,5-Trimethylbenzene	25.0	24.7	98.8	76.0-122	
Vinyl acetate	125	88.5	70.8	11.0-160	
Vinyl chloride	25.0	21.0	84.0	67.0-131	
Xylenes, Total	75.0	72.0	96.0	79.0-123	
(S) Toluene-d8			*99.9*	*80.0-120*	
(S) 4-Bromofluorobenzene			*105*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*98.5*	*70.0-130*	

Method Blank (MB)

(MB) R3467086-3 10/29/19 18:32

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	0.167	J	0.0933	0.500
(S) Toluene-d8	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*97.1*			*70.0-130*

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

(LCS) R3467086-1 10/29/19 17:35 • (LCSD) R3467086-2 10/29/19 17:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	5.00	4.96	5.27	99.2	105	73.0-120			6.06	20
(S) Toluene-d8				*104*	*104*	*80.0-120*				
(S) 4-Bromofluorobenzene				*99.8*	*98.6*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*98.8*	*96.4*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

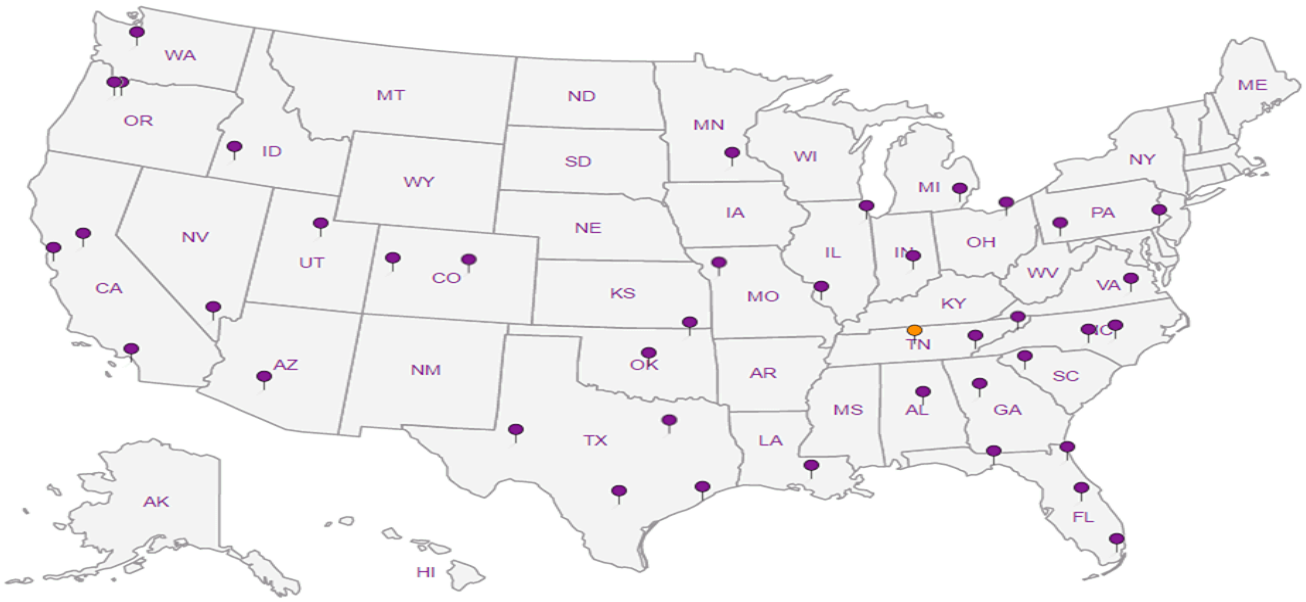
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



PES-Seattle

Billing Information: PES-Seattle

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

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

Report to: Bill Haldeman/Brian O'neal

Email To: on file

Project Description: American Liner

City/State Collected: Seattle, WA

Phone: on file
Fax:

Client Project # 1413.001.02.SOIE

Lab Project # PESENVSWA-ALP

L# 1152340

E151

Collected by (print): Chris DeBoer

Site/Facility ID #

P.O. #

Collected by (signature): Chris DeBoer
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Acctnum: PESENVSWA
Template:
Prelogin:
TSR: Brian Ford
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	**NO3,SO4,Chloride**48 hour hold	NWTPHGX	VOCs (V8260LLC)	Total Fe Mn 6020	TOC	Alkalinity	EEM (RSK175LL)	Remarks	Sample # (lab only)
MW-130-102119	Grab	GW	110'	10/21/19	1005	12	X	X	X	X	X	X	X		-01
MW-302-102119		GW	60'		1125	12	X	X	X	X	X	X	X		02
MW-304-102119		GW	110'		1250	12	X	X	X	X	X	X	X		03
MW-303-102119		GW	77'		1315	12	X	X	X	X	X	X	X		04
R-MW5-102119	↓	GW	27~~23~~ SW	↓	1025	12	X	X	X	X	X	X	X		05
TRIP BLANK-102119	—	GW	—	10/21/19	—	1		X	X						06
FMW-129-102119	Grab	GW	86'	10/21/19	1225	17 CK	X	X	X	X	X	X	X		07
		GW													
		GW													
		GW													

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 1275 8600 9716

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	If preservation required by Login: Date/Time
Chris DeBoer	10/21/19	1600		1	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.7 -.2=4.5 °C Bottles Received: 62	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 10/22/19 Time: 8:45	Hold: pHadj 1050 10/22 Condition: NCF / OK

Kelsey Stephenson

Login #: L1152340	Client:PESENVSWA	Date:10/22	Evaluated by:Kelsey S

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Temperature not in range		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	pH not in range.		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courier
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: TOC for MW-303-10219 received with a pH of 7

Client informed by:		Call		Email x		Voice Mail		Date:10/22/19	Time:1115
TSR Initials:bjf	Client Contact: PMs								

Login Instructions:

Proceed and qualify as needed.

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 04, 2019

PES Environmental, Inc.- WA

Sample Delivery Group:	L1152823
Samples Received:	10/23/2019
Project Number:	1413.001.02.501E
Description:	American Linen
Site:	AMERICAN LINEN
Report To:	Brian O'Neal/Bill Haldeman 1215 Fourth Ave., Suite 1350 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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MW-918-102219 L1152823-01 GW

Collected by: BLH/HRC | Collected date/time: 10/22/19 09:30 | Received date/time: 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 23:27	10/24/19 23:27	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 18:44	10/23/19 18:44	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 19:05	10/26/19 19:05	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 16:34	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1373020	1	11/03/19 00:40	11/03/19 00:40	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 11:45	10/24/19 11:45	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 09:06	10/29/19 09:06	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371769	5	10/29/19 19:29	10/29/19 19:29	ADM	Mt. Juliet, TN

MW-116-102219 L1152823-02 GW

Collected by: BLH/HRC | Collected date/time: 10/22/19 10:05 | Received date/time: 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 23:34	10/24/19 23:34	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 19:17	10/23/19 19:17	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 19:30	10/26/19 19:30	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:09	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	5	10/25/19 10:19	10/29/19 02:45	LAT	Mt. Juliet, TN

MW-113-102219 L1152823-03 GW

Collected by: BLH/HRC | Collected date/time: 10/22/19 10:45 | Received date/time: 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 23:42	10/24/19 23:42	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 19:33	10/23/19 19:33	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 19:57	10/26/19 19:57	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:12	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	5	10/25/19 10:19	10/29/19 02:48	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 11:49	10/24/19 11:49	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 09:26	10/29/19 09:26	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371769	10	10/29/19 19:48	10/29/19 19:48	ADM	Mt. Juliet, TN

MW-115-102219 L1152823-04 GW

Collected by: BLH/HRC | Collected date/time: 10/22/19 11:05 | Received date/time: 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 23:49	10/24/19 23:49	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 20:39	10/23/19 20:39	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 20:20	10/26/19 20:20	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:15	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	5	10/25/19 10:19	10/29/19 02:51	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 11:51	10/24/19 11:51	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 09:46	10/29/19 09:46	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371769	1	10/29/19 20:07	10/29/19 20:07	ADM	Mt. Juliet, TN

BB-8-102219 L1152823-05 GW

Collected by: BLH/HRC | Collected date/time: 10/22/19 12:50 | Received date/time: 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 23:57	10/24/19 23:57	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 20:55	10/23/19 20:55	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 23:06	10/26/19 23:06	VRP	Mt. Juliet, TN

BB-8-102219 L1152823-05 GW

Collected by: BLH/HRC | Collected date/time: 10/22/19 12:50 | Received date/time: 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:19	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1373020	1	11/03/19 01:01	11/03/19 01:01	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 11:54	10/24/19 11:54	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 10:06	10/29/19 10:06	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371769	5	10/29/19 20:26	10/29/19 20:26	ADM	Mt. Juliet, TN

MW-105-102219 L1152823-06 GW

Collected by: BLH/HRC | Collected date/time: 10/22/19 13:00 | Received date/time: 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/25/19 00:13	10/25/19 00:13	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 21:12	10/23/19 21:12	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 23:27	10/26/19 23:27	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:22	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	5	10/25/19 10:19	10/29/19 02:55	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 08:01	10/31/19 08:01	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 11:56	10/24/19 11:56	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 10:27	10/29/19 10:27	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371769	1	10/29/19 20:45	10/29/19 20:45	ADM	Mt. Juliet, TN

MW-919-102219 L1152823-07 GW

Collected by: BLH/HRC | Collected date/time: 10/22/19 14:00 | Received date/time: 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/25/19 00:20	10/25/19 00:20	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 21:28	10/23/19 21:28	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 23:44	10/26/19 23:44	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:25	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	5	10/25/19 10:19	10/29/19 02:58	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 08:23	10/31/19 08:23	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 11:58	10/24/19 11:58	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1373274	1	10/31/19 21:50	10/31/19 21:50	JCP	Mt. Juliet, TN

EQ-102219 L1152823-08 GW

Collected by: BLH/HRC | Collected date/time: 10/22/19 15:00 | Received date/time: 10/23/19 08:45

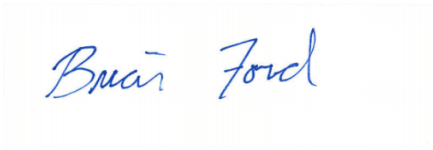
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/25/19 00:29	10/25/19 00:29	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 21:44	10/23/19 21:44	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/27/19 00:02	10/27/19 00:02	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:29	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 08:44	10/31/19 08:44	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 12:52	10/24/19 12:52	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1373274	1	10/31/19 22:10	10/31/19 22:10	JCP	Mt. Juliet, TN

TRIP-102219 L1152823-09 GW

Collected by: BLH/HRC | Collected date/time: 10/22/19 15:30 | Received date/time: 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 00:07	10/31/19 00:07	JAH	Mt. Juliet, TN

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



Brian Ford
Project Manager

Project Narrative

L1152823-09, TRIP-102219, VOCs by 8260: Vial accidentally broken prior to analysis. VOC analysis not possible.

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	246000		2710	20000	1	10/24/2019 23:27	WG1369144

Sample Narrative:

L1152823-01 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	10500		51.9	1000	1	10/23/2019 18:44	WG1367978
Nitrate	2170		22.7	100	1	10/23/2019 18:44	WG1367978
Sulfate	70000		77.4	5000	1	10/23/2019 18:44	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4270	B	102	1000	1	10/26/2019 19:05	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	339		15.0	100	1	10/28/2019 16:34	WG1368595
Manganese	313		0.250	5.00	1	10/28/2019 16:34	WG1368595

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	174	B	31.6	100	1	11/03/2019 00:40	WG1373020
(S) a,a,a-Trifluorotoluene(FID)	*96.6*			*78.0-120*		*11/03/2019 00:40*	WG1373020

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	10/24/2019 11:45	WG1368615
Ethane	U		0.296	1.29	1	10/24/2019 11:45	WG1368615
Ethene	U		0.422	1.27	1	10/24/2019 11:45	WG1368615

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.77	J J4	1.05	25.0	1	10/29/2019 09:06	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 09:06	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 09:06	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 09:06	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 09:06	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 09:06	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 09:06	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 09:06	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 09:06	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 09:06	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 09:06	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 09:06	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 09:06	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/29/2019 09:06	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 09:06	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 09:06	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 09:06	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 09:06	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 09:06	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 09:06	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 09:06	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 09:06	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 09:06	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 09:06	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 09:06	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 09:06	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 09:06	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 09:06	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 09:06	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 09:06	WG1371177
cis-1,2-Dichloroethene	30.4		0.0933	0.500	1	10/29/2019 09:06	WG1371177
trans-1,2-Dichloroethene	0.426	J	0.152	0.500	1	10/29/2019 09:06	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 09:06	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 09:06	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 09:06	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 09:06	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 09:06	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 09:06	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 09:06	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 09:06	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 09:06	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 09:06	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 09:06	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 09:06	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 09:06	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 09:06	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 09:06	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 09:06	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 09:06	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 09:06	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 09:06	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 09:06	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 09:06	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 09:06	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 09:06	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 09:06	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 09:06	WG1371177
Tetrachloroethene	169		0.995	2.50	5	10/29/2019 19:29	WG1371769
Toluene	U		0.412	0.500	1	10/29/2019 09:06	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 09:06	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 09:06	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 09:06	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 09:06	WG1371177
Trichloroethene	48.3		0.153	0.500	1	10/29/2019 09:06	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 09:06	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 09:06	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 09:06	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 09:06	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 09:06	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 09:06	WG1371177
Vinyl chloride	0.152	J	0.118	0.500	1	10/29/2019 09:06	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 09:06	WG1371177
(S) Toluene-d8	*96.8*			*80.0-120*		*10/29/2019 09:06*	WG1371177
(S) Toluene-d8	*106*			*80.0-120*		*10/29/2019 19:29*	WG1371769
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*10/29/2019 09:06*	WG1371177
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*10/29/2019 19:29*	WG1371769
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*10/29/2019 09:06*	WG1371177
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*10/29/2019 19:29*	WG1371769

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	361000		2710	20000	1	10/24/2019 23:34	WG1369144

Sample Narrative:
L1152823-02 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	23600		51.9	1000	1	10/23/2019 19:17	WG1367978
Nitrate	U		22.7	100	1	10/23/2019 19:17	WG1367978
Sulfate	U		77.4	5000	1	10/23/2019 19:17	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5950		102	1000	1	10/26/2019 19:30	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3720		75.0	500	5	10/29/2019 02:45	WG1368595
Manganese	723		0.250	5.00	1	10/28/2019 17:09	WG1368595

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	561000		2710	20000	1	10/24/2019 23:42	WG1369144

Sample Narrative:
L1152823-03 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	70400		51.9	1000	1	10/23/2019 19:33	WG1367978
Nitrate	146		22.7	100	1	10/23/2019 19:33	WG1367978
Sulfate	22100		77.4	5000	1	10/23/2019 19:33	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	15800		102	1000	1	10/26/2019 19:57	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3380		75.0	500	5	10/29/2019 02:48	WG1368595
Manganese	426		0.250	5.00	1	10/28/2019 17:12	WG1368595

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2330		0.287	0.678	1	10/24/2019 11:49	WG1368615
Ethane	16.3		0.296	1.29	1	10/24/2019 11:49	WG1368615
Ethene	115		0.422	1.27	1	10/24/2019 11:49	WG1368615

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.45	J J4	1.05	25.0	1	10/29/2019 09:26	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 09:26	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 09:26	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 09:26	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 09:26	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 09:26	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 09:26	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 09:26	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 09:26	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 09:26	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 09:26	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 09:26	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 09:26	WG1371177
Chlorobenzene	U		0.140	0.500	1	10/29/2019 09:26	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 09:26	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 09:26	WG1371177
Chloroform	0.239	J	0.0860	0.500	1	10/29/2019 09:26	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 09:26	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 09:26	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 09:26	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 09:26	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 09:26	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 09:26	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 09:26	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 09:26	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 09:26	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 09:26	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 09:26	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 09:26	WG1371177
1,1-Dichloroethene	1.78		0.188	0.500	1	10/29/2019 09:26	WG1371177
cis-1,2-Dichloroethene	1420		0.933	5.00	10	10/29/2019 19:48	WG1371769
trans-1,2-Dichloroethene	4.45		0.152	0.500	1	10/29/2019 09:26	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 09:26	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 09:26	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 09:26	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 09:26	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 09:26	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 09:26	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 09:26	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 09:26	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 09:26	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 09:26	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 09:26	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 09:26	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 09:26	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 09:26	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 09:26	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 09:26	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 09:26	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 09:26	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 09:26	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 09:26	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 09:26	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 09:26	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 09:26	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 09:26	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 09:26	WG1371177
Tetrachloroethene	U		1.99	5.00	10	10/29/2019 19:48	WG1371769
Toluene	U		0.412	0.500	1	10/29/2019 09:26	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 09:26	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 09:26	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 09:26	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 09:26	WG1371177
Trichloroethene	6.77		0.153	0.500	1	10/29/2019 09:26	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 09:26	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 09:26	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 09:26	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 09:26	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 09:26	WG1371177
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 09:26	WG1371177
Vinyl chloride	66.2		0.118	0.500	1	10/29/2019 09:26	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 09:26	WG1371177
(S) Toluene-d8	*101*			*80.0-120*		*10/29/2019 09:26*	WG1371177
(S) Toluene-d8	*107*			*80.0-120*		*10/29/2019 19:48*	WG1371769
(S) 4-Bromofluorobenzene	*110*			*77.0-126*		*10/29/2019 09:26*	WG1371177
(S) 4-Bromofluorobenzene	*134*	J1		*77.0-126*		*10/29/2019 19:48*	WG1371769

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 1,2-Dichloroethane-d4	*91.8*			*70.0-130*		*10/29/2019 09:26*	WG1371177
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*10/29/2019 19:48*	WG1371769

Sample Narrative:

L1152823-03 WG1371177, WG1371769: Not all compounds reportable at lower dilution.

L1152823-03 WG1371177, WG1371769: Cannot be reanalyzed at lower dilution due to high levels of target analytes.

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	330000		2710	20000	1	10/24/2019 23:49	WG1369144

Sample Narrative:
L1152823-04 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	19300		51.9	1000	1	10/23/2019 20:39	WG1367978
Nitrate	U		22.7	100	1	10/23/2019 20:39	WG1367978
Sulfate	23600		77.4	5000	1	10/23/2019 20:39	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5510		102	1000	1	10/26/2019 20:20	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4530		75.0	500	5	10/29/2019 02:51	WG1368595
Manganese	930		0.250	5.00	1	10/28/2019 17:15	WG1368595

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1500		0.287	0.678	1	10/24/2019 11:51	WG1368615
Ethane	4.04		0.296	1.29	1	10/24/2019 11:51	WG1368615
Ethene	4.17		0.422	1.27	1	10/24/2019 11:51	WG1368615

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	1.05	25.0	1	10/29/2019 09:46	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 09:46	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 09:46	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 09:46	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 09:46	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 09:46	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 09:46	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 09:46	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 09:46	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 09:46	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 09:46	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 09:46	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 09:46	WG1371177
Chlorobenzene	U		0.140	0.500	1	10/29/2019 09:46	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 09:46	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 09:46	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 09:46	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 09:46	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 09:46	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 09:46	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 09:46	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 09:46	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 09:46	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 09:46	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 09:46	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 09:46	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 09:46	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 09:46	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 09:46	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 09:46	WG1371177
cis-1,2-Dichloroethene	0.819	B	0.0933	0.500	1	10/29/2019 20:07	WG1371769
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 09:46	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 09:46	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 09:46	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 09:46	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 09:46	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 09:46	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 09:46	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 09:46	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 09:46	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 09:46	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 09:46	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 09:46	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 09:46	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 09:46	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 09:46	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 09:46	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 09:46	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 09:46	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 09:46	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 09:46	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 09:46	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 09:46	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 09:46	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 09:46	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 09:46	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 09:46	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 09:46	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 09:46	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 09:46	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 09:46	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 09:46	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 09:46	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 09:46	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 09:46	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 09:46	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 09:46	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 09:46	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 09:46	WG1371177
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 09:46	WG1371177
Vinyl chloride	23.2		0.118	0.500	1	10/29/2019 09:46	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 09:46	WG1371177
(S) Toluene-d8	*96.1*			*80.0-120*		*10/29/2019 09:46*	WG1371177
(S) Toluene-d8	*107*			*80.0-120*		*10/29/2019 20:07*	WG1371769
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*10/29/2019 09:46*	WG1371177
(S) 4-Bromofluorobenzene	*97.9*			*77.0-126*		*10/29/2019 20:07*	WG1371769

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*10/29/2019 09:46*	WG1371177
(S) 1,2-Dichloroethane-d4	*94.1*			*70.0-130*		*10/29/2019 20:07*	WG1371769

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	245000		2710	20000	1	10/24/2019 23:57	WG1369144

Sample Narrative:
L1152823-05 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	10300		51.9	1000	1	10/23/2019 20:55	WG1367978
Nitrate	1980		22.7	100	1	10/23/2019 20:55	WG1367978
Sulfate	67300		77.4	5000	1	10/23/2019 20:55	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5090		102	1000	1	10/26/2019 23:06	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	678		15.0	100	1	10/28/2019 17:19	WG1368595
Manganese	376		0.250	5.00	1	10/28/2019 17:19	WG1368595

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	176	B	31.6	100	1	11/03/2019 01:01	WG1373020
(S) a,a,a-Trifluorotoluene(FID)	*96.6*			*78.0-120*		*11/03/2019 01:01*	WG1373020

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	74.8		0.287	0.678	1	10/24/2019 11:54	WG1368615
Ethane	U		0.296	1.29	1	10/24/2019 11:54	WG1368615
Ethene	U		0.422	1.27	1	10/24/2019 11:54	WG1368615

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.24	J J4	1.05	25.0	1	10/29/2019 10:06	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 10:06	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 10:06	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 10:06	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 10:06	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 10:06	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 10:06	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 10:06	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 10:06	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 10:06	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 10:06	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 10:06	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 10:06	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/29/2019 10:06	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 10:06	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 10:06	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 10:06	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 10:06	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 10:06	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 10:06	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 10:06	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 10:06	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 10:06	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 10:06	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 10:06	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 10:06	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 10:06	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 10:06	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 10:06	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 10:06	WG1371177
cis-1,2-Dichloroethene	31.8		0.0933	0.500	1	10/29/2019 10:06	WG1371177
trans-1,2-Dichloroethene	0.398	J	0.152	0.500	1	10/29/2019 10:06	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 10:06	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 10:06	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 10:06	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 10:06	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 10:06	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 10:06	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 10:06	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 10:06	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 10:06	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 10:06	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 10:06	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 10:06	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 10:06	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 10:06	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 10:06	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 10:06	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 10:06	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 10:06	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 10:06	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 10:06	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 10:06	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 10:06	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 10:06	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 10:06	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 10:06	WG1371177
Tetrachloroethene	135		0.995	2.50	5	10/29/2019 20:26	WG1371769
Toluene	U		0.412	0.500	1	10/29/2019 10:06	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 10:06	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 10:06	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 10:06	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 10:06	WG1371177
Trichloroethene	46.6		0.153	0.500	1	10/29/2019 10:06	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 10:06	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 10:06	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 10:06	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 10:06	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 10:06	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 10:06	WG1371177
Vinyl chloride	0.162	J	0.118	0.500	1	10/29/2019 10:06	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 10:06	WG1371177
(S) Toluene-d8	*96.8*			*80.0-120*		*10/29/2019 10:06*	WG1371177
(S) Toluene-d8	*107*			*80.0-120*		*10/29/2019 20:26*	WG1371769
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*10/29/2019 10:06*	WG1371177
(S) 4-Bromofluorobenzene	*60.4*	J2		*77.0-126*		*10/29/2019 20:26*	WG1371769
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*10/29/2019 10:06*	WG1371177
(S) 1,2-Dichloroethane-d4	*95.6*			*70.0-130*		*10/29/2019 20:26*	WG1371769

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	330000		2710	20000	1	10/25/2019 00:13	WG1369144

Sample Narrative:

L1152823-06 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	35000		51.9	1000	1	10/23/2019 21:12	WG1367978
Nitrate	U		22.7	100	1	10/23/2019 21:12	WG1367978
Sulfate	12800		77.4	5000	1	10/23/2019 21:12	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2860	B	102	1000	1	10/26/2019 23:27	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3060		75.0	500	5	10/29/2019 02:55	WG1368595
Manganese	1050		0.250	5.00	1	10/28/2019 17:22	WG1368595

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	96.4	B J	31.6	100	1	10/31/2019 08:01	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	*95.1*			*78.0-120*		*10/31/2019 08:01*	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	731		0.287	0.678	1	10/24/2019 11:56	WG1368615
Ethane	U		0.296	1.29	1	10/24/2019 11:56	WG1368615
Ethene	U		0.422	1.27	1	10/24/2019 11:56	WG1368615

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.40	J J4	1.05	25.0	1	10/29/2019 10:27	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 10:27	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 10:27	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 10:27	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 10:27	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 10:27	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 10:27	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 10:27	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 10:27	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 10:27	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 10:27	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 10:27	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 10:27	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/29/2019 10:27	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 10:27	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 10:27	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 10:27	WG1371177
Chloromethane	U	J0	0.153	1.25	1	10/29/2019 10:27	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 10:27	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 10:27	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 10:27	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 10:27	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 10:27	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 10:27	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 10:27	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 10:27	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 10:27	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 10:27	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 10:27	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 10:27	WG1371177
cis-1,2-Dichloroethene	0.945		0.0933	0.500	1	10/29/2019 10:27	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 10:27	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 10:27	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 10:27	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 10:27	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 10:27	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 10:27	WG1371177
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/29/2019 10:27	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 10:27	WG1371177
Di-isopropyl ether	U	J0	0.0924	0.500	1	10/29/2019 10:27	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 10:27	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 10:27	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 10:27	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 10:27	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 10:27	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 10:27	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 10:27	WG1371177
2-Butanone (MEK)	U	J0	1.28	5.00	1	10/29/2019 10:27	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 10:27	WG1371177
4-Methyl-2-pentanone (MIBK)	U	J0	0.823	5.00	1	10/29/2019 10:27	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 10:27	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 10:27	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 10:27	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 10:27	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 10:27	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 10:27	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 10:27	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 20:45	WG1371769
Toluene	U		0.412	0.500	1	10/29/2019 10:27	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 10:27	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 10:27	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 10:27	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 10:27	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 10:27	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 10:27	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 10:27	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 10:27	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 10:27	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 10:27	WG1371177

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	J0	0.645	5.00	1	10/29/2019 10:27	WG1371177
Vinyl chloride	0.214	J	0.118	0.500	1	10/29/2019 10:27	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 10:27	WG1371177
(S) Toluene-d8	*99.2*			*80.0-120*		*10/29/2019 10:27*	WG1371177
(S) Toluene-d8	*106*			*80.0-120*		*10/29/2019 20:45*	WG1371769
(S) 4-Bromofluorobenzene	*109*			*77.0-126*		*10/29/2019 10:27*	WG1371177
(S) 4-Bromofluorobenzene	*98.1*			*77.0-126*		*10/29/2019 20:45*	WG1371769
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*10/29/2019 10:27*	WG1371177
(S) 1,2-Dichloroethane-d4	*95.3*			*70.0-130*		*10/29/2019 20:45*	WG1371769

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	330000		2710	20000	1	10/25/2019 00:20	WG1369144

Sample Narrative:
L1152823-07 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	35100		51.9	1000	1	10/23/2019 21:28	WG1367978
Nitrate	U		22.7	100	1	10/23/2019 21:28	WG1367978
Sulfate	12800		77.4	5000	1	10/23/2019 21:28	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2900	B	102	1000	1	10/26/2019 23:44	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2590		75.0	500	5	10/29/2019 02:58	WG1368595
Manganese	1030		0.250	5.00	1	10/28/2019 17:25	WG1368595

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	90.8	B J	31.6	100	1	10/31/2019 08:23	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	*96.4*			*78.0-120*		*10/31/2019 08:23*	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	655		0.287	0.678	1	10/24/2019 11:58	WG1368615
Ethane	U		0.296	1.29	1	10/24/2019 11:58	WG1368615
Ethene	U		0.422	1.27	1	10/24/2019 11:58	WG1368615

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.47	J	1.05	25.0	1	10/31/2019 21:50	WG1373274
Acrylonitrile	U		0.873	5.00	1	10/31/2019 21:50	WG1373274
Benzene	U		0.0896	0.500	1	10/31/2019 21:50	WG1373274
Bromobenzene	U	J4	0.133	0.500	1	10/31/2019 21:50	WG1373274
Bromodichloromethane	U		0.0800	0.500	1	10/31/2019 21:50	WG1373274
Bromochloromethane	U		0.145	0.500	1	10/31/2019 21:50	WG1373274
Bromoform	U		0.186	0.500	1	10/31/2019 21:50	WG1373274
Bromomethane	U		0.157	2.50	1	10/31/2019 21:50	WG1373274
n-Butylbenzene	U		0.143	0.500	1	10/31/2019 21:50	WG1373274
sec-Butylbenzene	U		0.134	0.500	1	10/31/2019 21:50	WG1373274
tert-Butylbenzene	U		0.183	0.500	1	10/31/2019 21:50	WG1373274
Carbon disulfide	U		0.101	0.500	1	10/31/2019 21:50	WG1373274
Carbon tetrachloride	U		0.159	0.500	1	10/31/2019 21:50	WG1373274

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/31/2019 21:50	WG1373274
Chlorodibromomethane	U		0.128	0.500	1	10/31/2019 21:50	WG1373274
Chloroethane	U		0.141	2.50	1	10/31/2019 21:50	WG1373274
Chloroform	U		0.0860	0.500	1	10/31/2019 21:50	WG1373274
Chloromethane	U		0.153	1.25	1	10/31/2019 21:50	WG1373274
2-Chlorotoluene	U	J4	0.111	0.500	1	10/31/2019 21:50	WG1373274
4-Chlorotoluene	U		0.0972	0.500	1	10/31/2019 21:50	WG1373274
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/31/2019 21:50	WG1373274
1,2-Dibromoethane	U		0.193	0.500	1	10/31/2019 21:50	WG1373274
Dibromomethane	U		0.117	0.500	1	10/31/2019 21:50	WG1373274
1,2-Dichlorobenzene	U		0.101	0.500	1	10/31/2019 21:50	WG1373274
1,3-Dichlorobenzene	U		0.130	0.500	1	10/31/2019 21:50	WG1373274
1,4-Dichlorobenzene	U		0.121	0.500	1	10/31/2019 21:50	WG1373274
Dichlorodifluoromethane	U		0.127	2.50	1	10/31/2019 21:50	WG1373274
1,1-Dichloroethane	U		0.114	0.500	1	10/31/2019 21:50	WG1373274
1,2-Dichloroethane	U		0.108	0.500	1	10/31/2019 21:50	WG1373274
1,1-Dichloroethene	U		0.188	0.500	1	10/31/2019 21:50	WG1373274
cis-1,2-Dichloroethene	0.720		0.0933	0.500	1	10/31/2019 21:50	WG1373274
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/31/2019 21:50	WG1373274
1,2-Dichloropropane	U		0.190	0.500	1	10/31/2019 21:50	WG1373274
1,1-Dichloropropene	U		0.128	0.500	1	10/31/2019 21:50	WG1373274
1,3-Dichloropropane	U		0.147	1.00	1	10/31/2019 21:50	WG1373274
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/31/2019 21:50	WG1373274
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/31/2019 21:50	WG1373274
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/31/2019 21:50	WG1373274
2,2-Dichloropropane	U		0.0929	0.500	1	10/31/2019 21:50	WG1373274
Di-isopropyl ether	U		0.0924	0.500	1	10/31/2019 21:50	WG1373274
Ethylbenzene	U		0.158	0.500	1	10/31/2019 21:50	WG1373274
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/31/2019 21:50	WG1373274
2-Hexanone	U		0.757	5.00	1	10/31/2019 21:50	WG1373274
n-Hexane	U		0.305	5.00	1	10/31/2019 21:50	WG1373274
Iodomethane	U		0.377	10.0	1	10/31/2019 21:50	WG1373274
Isopropylbenzene	U		0.126	0.500	1	10/31/2019 21:50	WG1373274
p-Isopropyltoluene	U		0.138	0.500	1	10/31/2019 21:50	WG1373274
2-Butanone (MEK)	U		1.28	5.00	1	10/31/2019 21:50	WG1373274
Methylene Chloride	U		1.07	2.50	1	10/31/2019 21:50	WG1373274
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/31/2019 21:50	WG1373274
Methyl tert-butyl ether	U		0.102	0.500	1	10/31/2019 21:50	WG1373274
Naphthalene	U		0.174	2.50	1	10/31/2019 21:50	WG1373274
n-Propylbenzene	U		0.162	0.500	1	10/31/2019 21:50	WG1373274
Styrene	U		0.117	0.500	1	10/31/2019 21:50	WG1373274
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/31/2019 21:50	WG1373274
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/31/2019 21:50	WG1373274
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/31/2019 21:50	WG1373274
Tetrachloroethene	U		0.199	0.500	1	10/31/2019 21:50	WG1373274
Toluene	U		0.412	0.500	1	10/31/2019 21:50	WG1373274
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/31/2019 21:50	WG1373274
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/31/2019 21:50	WG1373274
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/31/2019 21:50	WG1373274
1,1,2-Trichloroethane	U		0.186	0.500	1	10/31/2019 21:50	WG1373274
Trichloroethene	U		0.153	0.500	1	10/31/2019 21:50	WG1373274
Trichlorofluoromethane	U		0.130	2.50	1	10/31/2019 21:50	WG1373274
1,2,3-Trichloropropane	U		0.247	2.50	1	10/31/2019 21:50	WG1373274
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/31/2019 21:50	WG1373274
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/31/2019 21:50	WG1373274
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/31/2019 21:50	WG1373274

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	10/31/2019 21:50	WG1373274
Vinyl chloride	U		0.118	0.500	1	10/31/2019 21:50	WG1373274
Xylenes, Total	U		0.316	1.50	1	10/31/2019 21:50	WG1373274
(S) Toluene-d8	*113*			*80.0-120*		*10/31/2019 21:50*	WG1373274
(S) 4-Bromofluorobenzene	*109*			*77.0-126*		*10/31/2019 21:50*	WG1373274
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*10/31/2019 21:50*	WG1373274

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	4850	J	2710	20000	1	10/25/2019 00:29	WG1369144

Sample Narrative:

L1152823-08 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	397	J	51.9	1000	1	10/23/2019 21:44	WG1367978
Nitrate	U		22.7	100	1	10/23/2019 21:44	WG1367978
Sulfate	334	J	77.4	5000	1	10/23/2019 21:44	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	168	B J	102	1000	1	10/27/2019 00:02	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	25.5	J	15.0	100	1	10/28/2019 17:29	WG1368595
Manganese	4.16	B J	0.250	5.00	1	10/28/2019 17:29	WG1368595

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	88.4	B J	31.6	100	1	10/31/2019 08:44	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	*96.4*			*78.0-120*		*10/31/2019 08:44*	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	32.7		0.287	0.678	1	10/24/2019 12:52	WG1368615
Ethane	U		0.296	1.29	1	10/24/2019 12:52	WG1368615
Ethene	U		0.422	1.27	1	10/24/2019 12:52	WG1368615

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.04	J	1.05	25.0	1	10/31/2019 22:10	WG1373274
Acrylonitrile	U		0.873	5.00	1	10/31/2019 22:10	WG1373274
Benzene	U		0.0896	0.500	1	10/31/2019 22:10	WG1373274
Bromobenzene	U	J4	0.133	0.500	1	10/31/2019 22:10	WG1373274
Bromodichloromethane	U		0.0800	0.500	1	10/31/2019 22:10	WG1373274
Bromochloromethane	U		0.145	0.500	1	10/31/2019 22:10	WG1373274
Bromoform	U		0.186	0.500	1	10/31/2019 22:10	WG1373274
Bromomethane	U		0.157	2.50	1	10/31/2019 22:10	WG1373274
n-Butylbenzene	U		0.143	0.500	1	10/31/2019 22:10	WG1373274
sec-Butylbenzene	U		0.134	0.500	1	10/31/2019 22:10	WG1373274
tert-Butylbenzene	U		0.183	0.500	1	10/31/2019 22:10	WG1373274
Carbon disulfide	U		0.101	0.500	1	10/31/2019 22:10	WG1373274
Carbon tetrachloride	U		0.159	0.500	1	10/31/2019 22:10	WG1373274

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/31/2019 22:10	WG1373274
Chlorodibromomethane	U		0.128	0.500	1	10/31/2019 22:10	WG1373274
Chloroethane	U		0.141	2.50	1	10/31/2019 22:10	WG1373274
Chloroform	0.398	J	0.0860	0.500	1	10/31/2019 22:10	WG1373274
Chloromethane	U		0.153	1.25	1	10/31/2019 22:10	WG1373274
2-Chlorotoluene	U	J4	0.111	0.500	1	10/31/2019 22:10	WG1373274
4-Chlorotoluene	U		0.0972	0.500	1	10/31/2019 22:10	WG1373274
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/31/2019 22:10	WG1373274
1,2-Dibromoethane	U		0.193	0.500	1	10/31/2019 22:10	WG1373274
Dibromomethane	U		0.117	0.500	1	10/31/2019 22:10	WG1373274
1,2-Dichlorobenzene	U		0.101	0.500	1	10/31/2019 22:10	WG1373274
1,3-Dichlorobenzene	U		0.130	0.500	1	10/31/2019 22:10	WG1373274
1,4-Dichlorobenzene	U		0.121	0.500	1	10/31/2019 22:10	WG1373274
Dichlorodifluoromethane	U		0.127	2.50	1	10/31/2019 22:10	WG1373274
1,1-Dichloroethane	U		0.114	0.500	1	10/31/2019 22:10	WG1373274
1,2-Dichloroethane	U		0.108	0.500	1	10/31/2019 22:10	WG1373274
1,1-Dichloroethene	U		0.188	0.500	1	10/31/2019 22:10	WG1373274
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/31/2019 22:10	WG1373274
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/31/2019 22:10	WG1373274
1,2-Dichloropropane	U		0.190	0.500	1	10/31/2019 22:10	WG1373274
1,1-Dichloropropene	U		0.128	0.500	1	10/31/2019 22:10	WG1373274
1,3-Dichloropropane	U		0.147	1.00	1	10/31/2019 22:10	WG1373274
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/31/2019 22:10	WG1373274
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/31/2019 22:10	WG1373274
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	10/31/2019 22:10	WG1373274
2,2-Dichloropropane	U		0.0929	0.500	1	10/31/2019 22:10	WG1373274
Di-isopropyl ether	U		0.0924	0.500	1	10/31/2019 22:10	WG1373274
Ethylbenzene	U		0.158	0.500	1	10/31/2019 22:10	WG1373274
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/31/2019 22:10	WG1373274
2-Hexanone	U		0.757	5.00	1	10/31/2019 22:10	WG1373274
n-Hexane	U		0.305	5.00	1	10/31/2019 22:10	WG1373274
Iodomethane	U		0.377	10.0	1	10/31/2019 22:10	WG1373274
Isopropylbenzene	U		0.126	0.500	1	10/31/2019 22:10	WG1373274
p-Isopropyltoluene	U		0.138	0.500	1	10/31/2019 22:10	WG1373274
2-Butanone (MEK)	U		1.28	5.00	1	10/31/2019 22:10	WG1373274
Methylene Chloride	U		1.07	2.50	1	10/31/2019 22:10	WG1373274
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/31/2019 22:10	WG1373274
Methyl tert-butyl ether	U		0.102	0.500	1	10/31/2019 22:10	WG1373274
Naphthalene	U		0.174	2.50	1	10/31/2019 22:10	WG1373274
n-Propylbenzene	U		0.162	0.500	1	10/31/2019 22:10	WG1373274
Styrene	U		0.117	0.500	1	10/31/2019 22:10	WG1373274
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/31/2019 22:10	WG1373274
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/31/2019 22:10	WG1373274
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/31/2019 22:10	WG1373274
Tetrachloroethene	U		0.199	0.500	1	10/31/2019 22:10	WG1373274
Toluene	U		0.412	0.500	1	10/31/2019 22:10	WG1373274
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/31/2019 22:10	WG1373274
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/31/2019 22:10	WG1373274
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/31/2019 22:10	WG1373274
1,1,2-Trichloroethane	U		0.186	0.500	1	10/31/2019 22:10	WG1373274
Trichloroethene	U		0.153	0.500	1	10/31/2019 22:10	WG1373274
Trichlorofluoromethane	U		0.130	2.50	1	10/31/2019 22:10	WG1373274
1,2,3-Trichloropropane	U		0.247	2.50	1	10/31/2019 22:10	WG1373274
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/31/2019 22:10	WG1373274
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/31/2019 22:10	WG1373274
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/31/2019 22:10	WG1373274

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	10/31/2019 22:10	WG1373274
Vinyl chloride	U		0.118	0.500	1	10/31/2019 22:10	WG1373274
Xylenes, Total	U		0.316	1.50	1	10/31/2019 22:10	WG1373274
(S) Toluene-d8	*111*			*80.0-120*		*10/31/2019 22:10*	WG1373274
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*10/31/2019 22:10*	WG1373274
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*10/31/2019 22:10*	WG1373274

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	91.3	B J	31.6	100	1	10/31/2019 00:07	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*78.0-120*		*10/31/2019 00:07*	WG1371615

Method Blank (MB)

(MB) R3464935-1 10/24/19 21:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1152333-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152333-01 10/24/19 21:24 • (DUP) R3464935-2 10/24/19 21:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	589000	589000	1	0.0563		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1152791-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152791-01 10/24/19 23:11 • (DUP) R3464935-4 10/24/19 23:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	519000	520000	1	0.243		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3464935-3 10/24/19 22:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	98500	98.5	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3464355-1 10/23/19 12:55

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

L1152818-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1152818-06 10/23/19 17:38 • (DUP) R3464355-3 10/23/19 17:55

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	335	331	1	1.26	J	15
Nitrate	U	0.000	1	0.000		15
Sulfate	U	0.000	1	0.000		15

L1152823-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1152823-08 10/23/19 21:44 • (DUP) R3464355-8 10/24/19 08:01

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	397	406	1	2.07	J	15
Nitrate	U	0.000	1	0.000		15
Sulfate	334	322	1	3.50	J	15

Laboratory Control Sample (LCS)

(LCS) R3464355-2 10/23/19 13:11

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	38800	97.1	80.0-120	
Nitrate	8000	8040	101	80.0-120	
Sulfate	40000	39000	97.4	80.0-120	

L1152818-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152818-06 10/23/19 17:38 • (MS) R3464355-4 10/23/19 18:11 • (MSD) R3464355-5 10/23/19 18:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	335	50000	49500	99.3	98.3	1	80.0-120			1.03	15
Nitrate	5000	U	4880	4820	97.6	96.4	1	80.0-120			1.19	15
Sulfate	50000	U	49700	49200	99.4	98.4	1	80.0-120			0.969	15

L1152823-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1152823-08 10/23/19 21:44 • (MS) R3464355-7 10/23/19 22:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	397	49500	98.3	1	80.0-120	
Nitrate	5000	U	4920	98.3	1	80.0-120	
Sulfate	50000	334	49300	97.9	1	80.0-120	

Method Blank (MB)

(MB) R3466121-1 10/26/19 11:45

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	434	J	102	1000

L1152741-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1152741-04 10/26/19 15:20 • (DUP) R3466121-3 10/26/19 15:34

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	ND	300	1	0.000		20

L1152823-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1152823-04 10/26/19 20:20 • (DUP) R3466121-6 10/26/19 20:39

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	5510	5450	1	1.04		20

Laboratory Control Sample (LCS)

(LCS) R3466121-2 10/26/19 12:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC	75000	73300	97.7	85.0-115	

L1152741-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152741-06 10/26/19 17:52 • (MS) R3466121-4 10/26/19 18:20 • (MSD) R3466121-5 10/26/19 18:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	ND	48400	48500	96.4	96.7	1	80.0-120			0.310	20

L1152823-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152823-08 10/27/19 00:02 • (MS) R3466121-7 10/27/19 00:26 • (MSD) R3466121-8 10/27/19 00:53

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	168	50800	50800	101	101	1	80.0-120			0.0788	20

Method Blank (MB)

(MB) R3466042-1 10/28/19 16:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		15.0	100
Manganese	0.427	J	0.250	5.00

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

(LCS) R3466042-2 10/28/19 16:28 • (LCSD) R3466042-3 10/28/19 16:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Iron	5000	4950	5070	99.0	101	80.0-120			2.36	20
Manganese	50.0	49.3	51.5	98.6	103	80.0-120			4.31	20

L1152823-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152823-01 10/28/19 16:34 • (MS) R3466042-5 10/28/19 16:41 • (MSD) R3466042-6 10/28/19 16:45

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	5000	339	5370	5230	101	97.9	1	75.0-125			2.51	20
Manganese	50.0	313	360	361	93.9	96.6	1	75.0-125			0.373	20

Method Blank (MB)

(MB) R3467099-2 10/30/19 23:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	103		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3467099-1 10/30/19 22:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5290	96.2	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*78.0-120*	

Method Blank (MB)

(MB) R3467812-2 11/02/19 22:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	97.6	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3467812-1 11/02/19 20:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4900	89.1	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*78.0-120*	

Method Blank (MB)

(MB) R3464593-1 10/24/19 11:26

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

L1152823-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1152823-06 10/24/19 11:56 • (DUP) R3464593-2 10/24/19 12:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	731	765	1	4.55		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

L1152959-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1152959-09 10/24/19 13:31 • (DUP) R3464593-3 10/24/19 13:37

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

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

(LCS) R3464593-4 10/24/19 13:42 • (LCSD) R3464593-5 10/24/19 13:54

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	64.6	68.2	95.3	101	85.0-115			5.42	20
Ethane	129	112	131	86.8	102	85.0-115			15.6	20
Ethene	127	117	136	92.1	107	85.0-115			15.0	20

Method Blank (MB)

(MB) R3466378-3 10/29/19 03:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3466378-3 10/29/19 03:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*97.6*			*80.0-120*
(S) 4-Bromofluorobenzene	*107*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3466378-1 10/29/19 02:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	91.7	73.4	19.0-160	J4
Acrylonitrile	125	90.2	72.2	55.0-149	J4
Benzene	25.0	27.6	110	70.0-123	
Bromobenzene	25.0	23.0	92.0	73.0-121	
Bromodichloromethane	25.0	30.2	121	75.0-120	J4
Bromochloromethane	25.0	29.1	116	76.0-122	
Bromoform	25.0	22.1	88.4	68.0-132	
Bromomethane	25.0	25.1	100	10.0-160	
n-Butylbenzene	25.0	26.1	104	73.0-125	
sec-Butylbenzene	25.0	24.5	98.0	75.0-125	
tert-Butylbenzene	25.0	25.3	101	76.0-124	
Carbon disulfide	25.0	24.5	98.0	61.0-128	
Carbon tetrachloride	25.0	30.0	120	68.0-126	
Chlorobenzene	25.0	24.6	98.4	80.0-121	
Chlorodibromomethane	25.0	26.6	106	77.0-125	
Chloroethane	25.0	23.2	92.8	47.0-150	
Chloroform	25.0	27.3	109	73.0-120	
Chloromethane	25.0	16.4	65.6	41.0-142	
2-Chlorotoluene	25.0	25.1	100	76.0-123	
4-Chlorotoluene	25.0	25.2	101	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	24.8	99.2	58.0-134	
1,2-Dibromoethane	25.0	23.3	93.2	80.0-122	
Dibromomethane	25.0	29.6	118	80.0-120	
1,2-Dichlorobenzene	25.0	23.2	92.8	79.0-121	
1,3-Dichlorobenzene	25.0	23.6	94.4	79.0-120	
1,4-Dichlorobenzene	25.0	22.6	90.4	79.0-120	
Dichlorodifluoromethane	25.0	27.2	109	51.0-149	
1,1-Dichloroethane	25.0	24.5	98.0	70.0-126	
1,2-Dichloroethane	25.0	26.6	106	70.0-128	
1,1-Dichloroethene	25.0	28.4	114	71.0-124	
cis-1,2-Dichloroethene	25.0	26.6	106	73.0-120	
trans-1,2-Dichloroethene	25.0	27.7	111	73.0-120	
1,2-Dichloropropane	25.0	24.0	96.0	77.0-125	
1,1-Dichloropropene	25.0	29.6	118	74.0-126	
1,3-Dichloropropane	25.0	24.7	98.8	80.0-120	
cis-1,3-Dichloropropene	25.0	29.6	118	80.0-123	
trans-1,3-Dichloropropene	25.0	26.7	107	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	17.0	68.0	33.0-144	
2,2-Dichloropropane	25.0	30.5	122	58.0-130	
Di-isopropyl ether	25.0	17.5	70.0	58.0-138	

Laboratory Control Sample (LCS)

(LCS) R3466378-1 10/29/19 02:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	24.6	98.4	79.0-123	
Hexachloro-1,3-butadiene	25.0	26.8	107	54.0-138	
2-Hexanone	125	97.6	78.1	67.0-149	
n-Hexane	25.0	22.1	88.4	57.0-133	
Iodomethane	125	152	122	33.0-147	
Isopropylbenzene	25.0	25.1	100	76.0-127	
p-Isopropyltoluene	25.0	25.3	101	76.0-125	
2-Butanone (MEK)	125	90.9	72.7	44.0-160	
Methylene Chloride	25.0	22.8	91.2	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	88.6	70.9	68.0-142	
Methyl tert-butyl ether	25.0	25.7	103	68.0-125	
Naphthalene	25.0	24.4	97.6	54.0-135	
n-Propylbenzene	25.0	25.9	104	77.0-124	
Styrene	25.0	23.9	95.6	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	24.8	99.2	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	21.8	87.2	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	26.2	105	69.0-132	
Tetrachloroethene	25.0	27.3	109	72.0-132	
Toluene	25.0	26.3	105	79.0-120	
1,2,3-Trichlorobenzene	25.0	26.2	105	50.0-138	
1,2,4-Trichlorobenzene	25.0	25.6	102	57.0-137	
1,1,1-Trichloroethane	25.0	31.7	127	73.0-124	J4
1,1,2-Trichloroethane	25.0	26.3	105	80.0-120	
Trichloroethene	25.0	29.1	116	78.0-124	
Trichlorofluoromethane	25.0	29.1	116	59.0-147	
1,2,3-Trichloropropane	25.0	24.5	98.0	73.0-130	
1,2,4-Trimethylbenzene	25.0	24.7	98.8	76.0-121	
1,2,3-Trimethylbenzene	25.0	23.8	95.2	77.0-120	
1,3,5-Trimethylbenzene	25.0	24.7	98.8	76.0-122	
Vinyl acetate	125	88.5	70.8	11.0-160	
Vinyl chloride	25.0	21.0	84.0	67.0-131	
Xylenes, Total	75.0	72.0	96.0	79.0-123	
(S) Toluene-d8			*99.9*	*80.0-120*	
(S) 4-Bromofluorobenzene			*105*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*98.5*	*70.0-130*	

Method Blank (MB)

(MB) R3467086-3 10/29/19 18:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
cis-1,2-Dichloroethene	0.167	J	0.0933	0.500
Tetrachloroethene	U		0.199	0.500
(S) Toluene-d8	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*97.1*			*70.0-130*

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

(LCS) R3467086-1 10/29/19 17:35 • (LCSD) R3467086-2 10/29/19 17:54

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
cis-1,2-Dichloroethene	5.00	4.96	5.27	99.2	105	73.0-120			6.06	20
Tetrachloroethene	5.00	5.06	5.67	101	113	72.0-132			11.4	20
(S) Toluene-d8				*104*	*104*	*80.0-120*				
(S) 4-Bromofluorobenzene				*99.8*	*98.6*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*98.8*	*96.4*	*70.0-130*				

Method Blank (MB)

(MB) R3467617-4 10/31/19 20:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3467617-4 10/31/19 20:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*114*			*80.0-120*
(S) 4-Bromofluorobenzene	*109*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*98.7*			*70.0-130*

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

(LCS) R3467617-1 10/31/19 19:21 • (LCSD) R3467617-2 10/31/19 19:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	23.4	19.7	93.6	78.8	19.0-160			17.2	27
Acrylonitrile	25.0	24.3	22.1	97.2	88.4	55.0-149			9.48	20
Benzene	5.00	4.59	4.37	91.8	87.4	70.0-123			4.91	20
Bromobenzene	5.00	4.05	3.63	81.0	72.6	73.0-121		J4	10.9	20
Bromodichloromethane	5.00	4.88	4.63	97.6	92.6	75.0-120			5.26	20
Bromochloromethane	5.00	5.53	5.30	111	106	76.0-122			4.25	20
Bromoform	5.00	6.04	5.96	121	119	68.0-132			1.33	20
Bromomethane	5.00	4.96	4.93	99.2	98.6	10.0-160			0.607	25
n-Butylbenzene	5.00	4.12	3.69	82.4	73.8	73.0-125			11.0	20
sec-Butylbenzene	5.00	4.32	3.99	86.4	79.8	75.0-125			7.94	20
tert-Butylbenzene	5.00	4.74	4.25	94.8	85.0	76.0-124			10.9	20
Carbon disulfide	5.00	4.23	4.11	84.6	82.2	61.0-128			2.88	20
Carbon tetrachloride	5.00	5.45	5.40	109	108	68.0-126			0.922	20
Chlorobenzene	5.00	5.17	4.90	103	98.0	80.0-121			5.36	20
Chlorodibromomethane	5.00	5.80	5.64	116	113	77.0-125			2.80	20
Chloroethane	5.00	4.85	4.77	97.0	95.4	47.0-150			1.66	20
Chloroform	5.00	4.46	4.43	89.2	88.6	73.0-120			0.675	20
Chloromethane	5.00	4.07	4.10	81.4	82.0	41.0-142			0.734	20
2-Chlorotoluene	5.00	4.27	3.77	85.4	75.4	76.0-123		J4	12.4	20
4-Chlorotoluene	5.00	4.29	3.77	85.8	75.4	75.0-122			12.9	20
1,2-Dibromo-3-Chloropropane	5.00	5.35	4.77	107	95.4	58.0-134			11.5	20
1,2-Dibromoethane	5.00	5.25	4.94	105	98.8	80.0-122			6.08	20
Dibromomethane	5.00	5.04	5.16	101	103	80.0-120			2.35	20
1,2-Dichlorobenzene	5.00	5.27	4.84	105	96.8	79.0-121			8.51	20
1,3-Dichlorobenzene	5.00	5.06	4.57	101	91.4	79.0-120			10.2	20
1,4-Dichlorobenzene	5.00	4.54	4.32	90.8	86.4	79.0-120			4.97	20
trans-1,4-Dichloro-2-butene	5.00	3.69	3.14	73.8	62.8	33.0-144			16.1	20
Dichlorodifluoromethane	5.00	4.40	4.24	88.0	84.8	51.0-149			3.70	20
1,1-Dichloroethane	5.00	4.67	4.53	93.4	90.6	70.0-126			3.04	20
1,2-Dichloroethane	5.00	4.42	4.43	88.4	88.6	70.0-128			0.226	20
1,1-Dichloroethene	5.00	4.59	4.60	91.8	92.0	71.0-124			0.218	20
cis-1,2-Dichloroethene	5.00	4.65	4.78	93.0	95.6	73.0-120			2.76	20
trans-1,2-Dichloroethene	5.00	4.74	4.76	94.8	95.2	73.0-120			0.421	20
1,2-Dichloropropane	5.00	4.59	4.69	91.8	93.8	77.0-125			2.16	20
1,1-Dichloropropene	5.00	4.72	4.52	94.4	90.4	74.0-126			4.33	20
1,3-Dichloropropane	5.00	5.03	4.73	101	94.6	80.0-120			6.15	20
cis-1,3-Dichloropropene	5.00	4.61	4.47	92.2	89.4	80.0-123			3.08	20
trans-1,3-Dichloropropene	5.00	4.82	4.85	96.4	97.0	78.0-124			0.620	20
2,2-Dichloropropane	5.00	5.14	4.76	103	95.2	58.0-130			7.68	20
Di-isopropyl ether	5.00	4.68	4.56	93.6	91.2	58.0-138			2.60	20

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

(LCS) R3467617-1 10/31/19 19:21 • (LCSD) R3467617-2 10/31/19 19:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	5.00	4.92	4.74	98.4	94.8	79.0-123			3.73	20
Hexachloro-1,3-butadiene	5.00	4.63	4.21	92.6	84.2	54.0-138			9.50	20
2-Hexanone	25.0	24.8	24.3	99.2	97.2	67.0-149			2.04	20
n-Hexane	5.00	4.51	4.10	90.2	82.0	57.0-133			9.52	20
Iodomethane	25.0	26.8	26.3	107	105	33.0-147			1.88	26
Isopropylbenzene	5.00	5.34	4.93	107	98.6	76.0-127			7.98	20
p-Isopropyltoluene	5.00	4.64	4.12	92.8	82.4	76.0-125			11.9	20
2-Butanone (MEK)	25.0	24.4	22.4	97.6	89.6	44.0-160			8.55	20
Methylene Chloride	5.00	4.46	4.40	89.2	88.0	67.0-120			1.35	20
4-Methyl-2-pentanone (MIBK)	25.0	24.5	23.5	98.0	94.0	68.0-142			4.17	20
Methyl tert-butyl ether	5.00	5.04	4.80	101	96.0	68.0-125			4.88	20
Naphthalene	5.00	4.31	4.18	86.2	83.6	54.0-135			3.06	20
n-Propylbenzene	5.00	4.18	3.86	83.6	77.2	77.0-124			7.96	20
Styrene	5.00	5.15	5.00	103	100	73.0-130			2.96	20
1,1,1,2-Tetrachloroethane	5.00	5.56	5.44	111	109	75.0-125			2.18	20
1,1,2,2-Tetrachloroethane	5.00	4.03	3.79	80.6	75.8	65.0-130			6.14	20
Tetrachloroethene	5.00	5.40	5.28	108	106	72.0-132			2.25	20
Toluene	5.00	4.93	4.78	98.6	95.6	79.0-120			3.09	20
1,1,2-Trichlorotrifluoroethane	5.00	4.94	4.80	98.8	96.0	69.0-132			2.87	20
1,2,3-Trichlorobenzene	5.00	4.49	4.35	89.8	87.0	50.0-138			3.17	20
1,2,4-Trichlorobenzene	5.00	4.52	4.20	90.4	84.0	57.0-137			7.34	20
1,1,1-Trichloroethane	5.00	5.16	4.98	103	99.6	73.0-124			3.55	20
1,1,2-Trichloroethane	5.00	5.17	5.19	103	104	80.0-120			0.386	20
Trichloroethene	5.00	5.40	5.18	108	104	78.0-124			4.16	20
Trichlorofluoromethane	5.00	5.19	5.06	104	101	59.0-147			2.54	20
1,2,3-Trichloropropane	5.00	4.20	4.39	84.0	87.8	73.0-130			4.42	20
1,2,3-Trimethylbenzene	5.00	4.51	4.07	90.2	81.4	77.0-120			10.3	20
1,2,4-Trimethylbenzene	5.00	4.39	3.95	87.8	79.0	76.0-121			10.6	20
1,3,5-Trimethylbenzene	5.00	4.43	3.87	88.6	77.4	76.0-122			13.5	20
Vinyl acetate	25.0	23.3	22.4	93.2	89.6	11.0-160			3.94	20
Vinyl chloride	5.00	4.80	4.79	96.0	95.8	67.0-131			0.209	20
Xylenes, Total	15.0	15.3	14.7	102	98.0	79.0-123			4.00	20
(S) Toluene-d8				*111*	*110*	*80.0-120*				
(S) 4-Bromofluorobenzene				*109*	*110*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*97.4*	*100*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J4	The associated batch QC was outside the established quality control range for accuracy.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

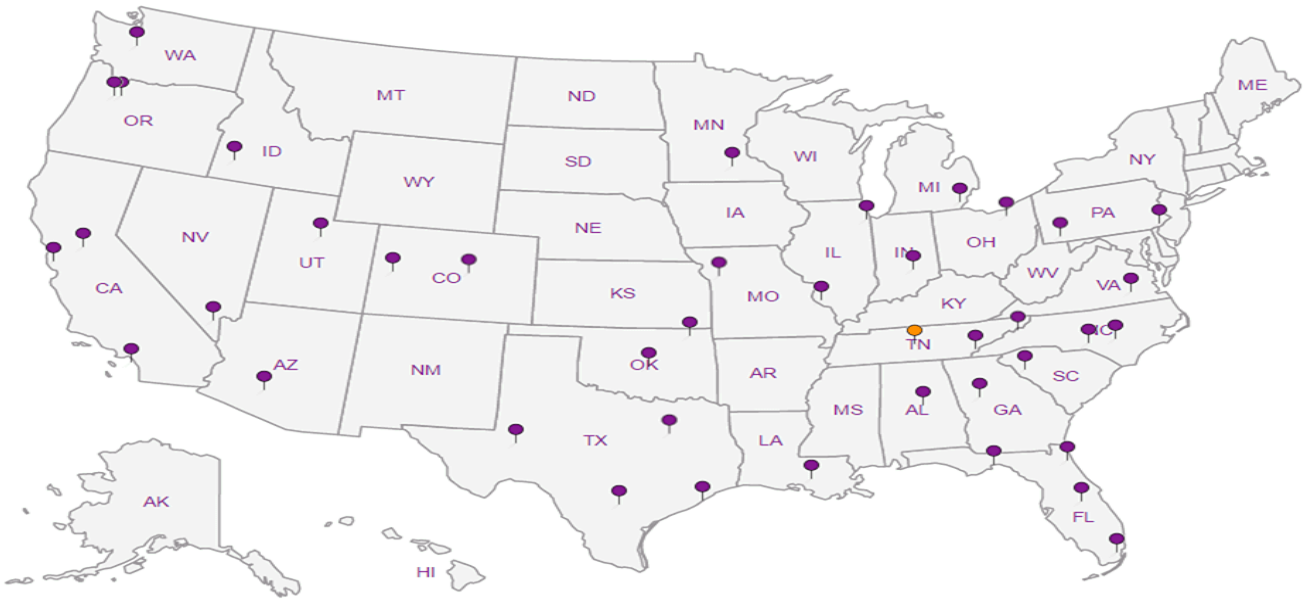
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



PES-Seattle

Billing Information: PES-Seattle

Report to: Bill Haldeman/Brian O'neal

Email To: on file

Project Description: American Linen

City/State Collected: Seattle, WA

Phone: on file
Fax:

Client Project # 1413.001.02.501 E

Lab Project # PESENVSWA-ALP

Collected by (print): BLH/HRC

Site/Facility ID # American Linen

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	**NO3,SO4,Chloride**48 hour hold	NWTPHGX	VOCs (V8260LLC)	Total Fe Mn 6020	TOC	Alkalinity	EEM (RSK175LL)	Remarks	Sample # (lab only)
MW-918-102219	Grab	GW	35	10-22-19	0930	12	X	X	X	X	X	X	X		-01
MW116-102219		GW	40		1005	9	X		X	X	X	X	X		02
MW113-102219		GW	75		1045	9	X		X	X	X	X	X		03
MW115-102219		GW	40		1105	12	X	X	X	X	X	X	X	No Gx	04
BB8-102219		GW	35		1250	12	X	X	X	X	X	X	X		05
MW105-102219		GW	135		1300	12	X	X	X	X	X	X	X		06
MW-919-102219		GW	135		1400	12	X	X	X	X	X	X	X		07
EQ-102219		GW	—		1500	12	X	X	X	X	X	X	X		08
TRIP-102219		GW	—		1530	1		X	X						09
		GW													

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 1203 5774 6529

Relinquished by : (Signature) Date: 10-22-19 Time: 1600 Received by: (Signature)

Relinquished by : (Signature) Date: Time: Received by: (Signature)

Relinquished by : (Signature) Date: Time: Received for lab by: (Signature)

Trip Blank Received: Yes / No HCL / MeoH TBR

Temp: 2.8 1.1 = 2.4 °C Bottles Received: 82

Date: 10/23/19 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y __N
COC Signed/Accurate: Y __N
Bottles arrive intact: Y __N
Correct bottles used: Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: Y __N
RAD SCREEN: <0.5 mR/hr

Chain of Custody Page ___ of ___

Pace Analytical® National Center for Testing & Innovation

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

L# 1152823
F190

Acctnum: PESENVSWA
Template:
Prelogin:
TSR: Brian Ford
PB:
Shipped Via:

Matt Shacklock

Pace Analytical®
National Center for Testing & Innovation

Login #: L1152823	Client:PESEBVSWA	Date:10/23	Evaluated by:Kelsey S

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time	x	Login Clarification Needed		**If Broken Container:**
	Temperature not in range		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	pH not in range.		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courie
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: All 5 vials for MW-116-102219 received empty.

Client informed by:		Call		Email x		Voice Mail		Date:10/23/19	Time:1200
TSR Initials:bjf	Client Contact: PMs								

Login Instructions:

For **MW-116-102219** , proceed with all analyses marked on the COC except VOCs by 8260.

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 11, 2019

PES Environmental, Inc.- WA

Sample Delivery Group:	L1155658
Samples Received:	10/31/2019
Project Number:	1413.001.02.501E
Description:	
Site:	1413.001.02.501E
Report To:	Brian O'Neal/Bill Haldeman 1215 Fourth Ave., Suite 1350 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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FMW-141-103019 L1155658-01 GW

Collected by: Chris DeBoer
Collected date/time: 10/30/19 12:35
Received date/time: 10/31/19 09:00

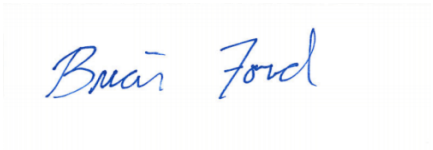
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1376309	1	11/06/19 19:55	11/06/19 19:55	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1372794	1	10/31/19 21:01	10/31/19 21:01	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1373549	1	11/01/19 15:54	11/01/19 15:54	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1374098	1	11/03/19 02:25	11/03/19 02:25	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1373700	10	11/05/19 13:47	11/05/19 17:46	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1373387	1	11/01/19 14:20	11/01/19 14:20	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1375825	1	11/06/19 21:11	11/06/19 21:11	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1377124	100	11/08/19 13:11	11/08/19 13:11	JAH	Mt. Juliet, TN

MW-920-103019 L1155658-02 GW

Collected by: Chris DeBoer
Collected date/time: 10/30/19 13:15
Received date/time: 10/31/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1376309	1	11/06/19 22:34	11/06/19 22:34	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1372794	1	10/31/19 21:36	10/31/19 21:36	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1373549	1	11/01/19 16:20	11/01/19 16:20	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1374098	1	11/03/19 02:41	11/03/19 02:41	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1373700	10	11/05/19 13:47	11/05/19 17:50	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1373387	1	11/01/19 14:25	11/01/19 14:25	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1375825	1	11/06/19 21:31	11/06/19 21:31	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1377124	100	11/08/19 13:31	11/08/19 13:31	JAH	Mt. Juliet, TN

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



Brian Ford
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	596000		2710	20000	1	11/06/2019 19:55	WG1376309

Sample Narrative:
L1155658-01 WG1376309: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	66900		51.9	1000	1	10/31/2019 21:01	WG1372794
Nitrate	U		22.7	100	1	10/31/2019 21:01	WG1372794
Sulfate	909	J	77.4	5000	1	11/01/2019 15:54	WG1373549

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	21200		102	1000	1	11/03/2019 02:25	WG1374098

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	8880		150	1000	10	11/05/2019 17:46	WG1373700
Manganese	1740		2.50	50.0	10	11/05/2019 17:46	WG1373700

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6040		0.287	0.678	1	11/01/2019 14:20	WG1373387
Ethane	113		0.296	1.29	1	11/01/2019 14:20	WG1373387
Ethene	460		0.422	1.27	1	11/01/2019 14:20	WG1373387

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		105	2500	100	11/08/2019 13:11	WG1377124
Acrylonitrile	U		0.873	5.00	1	11/06/2019 21:11	WG1375825
Benzene	0.230	J	0.0896	0.500	1	11/06/2019 21:11	WG1375825
Bromobenzene	U		0.133	0.500	1	11/06/2019 21:11	WG1375825
Bromodichloromethane	U		0.0800	0.500	1	11/06/2019 21:11	WG1375825
Bromochloromethane	U		0.145	0.500	1	11/06/2019 21:11	WG1375825
Bromoform	U		0.186	0.500	1	11/06/2019 21:11	WG1375825
Bromomethane	U	J0	0.157	2.50	1	11/06/2019 21:11	WG1375825
n-Butylbenzene	U		0.143	0.500	1	11/06/2019 21:11	WG1375825
sec-Butylbenzene	U		0.134	0.500	1	11/06/2019 21:11	WG1375825
tert-Butylbenzene	U		0.183	0.500	1	11/06/2019 21:11	WG1375825
Carbon disulfide	U		0.101	0.500	1	11/06/2019 21:11	WG1375825
Carbon tetrachloride	U		0.159	0.500	1	11/06/2019 21:11	WG1375825
Chlorobenzene	U		0.140	0.500	1	11/06/2019 21:11	WG1375825
Chlorodibromomethane	U		0.128	0.500	1	11/06/2019 21:11	WG1375825
Chloroethane	U		0.141	2.50	1	11/06/2019 21:11	WG1375825
Chloroform	U		0.0860	0.500	1	11/06/2019 21:11	WG1375825
Chloromethane	U	J0	0.153	1.25	1	11/06/2019 21:11	WG1375825
2-Chlorotoluene	U		0.111	0.500	1	11/06/2019 21:11	WG1375825
4-Chlorotoluene	U		0.0972	0.500	1	11/06/2019 21:11	WG1375825

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	11/06/2019 21:11	WG1375825
1,2-Dibromoethane	U		0.193	0.500	1	11/06/2019 21:11	WG1375825
Dibromomethane	U		0.117	0.500	1	11/06/2019 21:11	WG1375825
1,2-Dichlorobenzene	U		0.101	0.500	1	11/06/2019 21:11	WG1375825
1,3-Dichlorobenzene	U		0.130	0.500	1	11/06/2019 21:11	WG1375825
1,4-Dichlorobenzene	U		0.121	0.500	1	11/06/2019 21:11	WG1375825
Dichlorodifluoromethane	U		0.127	2.50	1	11/06/2019 21:11	WG1375825
1,1-Dichloroethane	U		0.114	0.500	1	11/06/2019 21:11	WG1375825
1,2-Dichloroethane	U		0.108	0.500	1	11/06/2019 21:11	WG1375825
1,1-Dichloroethene	2.51		0.188	0.500	1	11/06/2019 21:11	WG1375825
cis-1,2-Dichloroethene	1200		9.33	50.0	100	11/08/2019 13:11	WG1377124
trans-1,2-Dichloroethene	7.13		0.152	0.500	1	11/06/2019 21:11	WG1375825
1,2-Dichloropropane	U		0.190	0.500	1	11/06/2019 21:11	WG1375825
1,1-Dichloropropene	U		0.128	0.500	1	11/06/2019 21:11	WG1375825
1,3-Dichloropropane	U		0.147	1.00	1	11/06/2019 21:11	WG1375825
cis-1,3-Dichloropropene	U		0.0976	0.500	1	11/06/2019 21:11	WG1375825
trans-1,3-Dichloropropene	U		0.222	0.500	1	11/06/2019 21:11	WG1375825
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	11/06/2019 21:11	WG1375825
2,2-Dichloropropane	U		0.0929	0.500	1	11/06/2019 21:11	WG1375825
Di-isopropyl ether	U		0.0924	0.500	1	11/06/2019 21:11	WG1375825
Ethylbenzene	U		0.158	0.500	1	11/06/2019 21:11	WG1375825
Hexachloro-1,3-butadiene	U		0.157	1.00	1	11/06/2019 21:11	WG1375825
2-Hexanone	U		0.757	5.00	1	11/06/2019 21:11	WG1375825
n-Hexane	U		0.305	5.00	1	11/06/2019 21:11	WG1375825
Iodomethane	U	J0	0.377	10.0	1	11/06/2019 21:11	WG1375825
Isopropylbenzene	U		0.126	0.500	1	11/06/2019 21:11	WG1375825
p-Isopropyltoluene	U		0.138	0.500	1	11/06/2019 21:11	WG1375825
2-Butanone (MEK)	U		1.28	5.00	1	11/06/2019 21:11	WG1375825
Methylene Chloride	U		1.07	2.50	1	11/06/2019 21:11	WG1375825
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	11/06/2019 21:11	WG1375825
Methyl tert-butyl ether	U		0.102	0.500	1	11/06/2019 21:11	WG1375825
Naphthalene	U		0.174	2.50	1	11/06/2019 21:11	WG1375825
n-Propylbenzene	U		0.162	0.500	1	11/06/2019 21:11	WG1375825
Styrene	U		0.117	0.500	1	11/06/2019 21:11	WG1375825
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	11/06/2019 21:11	WG1375825
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	11/06/2019 21:11	WG1375825
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	11/06/2019 21:11	WG1375825
Tetrachloroethene	U		0.199	0.500	1	11/06/2019 21:11	WG1375825
Toluene	U		0.412	0.500	1	11/06/2019 21:11	WG1375825
1,2,3-Trichlorobenzene	U		0.164	0.500	1	11/06/2019 21:11	WG1375825
1,2,4-Trichlorobenzene	U		0.355	0.500	1	11/06/2019 21:11	WG1375825
1,1,1-Trichloroethane	U		0.0940	0.500	1	11/06/2019 21:11	WG1375825
1,1,2-Trichloroethane	U		0.186	0.500	1	11/06/2019 21:11	WG1375825
Trichloroethene	2.18		0.153	0.500	1	11/06/2019 21:11	WG1375825
Trichlorofluoromethane	U		0.130	2.50	1	11/06/2019 21:11	WG1375825
1,2,3-Trichloropropane	U		0.247	2.50	1	11/06/2019 21:11	WG1375825
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/06/2019 21:11	WG1375825
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	11/06/2019 21:11	WG1375825
1,3,5-Trimethylbenzene	U		0.124	0.500	1	11/06/2019 21:11	WG1375825
Vinyl acetate	U		0.645	5.00	1	11/06/2019 21:11	WG1375825
Vinyl chloride	1760		11.8	50.0	100	11/08/2019 13:11	WG1377124
Xylenes, Total	U		0.316	1.50	1	11/06/2019 21:11	WG1375825
(S) Toluene-d8	*93.8*			*80.0-120*		*11/06/2019 21:11*	WG1375825
(S) Toluene-d8	*93.8*			*80.0-120*		*11/08/2019 13:11*	WG1377124
(S) 4-Bromofluorobenzene	*92.4*			*77.0-126*		*11/06/2019 21:11*	WG1375825
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*11/08/2019 13:11*	WG1377124

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 1,2-Dichloroethane-d4	*89.9*			*70.0-130*		*11/06/2019 21:11*	WG1375825
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/08/2019 13:11*	WG1377124

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	466000		2710	20000	1	11/06/2019 22:34	WG1376309

Sample Narrative:
L1155658-02 WG1376309: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	44500		51.9	1000	1	10/31/2019 21:36	WG1372794
Nitrate	U		22.7	100	1	10/31/2019 21:36	WG1372794
Sulfate	4730	J	77.4	5000	1	11/01/2019 16:20	WG1373549

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	18800		102	1000	1	11/03/2019 02:41	WG1374098

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	8380		150	1000	10	11/05/2019 17:50	WG1373700
Manganese	1520		2.50	50.0	10	11/05/2019 17:50	WG1373700

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	5710		0.287	0.678	1	11/01/2019 14:25	WG1373387
Ethane	84.9		0.296	1.29	1	11/01/2019 14:25	WG1373387
Ethene	305		0.422	1.27	1	11/01/2019 14:25	WG1373387

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		105	2500	100	11/08/2019 13:31	WG1377124
Acrylonitrile	U		0.873	5.00	1	11/06/2019 21:31	WG1375825
Benzene	0.212	J	0.0896	0.500	1	11/06/2019 21:31	WG1375825
Bromobenzene	U		0.133	0.500	1	11/06/2019 21:31	WG1375825
Bromodichloromethane	U		0.0800	0.500	1	11/06/2019 21:31	WG1375825
Bromochloromethane	U		0.145	0.500	1	11/06/2019 21:31	WG1375825
Bromoform	U		0.186	0.500	1	11/06/2019 21:31	WG1375825
Bromomethane	U	J0	0.157	2.50	1	11/06/2019 21:31	WG1375825
n-Butylbenzene	U		0.143	0.500	1	11/06/2019 21:31	WG1375825
sec-Butylbenzene	U		0.134	0.500	1	11/06/2019 21:31	WG1375825
tert-Butylbenzene	U		0.183	0.500	1	11/06/2019 21:31	WG1375825
Carbon disulfide	U		0.101	0.500	1	11/06/2019 21:31	WG1375825
Carbon tetrachloride	U		0.159	0.500	1	11/06/2019 21:31	WG1375825
Chlorobenzene	U		0.140	0.500	1	11/06/2019 21:31	WG1375825
Chlorodibromomethane	U		0.128	0.500	1	11/06/2019 21:31	WG1375825
Chloroethane	U		0.141	2.50	1	11/06/2019 21:31	WG1375825
Chloroform	U		0.0860	0.500	1	11/06/2019 21:31	WG1375825
Chloromethane	U	J0	0.153	1.25	1	11/06/2019 21:31	WG1375825
2-Chlorotoluene	U		0.111	0.500	1	11/06/2019 21:31	WG1375825
4-Chlorotoluene	U		0.0972	0.500	1	11/06/2019 21:31	WG1375825

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	11/06/2019 21:31	WG1375825
1,2-Dibromoethane	U		0.193	0.500	1	11/06/2019 21:31	WG1375825
Dibromomethane	U		0.117	0.500	1	11/06/2019 21:31	WG1375825
1,2-Dichlorobenzene	U		0.101	0.500	1	11/06/2019 21:31	WG1375825
1,3-Dichlorobenzene	U		0.130	0.500	1	11/06/2019 21:31	WG1375825
1,4-Dichlorobenzene	U		0.121	0.500	1	11/06/2019 21:31	WG1375825
Dichlorodifluoromethane	U		0.127	2.50	1	11/06/2019 21:31	WG1375825
1,1-Dichloroethane	U		0.114	0.500	1	11/06/2019 21:31	WG1375825
1,2-Dichloroethane	U		0.108	0.500	1	11/06/2019 21:31	WG1375825
1,1-Dichloroethene	4.63		0.188	0.500	1	11/06/2019 21:31	WG1375825
cis-1,2-Dichloroethene	2250		9.33	50.0	100	11/08/2019 13:31	WG1377124
trans-1,2-Dichloroethene	10.5		0.152	0.500	1	11/06/2019 21:31	WG1375825
1,2-Dichloropropane	U		0.190	0.500	1	11/06/2019 21:31	WG1375825
1,1-Dichloropropene	U		0.128	0.500	1	11/06/2019 21:31	WG1375825
1,3-Dichloropropane	U		0.147	1.00	1	11/06/2019 21:31	WG1375825
cis-1,3-Dichloropropene	U		0.0976	0.500	1	11/06/2019 21:31	WG1375825
trans-1,3-Dichloropropene	U		0.222	0.500	1	11/06/2019 21:31	WG1375825
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	11/06/2019 21:31	WG1375825
2,2-Dichloropropane	U		0.0929	0.500	1	11/06/2019 21:31	WG1375825
Di-isopropyl ether	U		0.0924	0.500	1	11/06/2019 21:31	WG1375825
Ethylbenzene	U		0.158	0.500	1	11/06/2019 21:31	WG1375825
Hexachloro-1,3-butadiene	U		0.157	1.00	1	11/06/2019 21:31	WG1375825
2-Hexanone	U		0.757	5.00	1	11/06/2019 21:31	WG1375825
n-Hexane	U		0.305	5.00	1	11/06/2019 21:31	WG1375825
Iodomethane	U	J0	0.377	10.0	1	11/06/2019 21:31	WG1375825
Isopropylbenzene	U		0.126	0.500	1	11/06/2019 21:31	WG1375825
p-Isopropyltoluene	U		0.138	0.500	1	11/06/2019 21:31	WG1375825
2-Butanone (MEK)	U		1.28	5.00	1	11/06/2019 21:31	WG1375825
Methylene Chloride	U		1.07	2.50	1	11/06/2019 21:31	WG1375825
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	11/06/2019 21:31	WG1375825
Methyl tert-butyl ether	U		0.102	0.500	1	11/06/2019 21:31	WG1375825
Naphthalene	U		0.174	2.50	1	11/06/2019 21:31	WG1375825
n-Propylbenzene	U		0.162	0.500	1	11/06/2019 21:31	WG1375825
Styrene	U		0.117	0.500	1	11/06/2019 21:31	WG1375825
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	11/06/2019 21:31	WG1375825
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	11/06/2019 21:31	WG1375825
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	11/06/2019 21:31	WG1375825
Tetrachloroethene	U		0.199	0.500	1	11/06/2019 21:31	WG1375825
Toluene	U		0.412	0.500	1	11/06/2019 21:31	WG1375825
1,2,3-Trichlorobenzene	U		0.164	0.500	1	11/06/2019 21:31	WG1375825
1,2,4-Trichlorobenzene	U		0.355	0.500	1	11/06/2019 21:31	WG1375825
1,1,1-Trichloroethane	U		0.0940	0.500	1	11/06/2019 21:31	WG1375825
1,1,2-Trichloroethane	U		0.186	0.500	1	11/06/2019 21:31	WG1375825
Trichloroethene	12.7		0.153	0.500	1	11/06/2019 21:31	WG1375825
Trichlorofluoromethane	U		0.130	2.50	1	11/06/2019 21:31	WG1375825
1,2,3-Trichloropropane	U		0.247	2.50	1	11/06/2019 21:31	WG1375825
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/06/2019 21:31	WG1375825
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	11/06/2019 21:31	WG1375825
1,3,5-Trimethylbenzene	U		0.124	0.500	1	11/06/2019 21:31	WG1375825
Vinyl acetate	U		0.645	5.00	1	11/06/2019 21:31	WG1375825
Vinyl chloride	1710		11.8	50.0	100	11/08/2019 13:31	WG1377124
Xylenes, Total	U		0.316	1.50	1	11/06/2019 21:31	WG1375825
(S) Toluene-d8	*93.5*			*80.0-120*		*11/06/2019 21:31*	WG1375825
(S) Toluene-d8	*102*			*80.0-120*		*11/08/2019 13:31*	WG1377124
(S) 4-Bromofluorobenzene	*94.2*			*77.0-126*		*11/06/2019 21:31*	WG1375825
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*11/08/2019 13:31*	WG1377124

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 1,2-Dichloroethane-d4	*94.1*			*70.0-130*		*11/06/2019 21:31*	WG1375825
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/08/2019 13:31*	WG1377124

Method Blank (MB)

(MB) R3469251-1 11/06/19 19:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	3080	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1153228-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1153228-01 11/06/19 19:31 • (DUP) R3469251-2 11/06/19 19:39

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	87100	87200	1	0.0923		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1155903-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1155903-16 11/06/19 22:20 • (DUP) R3469251-4 11/06/19 22:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	432000	431000	1	0.123		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3469251-3 11/06/19 20:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	100000	100	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3467343-1 10/31/19 08:59

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	53.1	J	51.9	1000
Nitrate	U		22.7	100

L1155658-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1155658-01 10/31/19 21:01 • (DUP) R3467343-6 10/31/19 21:18

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	66900	66700	1	0.278		15
Nitrate	U	0.000	1	0.000		15

L1154639-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1154639-02 10/31/19 22:11 • (DUP) R3467343-8 10/31/19 22:29

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	125000	125000	5	0.0892		15
Nitrate	22100	22000	5	0.504		15

Laboratory Control Sample (LCS)

(LCS) R3467343-2 10/31/19 09:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39200	98.0	80.0-120	
Nitrate	8000	8160	102	80.0-120	

L1155572-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1155572-01 10/31/19 13:58 • (MS) R3467343-4 10/31/19 14:15 • (MSD) R3467343-5 10/31/19 14:33

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	ND	50200	50700	99.8	101	1	80.0-120			1.12	15
Nitrate	5000	1650	6730	6770	102	102	1	80.0-120			0.554	15

L1155658-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1155658-02 10/31/19 21:36 • (MS) R3467343-7 10/31/19 21:53

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	44500	92500	95.9	1	80.0-120	
Nitrate	5000	U	4990	99.8	1	80.0-120	

Method Blank (MB)

(MB) R3467688-1 11/01/19 10:58

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	90.9	J	77.4	5000

L1155658-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1155658-01 11/01/19 15:54 • (DUP) R3467688-3 11/01/19 16:07

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	909	872	1	4.21	J	15

L1156202-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1156202-03 11/01/19 20:03 • (DUP) R3467688-6 11/01/19 20:42

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	ND	100	1	1.88	J	15

Laboratory Control Sample (LCS)

(LCS) R3467688-2 11/01/19 11:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	40000	100	80.0-120	

L1155905-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1155905-05 11/01/19 17:13 • (MS) R3467688-4 11/01/19 17:26

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	2710	53200	101	1	80.0-120	

L1155905-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1155905-05 11/01/19 17:13 • (MS) R3467688-5 11/01/19 18:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	2710	51900	98.3	1	80.0-120	

L1156212-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1156212-01 11/01/19 20:55 • (MS) R3467688-7 11/01/19 21:08

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	53200	101000	95.4	1	80.0-120	E

Method Blank (MB)

(MB) R3468492-1 11/02/19 22:57

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	387	J	102	1000

L1155639-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1155639-02 11/03/19 00:50 • (DUP) R3468492-3 11/03/19 01:03

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	508	480	1	5.69	J	20

L1155683-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1155683-01 11/03/19 03:10 • (DUP) R3468492-6 11/03/19 03:24

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	1260	1210	1	4.46		20

Laboratory Control Sample (LCS)

(LCS) R3468492-2 11/02/19 23:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC	75000	72300	96.4	85.0-115	

L1155644-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1155644-02 11/03/19 01:35 • (MS) R3468492-4 11/03/19 01:53 • (MSD) R3468492-5 11/03/19 02:09

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	2330	50000	50500	95.3	96.4	1	80.0-120			1.09	20

L1155761-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1155761-10 11/03/19 05:37 • (MS) R3468492-7 11/03/19 05:56 • (MSD) R3468492-8 11/03/19 06:12

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	349	47400	48800	94.2	96.9	1	80.0-120			2.85	20

Method Blank (MB)

(MB) R3468712-1 11/05/19 15:58

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	0.609	J	0.250	5.00

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

(LCS) R3468712-2 11/05/19 16:02 • (LCSD) R3468712-3 11/05/19 16:05

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Iron	5000	4750	4890	95.1	97.8	80.0-120			2.84	20
Manganese	50.0	47.3	49.1	94.7	98.3	80.0-120			3.73	20

L1155830-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1155830-07 11/05/19 16:09 • (MS) R3468712-5 11/05/19 16:17 • (MSD) R3468712-6 11/05/19 16:21

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	5000	41.1	4900	4850	97.2	96.2	1	75.0-125			1.07	20
Manganese	50.0	20.3	69.5	68.6	98.4	96.7	1	75.0-125			1.26	20

Method Blank (MB)

(MB) R3467529-1 11/01/19 14:17

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

L1155658-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1155658-01 11/01/19 14:20 • (DUP) R3467529-2 11/01/19 14:33

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	6040	6040	1	0.000		20
Ethane	113	113	1	0.000		20
Ethene	460	458	1	0.436		20

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

(LCS) R3467529-3 11/01/19 14:36 • (LCSD) R3467529-4 11/01/19 14:40

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	71.0	72.6	105	107	85.0-115			2.23	20
Ethane	129	126	127	97.7	98.4	85.0-115			0.791	20
Ethene	127	132	133	104	105	85.0-115			0.755	20

Method Blank (MB)

(MB) R3469663-2 11/06/19 15:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00

Method Blank (MB)

(MB) R3469663-2 11/06/19 15:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*92.3*			*80.0-120*
(S) 4-Bromofluorobenzene	*92.6*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*88.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3469663-1 11/06/19 14:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acrylonitrile	25.0	23.6	94.4	55.0-149	
Benzene	5.00	4.64	92.8	70.0-123	
Bromobenzene	5.00	4.50	90.0	73.0-121	
Bromodichloromethane	5.00	4.58	91.6	75.0-120	
Bromochloromethane	5.00	5.14	103	76.0-122	
Bromoform	5.00	4.45	89.0	68.0-132	
Bromomethane	5.00	2.43	48.6	10.0-160	
n-Butylbenzene	5.00	4.78	95.6	73.0-125	
sec-Butylbenzene	5.00	4.84	96.8	75.0-125	
tert-Butylbenzene	5.00	4.73	94.6	76.0-124	
Carbon disulfide	5.00	5.07	101	61.0-128	
Carbon tetrachloride	5.00	4.81	96.2	68.0-126	
Chlorobenzene	5.00	4.72	94.4	80.0-121	
Chlorodibromomethane	5.00	4.48	89.6	77.0-125	
Chloroethane	5.00	5.30	106	47.0-150	
Chloroform	5.00	4.62	92.4	73.0-120	
Chloromethane	5.00	3.76	75.2	41.0-142	
2-Chlorotoluene	5.00	4.61	92.2	76.0-123	
4-Chlorotoluene	5.00	4.48	89.6	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	5.30	106	58.0-134	
1,2-Dibromoethane	5.00	4.85	97.0	80.0-122	
Dibromomethane	5.00	4.61	92.2	80.0-120	
1,2-Dichlorobenzene	5.00	4.64	92.8	79.0-121	
1,3-Dichlorobenzene	5.00	4.55	91.0	79.0-120	
1,4-Dichlorobenzene	5.00	4.56	91.2	79.0-120	
trans-1,4-Dichloro-2-butene	5.00	3.83	76.6	33.0-144	
Dichlorodifluoromethane	5.00	6.75	135	51.0-149	
1,1-Dichloroethane	5.00	4.70	94.0	70.0-126	
1,2-Dichloroethane	5.00	4.57	91.4	70.0-128	
1,1-Dichloroethene	5.00	5.16	103	71.0-124	
trans-1,2-Dichloroethene	5.00	4.74	94.8	73.0-120	
1,2-Dichloropropane	5.00	4.55	91.0	77.0-125	
1,1-Dichloropropene	5.00	4.81	96.2	74.0-126	
1,3-Dichloropropane	5.00	4.67	93.4	80.0-120	
cis-1,3-Dichloropropene	5.00	4.37	87.4	80.0-123	
trans-1,3-Dichloropropene	5.00	4.59	91.8	78.0-124	
2,2-Dichloropropane	5.00	4.99	99.8	58.0-130	
Di-isopropyl ether	5.00	4.43	88.6	58.0-138	
Ethylbenzene	5.00	4.77	95.4	79.0-123	
Hexachloro-1,3-butadiene	5.00	5.05	101	54.0-138	

Laboratory Control Sample (LCS)

(LCS) R3469663-1 11/06/19 14:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Hexanone	25.0	24.0	96.0	67.0-149	
n-Hexane	5.00	4.91	98.2	57.0-133	
Iodomethane	25.0	18.9	75.6	33.0-147	
Isopropylbenzene	5.00	4.72	94.4	76.0-127	
p-Isopropyltoluene	5.00	4.82	96.4	76.0-125	
2-Butanone (MEK)	25.0	25.3	101	44.0-160	
Methylene Chloride	5.00	5.06	101	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	22.4	89.6	68.0-142	
Methyl tert-butyl ether	5.00	4.71	94.2	68.0-125	
Naphthalene	5.00	4.92	98.4	54.0-135	
n-Propylbenzene	5.00	4.70	94.0	77.0-124	
Styrene	5.00	4.71	94.2	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	4.49	89.8	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	4.46	89.2	65.0-130	
Tetrachloroethene	5.00	4.86	97.2	72.0-132	
Toluene	5.00	4.48	89.6	79.0-120	
1,1,2-Trichlorotrifluoroethane	5.00	5.71	114	69.0-132	
1,2,3-Trichlorobenzene	5.00	4.82	96.4	50.0-138	
1,2,4-Trichlorobenzene	5.00	4.56	91.2	57.0-137	
1,1,1-Trichloroethane	5.00	5.24	105	73.0-124	
1,1,2-Trichloroethane	5.00	4.66	93.2	80.0-120	
Trichloroethene	5.00	5.02	100	78.0-124	
Trichlorofluoromethane	5.00	5.20	104	59.0-147	
1,2,3-Trichloropropane	5.00	4.68	93.6	73.0-130	
1,2,3-Trimethylbenzene	5.00	4.51	90.2	77.0-120	
1,2,4-Trimethylbenzene	5.00	4.64	92.8	76.0-121	
1,3,5-Trimethylbenzene	5.00	4.71	94.2	76.0-122	
Vinyl acetate	25.0	21.6	86.4	11.0-160	
Xylenes, Total	15.0	13.7	91.3	79.0-123	
(S) Toluene-d8			*93.4*	*80.0-120*	
(S) 4-Bromofluorobenzene			*93.8*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*93.0*	*70.0-130*	

L1156286-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1156286-05 11/06/19 18:15 • (MS) R3469663-3 11/06/19 22:30 • (MSD) R3469663-4 11/06/19 22:50

Analyte	Spike Amount ug/l	Original Result	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	5.00		5.31	3.92	106	78.4	1	38.0-142		J3	30.1	26
Carbon disulfide	5.00		5.37	3.94	107	78.8	1	10.0-156		J3	30.7	28
Acrylonitrile	25.0		23.4	17.3	93.6	69.2	1	21.0-160			30.0	32
Benzene	5.00		4.80	3.54	96.0	70.8	1	17.0-158		J3	30.2	27
Bromobenzene	5.00		4.70	3.52	94.0	70.4	1	30.0-149		J3	28.7	28
Bromodichloromethane	5.00		4.75	3.48	95.0	69.6	1	31.0-150		J3	30.9	27
Bromoform	5.00		4.30	3.20	86.0	64.0	1	29.0-150		J3	29.3	29
Bromomethane	5.00		4.31	2.73	86.2	54.6	1	10.0-160		J3	44.9	38
n-Butylbenzene	5.00		4.92	3.60	98.4	72.0	1	31.0-150		J3	31.0	30
sec-Butylbenzene	5.00		4.98	3.68	99.6	73.6	1	33.0-155		J3	30.0	29
tert-Butylbenzene	5.00		4.94	3.59	98.8	71.8	1	34.0-153		J3	31.7	28
Carbon tetrachloride	5.00		5.50	3.94	110	78.8	1	23.0-159		J3	33.1	28
Chlorobenzene	5.00		4.86	3.63	97.2	72.6	1	33.0-152		J3	29.0	27
Chlorodibromomethane	5.00		4.45	3.33	89.0	66.6	1	37.0-149		J3	28.8	27
Chloroethane	5.00		5.47	4.24	109	84.8	1	10.0-160			25.3	30
Chloroform	5.00		5.02	3.72	100	74.4	1	29.0-154		J3	29.7	28
Chloromethane	5.00		4.28	3.22	85.6	64.4	1	10.0-160			28.3	29
trans-1,4-Dichloro-2-butene	5.00		3.52	2.63	70.4	52.6	1	10.0-157			28.9	37
2-Chlorotoluene	5.00		4.65	3.69	93.0	73.8	1	32.0-153			23.0	28
4-Chlorotoluene	5.00		4.58	3.51	91.6	70.2	1	32.0-150			26.5	28
1,2-Dibromo-3-Chloropropane	5.00		4.85	3.80	97.0	76.0	1	22.0-151			24.3	34
1,2-Dibromoethane	5.00		4.91	3.49	98.2	69.8	1	34.0-147		J3	33.8	27
2-Hexanone	25.0		23.2	16.1	92.8	64.4	1	21.0-160		J3	36.1	29
Dibromomethane	5.00		4.87	3.62	97.4	72.4	1	30.0-151		J3	29.4	27
1,2-Dichlorobenzene	5.00		4.63	3.70	92.6	74.0	1	34.0-149			22.3	28
n-Hexane	5.00		5.15	3.68	103	73.6	1	10.0-153		J3	33.3	28
1,3-Dichlorobenzene	5.00		4.50	3.32	90.0	66.4	1	36.0-146		J3	30.2	27
Iodomethane	25.0		14.6	14.1	58.4	56.4	1	10.0-160			3.48	40
1,4-Dichlorobenzene	5.00		4.58	3.52	91.6	70.4	1	35.0-142			26.2	27
Dichlorodifluoromethane	5.00		7.20	5.78	144	116	1	10.0-160			21.9	29
1,1-Dichloroethane	5.00		4.85	3.58	97.0	71.6	1	25.0-158		J3	30.1	27
1,2-Dichloroethane	5.00	U	4.78	3.57	95.6	71.4	1	29.0-151		J3	29.0	27
1,1-Dichloroethene	5.00		5.64	4.19	113	83.8	1	11.0-160		J3	29.5	29
trans-1,2-Dichloroethene	5.00	U	5.10	3.69	102	73.8	1	17.0-153		J3	32.1	27
1,2-Dichloropropane	5.00		4.67	3.48	93.4	69.6	1	30.0-156		J3	29.2	27
1,1-Dichloropropene	5.00		5.29	3.81	106	76.2	1	25.0-158		J3	32.5	27
1,3-Dichloropropane	5.00		4.82	3.51	96.4	70.2	1	38.0-147		J3	31.5	27
cis-1,3-Dichloropropene	5.00		4.60	3.31	92.0	66.2	1	34.0-149		J3	32.6	28
trans-1,3-Dichloropropene	5.00		4.41	3.20	88.2	64.0	1	32.0-149		J3	31.8	28
2,2-Dichloropropane	5.00		5.39	3.95	108	79.0	1	24.0-152		J3	30.8	29

L1156286-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1156286-05 11/06/19 18:15 • (MS) R3469663-3 11/06/19 22:30 • (MSD) R3469663-4 11/06/19 22:50

Analyte	Spike Amount ug/l	Original Result	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	5.00		4.62	3.44	92.4	68.8	1	21.0-160		J3	29.3	28
Ethylbenzene	5.00		4.80	3.64	96.0	72.8	1	30.0-155		J3	27.5	27
Hexachloro-1,3-butadiene	5.00		5.38	3.74	108	74.8	1	20.0-154		J3	36.0	34
Isopropylbenzene	5.00		4.94	3.63	98.8	72.6	1	28.0-157		J3	30.6	27
Vinyl acetate	25.0		22.9	16.7	91.6	66.8	1	12.0-160		J3	31.3	31
p-Isopropyltoluene	5.00		4.95	3.64	99.0	72.8	1	30.0-154		J3	30.5	29
2-Butanone (MEK)	25.0		24.7	18.4	98.8	73.6	1	10.0-160			29.2	32
Methylene Chloride	5.00		4.85	3.62	97.0	72.4	1	23.0-144		J3	29.0	28
4-Methyl-2-pentanone (MIBK)	25.0		22.1	16.1	88.4	64.4	1	29.0-160		J3	31.4	29
Methyl tert-butyl ether	5.00		4.84	3.53	96.8	70.6	1	28.0-150		J3	31.3	29
Naphthalene	5.00		4.47	3.57	89.4	71.4	1	12.0-156			22.4	35
n-Propylbenzene	5.00		4.89	3.64	97.8	72.8	1	31.0-154		J3	29.3	28
Styrene	5.00		4.72	3.48	94.4	69.6	1	33.0-155		J3	30.2	28
1,1,1,2-Tetrachloroethane	5.00		4.72	3.41	94.4	68.2	1	36.0-151		J3	32.2	29
1,1,2,2-Tetrachloroethane	5.00	U	4.41	3.55	88.2	71.0	1	33.0-150			21.6	28
Tetrachloroethene	5.00	U	5.06	3.88	101	77.6	1	10.0-160			26.4	27
Toluene	5.00		4.67	3.44	93.4	68.8	1	26.0-154		J3	30.3	28
1,1,2-Trichlorotrifluoroethane	5.00		6.02	4.66	120	93.2	1	23.0-160			25.5	30
1,2,3-Trichlorobenzene	5.00		4.65	3.43	93.0	68.6	1	17.0-150			30.2	36
1,2,4-Trichlorobenzene	5.00		4.40	3.43	88.0	68.6	1	24.0-150			24.8	33
1,1,1-Trichloroethane	5.00		5.49	4.02	110	80.4	1	23.0-160		J3	30.9	28
1,1,2-Trichloroethane	5.00	U	4.61	3.39	92.2	67.8	1	35.0-147		J3	30.5	27
Trichloroethene	5.00	0.228	6.01	4.36	120	87.2	1	10.0-160		J3	31.8	25
Trichlorofluoromethane	5.00		5.78	4.25	116	85.0	1	17.0-160			30.5	31
1,2,3-Trichloropropane	5.00		4.67	3.48	93.4	69.6	1	34.0-151		J3	29.2	29
1,2,3-Trimethylbenzene	5.00		4.76	3.51	95.2	70.2	1	32.0-149		J3	30.2	28
1,2,4-Trimethylbenzene	5.00		4.79	3.64	95.8	72.8	1	26.0-154		J3	27.3	27
1,3,5-Trimethylbenzene	5.00		4.79	3.54	95.8	70.8	1	28.0-153		J3	30.0	27
Xylenes, Total	15.0		14.2	10.2	94.7	68.0	1	29.0-154		J3	32.8	28
(S) Toluene-d8					*91.4*	*93.3*		*80.0-120*				
(S) 4-Bromofluorobenzene					*93.4*	*93.6*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*92.2*	*93.8*		*70.0-130*				

Method Blank (MB)

(MB) R3470024-2 11/08/19 11:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
cis-1,2-Dichloroethene	U		0.0933	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	*97.9*			*80.0-120*
(S) 4-Bromofluorobenzene	*105*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3470024-1 11/08/19 10:33

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	39.3	157	19.0-160	
cis-1,2-Dichloroethene	5.00	4.91	98.2	73.0-120	
Vinyl chloride	5.00	5.63	113	67.0-131	
(S) Toluene-d8			*95.5*	*80.0-120*	
(S) 4-Bromofluorobenzene			*106*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*104*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
J3	The associated batch QC was outside the established quality control range for precision.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

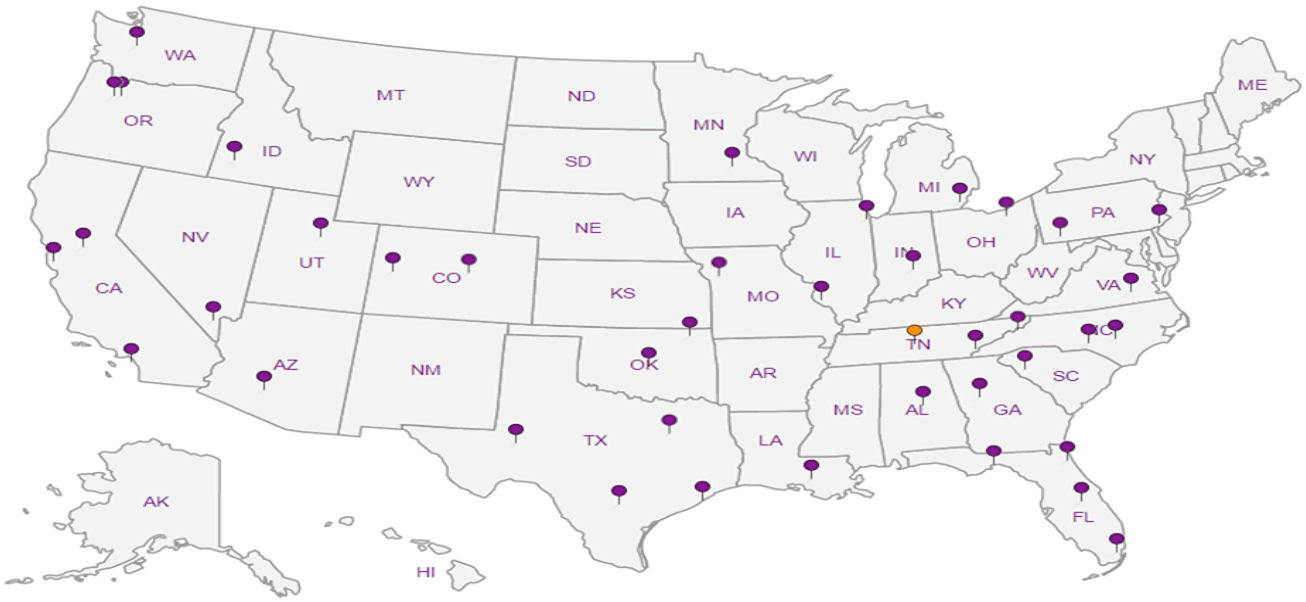
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

F205

ALL SHADED AREAS are for LAB USE ONLY

Company: **PES Environmental, Inc.**	Billing Information: **Attn: Accounts Payable 1215 4th Ave STE 1350, Seattle, WA 98161**
Address: **1215 4th Ave STE 1350, Seattle, WA 98161**	
Report To: **Bill Haldeman/Brian O'Neal**	Email To: **bhaldeman@pesenv.com; boneal@pesenv.com**
Copy To: **Kim Vik, Shannon McKernan, Karsten Springstead**	Site Collection Info/Address: **700 Dexter Ave N**
Customer Project Name/Number: **American Linen 1413.001.02.501E**	State: **WA** / County/City: **King/Seattle** Time Zone Collected: [x]PT [ ]MT [ ]CT [ ]ET
Phone: **206-529-3980** Email: **mjoiner@pesenv.com**	Site/Facility ID #: **1413.001.02.501E**
Collected By (print): Chris DeBoer	Purchase Order # : **1413.001.02.501E** Quote #: **PESENVSWA-ALP**
Collected By (signature): Chris DeBoer	Turnaround Date Required:
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Compliance Monitoring? [x] Yes [ ] No

DW PWS ID #:

DW Location Code:

Immediately Packed on Ice: [x] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: _____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	*NO3, SO4, Cl* 125mlHDPE-NoPres	Alkalinity 125mlHDPE-NoPres	EEM RSK175LL 40mlAmb-HCl	TOC 250mlAmb-HCl or 250mlHDPE-HCl	Total Fe, Mn 6020 250mlHDPE-HNO3	VOCs 8260LLC 40mlAmb-HCl
FMW-141-103019	GW	Grab	10/30/19	1235				12	X	X	X	X	X	X
MW-920-103019	GW	Grab	10/30/19	1315				12	X	X	X	X	X	X

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:

RAD SCREEN: <0.5 mR/hr

1105658 -01 02

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

LAB Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: A3
Cooler 1 Temp Upon Receipt: 2.8 oC
Cooler 1 Therm Corr. Factor: -0.2 oC
Cooler 1 Corrected Temp: 2.6 oC
Comments: A2

Relinquished by/Company: (Signature) Chris DeBoer	Date/Time: 10/30/19 1400	Received by/Company: (Signature)	Date/Time:	MTJL LAB USE ONLY Table #:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Acctnum: Template: Prelogin:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature) Hayley Lee	Date/Time: 10/31/19 0900	PM: PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: _____ of: _____

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 11, 2019

PES Environmental, Inc.- WA

Sample Delivery Group:	L1156109
Samples Received:	11/01/2019
Project Number:	1413.001.02.501E
Description:	American Linen
Site:	1413.001.02.501E
Report To:	Brian O'Neal/Bill Haldeman 1215 Fourth Ave., Suite 1350 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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FMW-140-103119 L1156109-01 GW

Collected by: Chris DeBoer | Collected date/time: 10/31/19 09:05 | Received date/time: 11/01/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1376333	1	11/07/19 02:56	11/07/19 02:56	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1373549	1	11/01/19 18:44	11/01/19 18:44	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1375433	1	11/05/19 22:49	11/05/19 22:49	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1373704	1	11/07/19 10:35	11/07/19 13:42	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1375047	1	11/05/19 15:54	11/05/19 15:54	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1377899	1	11/09/19 14:23	11/09/19 14:23	ACG	Mt. Juliet, TN

FMW-142-103119 L1156109-02 GW

Collected by: Chris DeBoer | Collected date/time: 10/31/19 10:15 | Received date/time: 11/01/19 08:45

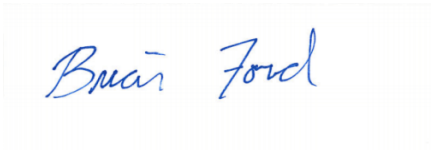
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1376333	1	11/07/19 03:03	11/07/19 03:03	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1373549	1	11/01/19 18:58	11/01/19 18:58	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1375433	1	11/06/19 00:43	11/06/19 00:43	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1373704	1	11/07/19 10:35	11/07/19 14:31	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1375047	1	11/05/19 15:56	11/05/19 15:56	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1375795	10	11/06/19 14:48	11/06/19 14:48	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1377899	1	11/09/19 14:43	11/09/19 14:43	ACG	Mt. Juliet, TN

MW-116-103119 L1156109-03 GW

Collected by: Chris DeBoer | Collected date/time: 10/31/19 11:50 | Received date/time: 11/01/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method RSK175	WG1375047	1	11/05/19 16:01	11/05/19 16:01	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1375795	10	11/06/19 14:52	11/06/19 14:52	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1377899	1	11/09/19 15:04	11/09/19 15:04	ACG	Mt. Juliet, TN

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



Brian Ford
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	396000		2710	20000	1	11/07/2019 02:56	WG1376333

Sample Narrative:

L1156109-01 WG1376333: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	17600		51.9	1000	1	11/01/2019 18:44	WG1373549
Nitrate	U		22.7	100	1	11/01/2019 18:44	WG1373549
Sulfate	2990	J	77.4	5000	1	11/01/2019 18:44	WG1373549

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	16800		102	1000	1	11/05/2019 22:49	WG1375433

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	213		15.0	100	1	11/07/2019 13:42	WG1373704
Manganese	1020		0.250	5.00	1	11/07/2019 13:42	WG1373704

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2440		0.287	0.678	1	11/05/2019 15:54	WG1375047
Ethane	75.1		0.296	1.29	1	11/05/2019 15:54	WG1375047
Ethene	81.1		0.422	1.27	1	11/05/2019 15:54	WG1375047

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	5.97	J J0 J4	1.05	25.0	1	11/09/2019 14:23	WG1377899
Acrylonitrile	U	J4	0.873	5.00	1	11/09/2019 14:23	WG1377899
Benzene	18.5		0.0896	0.500	1	11/09/2019 14:23	WG1377899
Bromobenzene	U		0.133	0.500	1	11/09/2019 14:23	WG1377899
Bromodichloromethane	U		0.0800	0.500	1	11/09/2019 14:23	WG1377899
Bromochloromethane	U		0.145	0.500	1	11/09/2019 14:23	WG1377899
Bromoform	U		0.186	0.500	1	11/09/2019 14:23	WG1377899
Bromomethane	U		0.157	2.50	1	11/09/2019 14:23	WG1377899
n-Butylbenzene	U	J0 J4	0.143	0.500	1	11/09/2019 14:23	WG1377899
sec-Butylbenzene	U		0.134	0.500	1	11/09/2019 14:23	WG1377899
tert-Butylbenzene	U		0.183	0.500	1	11/09/2019 14:23	WG1377899
Carbon disulfide	3.49		0.101	0.500	1	11/09/2019 14:23	WG1377899
Carbon tetrachloride	U		0.159	0.500	1	11/09/2019 14:23	WG1377899
Chlorobenzene	U		0.140	0.500	1	11/09/2019 14:23	WG1377899
Chlorodibromomethane	U		0.128	0.500	1	11/09/2019 14:23	WG1377899
Chloroethane	U		0.141	2.50	1	11/09/2019 14:23	WG1377899
Chloroform	U		0.0860	0.500	1	11/09/2019 14:23	WG1377899
Chloromethane	U		0.153	1.25	1	11/09/2019 14:23	WG1377899
2-Chlorotoluene	U		0.111	0.500	1	11/09/2019 14:23	WG1377899
4-Chlorotoluene	U		0.0972	0.500	1	11/09/2019 14:23	WG1377899

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	11/09/2019 14:23	WG1377899
1,2-Dibromoethane	U		0.193	0.500	1	11/09/2019 14:23	WG1377899
Dibromomethane	U		0.117	0.500	1	11/09/2019 14:23	WG1377899
1,2-Dichlorobenzene	U		0.101	0.500	1	11/09/2019 14:23	WG1377899
1,3-Dichlorobenzene	U		0.130	0.500	1	11/09/2019 14:23	WG1377899
1,4-Dichlorobenzene	U		0.121	0.500	1	11/09/2019 14:23	WG1377899
Dichlorodifluoromethane	U		0.127	2.50	1	11/09/2019 14:23	WG1377899
1,1-Dichloroethane	U		0.114	0.500	1	11/09/2019 14:23	WG1377899
1,2-Dichloroethane	U		0.108	0.500	1	11/09/2019 14:23	WG1377899
1,1-Dichloroethene	U		0.188	0.500	1	11/09/2019 14:23	WG1377899
cis-1,2-Dichloroethene	0.160	J	0.0933	0.500	1	11/09/2019 14:23	WG1377899
trans-1,2-Dichloroethene	U		0.152	0.500	1	11/09/2019 14:23	WG1377899
1,2-Dichloropropane	U		0.190	0.500	1	11/09/2019 14:23	WG1377899
1,1-Dichloropropene	U		0.128	0.500	1	11/09/2019 14:23	WG1377899
1,3-Dichloropropane	U		0.147	1.00	1	11/09/2019 14:23	WG1377899
cis-1,3-Dichloropropene	U		0.0976	0.500	1	11/09/2019 14:23	WG1377899
trans-1,3-Dichloropropene	U		0.222	0.500	1	11/09/2019 14:23	WG1377899
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/09/2019 14:23	WG1377899
2,2-Dichloropropane	U		0.0929	0.500	1	11/09/2019 14:23	WG1377899
Di-isopropyl ether	0.327	J	0.0924	0.500	1	11/09/2019 14:23	WG1377899
Ethylbenzene	U		0.158	0.500	1	11/09/2019 14:23	WG1377899
Hexachloro-1,3-butadiene	U		0.157	1.00	1	11/09/2019 14:23	WG1377899
2-Hexanone	U		0.757	5.00	1	11/09/2019 14:23	WG1377899
n-Hexane	U		0.305	5.00	1	11/09/2019 14:23	WG1377899
Iodomethane	U		0.377	10.0	1	11/09/2019 14:23	WG1377899
Isopropylbenzene	U		0.126	0.500	1	11/09/2019 14:23	WG1377899
p-Isopropyltoluene	U		0.138	0.500	1	11/09/2019 14:23	WG1377899
2-Butanone (MEK)	1.50	J J0	1.28	5.00	1	11/09/2019 14:23	WG1377899
Methylene Chloride	U	J0	1.07	2.50	1	11/09/2019 14:23	WG1377899
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	11/09/2019 14:23	WG1377899
Methyl tert-butyl ether	0.200	J	0.102	0.500	1	11/09/2019 14:23	WG1377899
Naphthalene	U		0.174	2.50	1	11/09/2019 14:23	WG1377899
n-Propylbenzene	U		0.162	0.500	1	11/09/2019 14:23	WG1377899
Styrene	U		0.117	0.500	1	11/09/2019 14:23	WG1377899
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	11/09/2019 14:23	WG1377899
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	11/09/2019 14:23	WG1377899
1,1,2-Trichlorotrifluoroethane	U	J0 J4	0.164	0.500	1	11/09/2019 14:23	WG1377899
Tetrachloroethene	U		0.199	0.500	1	11/09/2019 14:23	WG1377899
Toluene	1.43		0.412	0.500	1	11/09/2019 14:23	WG1377899
1,2,3-Trichlorobenzene	U		0.164	0.500	1	11/09/2019 14:23	WG1377899
1,2,4-Trichlorobenzene	U		0.355	0.500	1	11/09/2019 14:23	WG1377899
1,1,1-Trichloroethane	U		0.0940	0.500	1	11/09/2019 14:23	WG1377899
1,1,2-Trichloroethane	U		0.186	0.500	1	11/09/2019 14:23	WG1377899
Trichloroethene	U		0.153	0.500	1	11/09/2019 14:23	WG1377899
Trichlorofluoromethane	U		0.130	2.50	1	11/09/2019 14:23	WG1377899
1,2,3-Trichloropropane	U		0.247	2.50	1	11/09/2019 14:23	WG1377899
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/09/2019 14:23	WG1377899
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	11/09/2019 14:23	WG1377899
1,3,5-Trimethylbenzene	U		0.124	0.500	1	11/09/2019 14:23	WG1377899
Vinyl acetate	U		0.645	5.00	1	11/09/2019 14:23	WG1377899
Vinyl chloride	189		0.118	0.500	1	11/09/2019 14:23	WG1377899
Xylenes, Total	U		0.316	1.50	1	11/09/2019 14:23	WG1377899
(S) Toluene-d8	*94.4*			*80.0-120*		*11/09/2019 14:23*	WG1377899
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*11/09/2019 14:23*	WG1377899
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*11/09/2019 14:23*	WG1377899

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	276000		2710	20000	1	11/07/2019 03:03	WG1376333

Sample Narrative:

L1156109-02 WG1376333: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	25500		51.9	1000	1	11/01/2019 18:58	WG1373549
Nitrate	U		22.7	100	1	11/01/2019 18:58	WG1373549
Sulfate	18200		77.4	5000	1	11/01/2019 18:58	WG1373549

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6500		102	1000	1	11/06/2019 00:43	WG1375433

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3360		15.0	100	1	11/07/2019 14:31	WG1373704
Manganese	307		0.250	5.00	1	11/07/2019 14:31	WG1373704

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	8040		2.87	6.78	10	11/06/2019 14:48	WG1375795
Ethane	5.07		0.296	1.29	1	11/05/2019 15:56	WG1375047
Ethene	U		0.422	1.27	1	11/05/2019 15:56	WG1375047

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.11	J J0 J4	1.05	25.0	1	11/09/2019 14:43	WG1377899
Acrylonitrile	U	J4	0.873	5.00	1	11/09/2019 14:43	WG1377899
Benzene	U		0.0896	0.500	1	11/09/2019 14:43	WG1377899
Bromobenzene	U		0.133	0.500	1	11/09/2019 14:43	WG1377899
Bromodichloromethane	U		0.0800	0.500	1	11/09/2019 14:43	WG1377899
Bromochloromethane	U		0.145	0.500	1	11/09/2019 14:43	WG1377899
Bromoform	U		0.186	0.500	1	11/09/2019 14:43	WG1377899
Bromomethane	U		0.157	2.50	1	11/09/2019 14:43	WG1377899
n-Butylbenzene	U	J0 J4	0.143	0.500	1	11/09/2019 14:43	WG1377899
sec-Butylbenzene	U		0.134	0.500	1	11/09/2019 14:43	WG1377899
tert-Butylbenzene	U		0.183	0.500	1	11/09/2019 14:43	WG1377899
Carbon disulfide	0.894		0.101	0.500	1	11/09/2019 14:43	WG1377899
Carbon tetrachloride	U		0.159	0.500	1	11/09/2019 14:43	WG1377899
Chlorobenzene	U		0.140	0.500	1	11/09/2019 14:43	WG1377899
Chlorodibromomethane	U		0.128	0.500	1	11/09/2019 14:43	WG1377899
Chloroethane	U		0.141	2.50	1	11/09/2019 14:43	WG1377899
Chloroform	U		0.0860	0.500	1	11/09/2019 14:43	WG1377899
Chloromethane	U		0.153	1.25	1	11/09/2019 14:43	WG1377899
2-Chlorotoluene	U		0.111	0.500	1	11/09/2019 14:43	WG1377899
4-Chlorotoluene	U		0.0972	0.500	1	11/09/2019 14:43	WG1377899

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	11/09/2019 14:43	WG1377899
1,2-Dibromoethane	U		0.193	0.500	1	11/09/2019 14:43	WG1377899
Dibromomethane	U		0.117	0.500	1	11/09/2019 14:43	WG1377899
1,2-Dichlorobenzene	U		0.101	0.500	1	11/09/2019 14:43	WG1377899
1,3-Dichlorobenzene	U		0.130	0.500	1	11/09/2019 14:43	WG1377899
1,4-Dichlorobenzene	U		0.121	0.500	1	11/09/2019 14:43	WG1377899
Dichlorodifluoromethane	U		0.127	2.50	1	11/09/2019 14:43	WG1377899
1,1-Dichloroethane	U		0.114	0.500	1	11/09/2019 14:43	WG1377899
1,2-Dichloroethane	U		0.108	0.500	1	11/09/2019 14:43	WG1377899
1,1-Dichloroethene	U		0.188	0.500	1	11/09/2019 14:43	WG1377899
cis-1,2-Dichloroethene	U		0.0933	0.500	1	11/09/2019 14:43	WG1377899
trans-1,2-Dichloroethene	U		0.152	0.500	1	11/09/2019 14:43	WG1377899
1,2-Dichloropropane	U		0.190	0.500	1	11/09/2019 14:43	WG1377899
1,1-Dichloropropene	U		0.128	0.500	1	11/09/2019 14:43	WG1377899
1,3-Dichloropropane	U		0.147	1.00	1	11/09/2019 14:43	WG1377899
cis-1,3-Dichloropropene	U		0.0976	0.500	1	11/09/2019 14:43	WG1377899
trans-1,3-Dichloropropene	U		0.222	0.500	1	11/09/2019 14:43	WG1377899
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/09/2019 14:43	WG1377899
2,2-Dichloropropane	U		0.0929	0.500	1	11/09/2019 14:43	WG1377899
Di-isopropyl ether	U		0.0924	0.500	1	11/09/2019 14:43	WG1377899
Ethylbenzene	U		0.158	0.500	1	11/09/2019 14:43	WG1377899
Hexachloro-1,3-butadiene	U		0.157	1.00	1	11/09/2019 14:43	WG1377899
2-Hexanone	U		0.757	5.00	1	11/09/2019 14:43	WG1377899
n-Hexane	U		0.305	5.00	1	11/09/2019 14:43	WG1377899
Iodomethane	U		0.377	10.0	1	11/09/2019 14:43	WG1377899
Isopropylbenzene	U		0.126	0.500	1	11/09/2019 14:43	WG1377899
p-Isopropyltoluene	U		0.138	0.500	1	11/09/2019 14:43	WG1377899
2-Butanone (MEK)	U	J0	1.28	5.00	1	11/09/2019 14:43	WG1377899
Methylene Chloride	U	J0	1.07	2.50	1	11/09/2019 14:43	WG1377899
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	11/09/2019 14:43	WG1377899
Methyl tert-butyl ether	U		0.102	0.500	1	11/09/2019 14:43	WG1377899
Naphthalene	U		0.174	2.50	1	11/09/2019 14:43	WG1377899
n-Propylbenzene	U		0.162	0.500	1	11/09/2019 14:43	WG1377899
Styrene	U		0.117	0.500	1	11/09/2019 14:43	WG1377899
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	11/09/2019 14:43	WG1377899
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	11/09/2019 14:43	WG1377899
1,1,2-Trichlorotrifluoroethane	U	J0 J4	0.164	0.500	1	11/09/2019 14:43	WG1377899
Tetrachloroethene	U		0.199	0.500	1	11/09/2019 14:43	WG1377899
Toluene	U		0.412	0.500	1	11/09/2019 14:43	WG1377899
1,2,3-Trichlorobenzene	U		0.164	0.500	1	11/09/2019 14:43	WG1377899
1,2,4-Trichlorobenzene	U		0.355	0.500	1	11/09/2019 14:43	WG1377899
1,1,1-Trichloroethane	U		0.0940	0.500	1	11/09/2019 14:43	WG1377899
1,1,2-Trichloroethane	U		0.186	0.500	1	11/09/2019 14:43	WG1377899
Trichloroethene	U		0.153	0.500	1	11/09/2019 14:43	WG1377899
Trichlorofluoromethane	U		0.130	2.50	1	11/09/2019 14:43	WG1377899
1,2,3-Trichloropropane	U		0.247	2.50	1	11/09/2019 14:43	WG1377899
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/09/2019 14:43	WG1377899
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	11/09/2019 14:43	WG1377899
1,3,5-Trimethylbenzene	U		0.124	0.500	1	11/09/2019 14:43	WG1377899
Vinyl acetate	U		0.645	5.00	1	11/09/2019 14:43	WG1377899
Vinyl chloride	U		0.118	0.500	1	11/09/2019 14:43	WG1377899
Xylenes, Total	U		0.316	1.50	1	11/09/2019 14:43	WG1377899
(S) Toluene-d8	*91.8*			*80.0-120*		*11/09/2019 14:43*	WG1377899
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*11/09/2019 14:43*	WG1377899
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*11/09/2019 14:43*	WG1377899

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	7650		2.87	6.78	10	11/06/2019 14:52	WG1375795
Ethane	U		0.296	1.29	1	11/05/2019 16:01	WG1375047
Ethene	U		0.422	1.27	1	11/05/2019 16:01	WG1375047

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.74	J J0 J4	1.05	25.0	1	11/09/2019 15:04	WG1377899
Acrylonitrile	U	J4	0.873	5.00	1	11/09/2019 15:04	WG1377899
Benzene	U		0.0896	0.500	1	11/09/2019 15:04	WG1377899
Bromobenzene	U		0.133	0.500	1	11/09/2019 15:04	WG1377899
Bromodichloromethane	U		0.0800	0.500	1	11/09/2019 15:04	WG1377899
Bromochloromethane	U		0.145	0.500	1	11/09/2019 15:04	WG1377899
Bromoform	U		0.186	0.500	1	11/09/2019 15:04	WG1377899
Bromomethane	U		0.157	2.50	1	11/09/2019 15:04	WG1377899
n-Butylbenzene	U	J0 J4	0.143	0.500	1	11/09/2019 15:04	WG1377899
sec-Butylbenzene	U		0.134	0.500	1	11/09/2019 15:04	WG1377899
tert-Butylbenzene	U		0.183	0.500	1	11/09/2019 15:04	WG1377899
Carbon disulfide	U		0.101	0.500	1	11/09/2019 15:04	WG1377899
Carbon tetrachloride	U		0.159	0.500	1	11/09/2019 15:04	WG1377899
Chlorobenzene	U		0.140	0.500	1	11/09/2019 15:04	WG1377899
Chlorodibromomethane	U		0.128	0.500	1	11/09/2019 15:04	WG1377899
Chloroethane	U		0.141	2.50	1	11/09/2019 15:04	WG1377899
Chloroform	U		0.0860	0.500	1	11/09/2019 15:04	WG1377899
Chloromethane	U		0.153	1.25	1	11/09/2019 15:04	WG1377899
2-Chlorotoluene	U		0.111	0.500	1	11/09/2019 15:04	WG1377899
4-Chlorotoluene	U		0.0972	0.500	1	11/09/2019 15:04	WG1377899
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	11/09/2019 15:04	WG1377899
1,2-Dibromoethane	U		0.193	0.500	1	11/09/2019 15:04	WG1377899
Dibromomethane	U		0.117	0.500	1	11/09/2019 15:04	WG1377899
1,2-Dichlorobenzene	U		0.101	0.500	1	11/09/2019 15:04	WG1377899
1,3-Dichlorobenzene	U		0.130	0.500	1	11/09/2019 15:04	WG1377899
1,4-Dichlorobenzene	U		0.121	0.500	1	11/09/2019 15:04	WG1377899
Dichlorodifluoromethane	U		0.127	2.50	1	11/09/2019 15:04	WG1377899
1,1-Dichloroethane	U		0.114	0.500	1	11/09/2019 15:04	WG1377899
1,2-Dichloroethane	U		0.108	0.500	1	11/09/2019 15:04	WG1377899
1,1-Dichloroethene	U		0.188	0.500	1	11/09/2019 15:04	WG1377899
cis-1,2-Dichloroethene	U		0.0933	0.500	1	11/09/2019 15:04	WG1377899
trans-1,2-Dichloroethene	U		0.152	0.500	1	11/09/2019 15:04	WG1377899
1,2-Dichloropropane	U		0.190	0.500	1	11/09/2019 15:04	WG1377899
1,1-Dichloropropene	U		0.128	0.500	1	11/09/2019 15:04	WG1377899
1,3-Dichloropropane	U		0.147	1.00	1	11/09/2019 15:04	WG1377899
cis-1,3-Dichloropropene	U		0.0976	0.500	1	11/09/2019 15:04	WG1377899
trans-1,3-Dichloropropene	U		0.222	0.500	1	11/09/2019 15:04	WG1377899
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/09/2019 15:04	WG1377899
2,2-Dichloropropane	U		0.0929	0.500	1	11/09/2019 15:04	WG1377899
Di-isopropyl ether	U		0.0924	0.500	1	11/09/2019 15:04	WG1377899
Ethylbenzene	U		0.158	0.500	1	11/09/2019 15:04	WG1377899
Hexachloro-1,3-butadiene	U		0.157	1.00	1	11/09/2019 15:04	WG1377899
2-Hexanone	U		0.757	5.00	1	11/09/2019 15:04	WG1377899
n-Hexane	U		0.305	5.00	1	11/09/2019 15:04	WG1377899
Iodomethane	U		0.377	10.0	1	11/09/2019 15:04	WG1377899
Isopropylbenzene	U		0.126	0.500	1	11/09/2019 15:04	WG1377899
p-Isopropyltoluene	U		0.138	0.500	1	11/09/2019 15:04	WG1377899
2-Butanone (MEK)	U		1.28	5.00	1	11/09/2019 15:04	WG1377899

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U	J0	1.07	2.50	1	11/09/2019 15:04	WG1377899
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	11/09/2019 15:04	WG1377899
Methyl tert-butyl ether	U		0.102	0.500	1	11/09/2019 15:04	WG1377899
Naphthalene	U		0.174	2.50	1	11/09/2019 15:04	WG1377899
n-Propylbenzene	U		0.162	0.500	1	11/09/2019 15:04	WG1377899
Styrene	U		0.117	0.500	1	11/09/2019 15:04	WG1377899
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	11/09/2019 15:04	WG1377899
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	11/09/2019 15:04	WG1377899
1,1,2-Trichlorotrifluoroethane	U	J0 J4	0.164	0.500	1	11/09/2019 15:04	WG1377899
Tetrachloroethene	U		0.199	0.500	1	11/09/2019 15:04	WG1377899
Toluene	U		0.412	0.500	1	11/09/2019 15:04	WG1377899
1,2,3-Trichlorobenzene	U		0.164	0.500	1	11/09/2019 15:04	WG1377899
1,2,4-Trichlorobenzene	U		0.355	0.500	1	11/09/2019 15:04	WG1377899
1,1,1-Trichloroethane	U		0.0940	0.500	1	11/09/2019 15:04	WG1377899
1,1,2-Trichloroethane	U		0.186	0.500	1	11/09/2019 15:04	WG1377899
Trichloroethene	U		0.153	0.500	1	11/09/2019 15:04	WG1377899
Trichlorofluoromethane	U		0.130	2.50	1	11/09/2019 15:04	WG1377899
1,2,3-Trichloropropane	U		0.247	2.50	1	11/09/2019 15:04	WG1377899
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/09/2019 15:04	WG1377899
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	11/09/2019 15:04	WG1377899
1,3,5-Trimethylbenzene	U		0.124	0.500	1	11/09/2019 15:04	WG1377899
Vinyl acetate	U		0.645	5.00	1	11/09/2019 15:04	WG1377899
Vinyl chloride	U		0.118	0.500	1	11/09/2019 15:04	WG1377899
Xylenes, Total	U		0.316	1.50	1	11/09/2019 15:04	WG1377899
(S) Toluene-d8	*94.6*			*80.0-120*		*11/09/2019 15:04*	WG1377899
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*11/09/2019 15:04*	WG1377899
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*11/09/2019 15:04*	WG1377899

Method Blank (MB)

(MB) R3469414-1 11/06/19 23:16

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	3390	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1156246-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1156246-04 11/07/19 03:39 • (DUP) R3469414-4 11/07/19 03:46

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	384000	383000	1	0.218		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1155933-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1155933-01 11/07/19 03:53 • (DUP) R3469414-6 11/07/19 04:00

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	75300	74900	1	0.504		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3469414-3 11/07/19 01:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	101000	101	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3467688-1 11/01/19 10:58

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	83.7	J	51.9	1000
Nitrate	U		22.7	100
Sulfate	90.9	J	77.4	5000

L1155658-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1155658-01 11/01/19 15:54 • (DUP) R3467688-3 11/01/19 16:07

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	67500	65200	1	3.56		15
Nitrate	U	0.000	1	0.000		15
Sulfate	909	872	1	4.21	J	15

L1156202-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1156202-03 11/01/19 20:03 • (DUP) R3467688-6 11/01/19 20:42

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	ND	0.000	1	0.000		15
Nitrate	ND	0.000	1	0.000		15
Sulfate	ND	100	1	1.88	J	15

Laboratory Control Sample (LCS)

(LCS) R3467688-2 11/01/19 11:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39500	98.7	80.0-120	
Nitrate	8000	8200	102	80.0-120	
Sulfate	40000	40000	100	80.0-120	

L1155905-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1155905-05 11/01/19 17:13 • (MS) R3467688-4 11/01/19 17:26

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	49700	97900	96.4	1	80.0-120	
Nitrate	5000	U	5070	101	1	80.0-120	
Sulfate	50000	2710	53200	101	1	80.0-120	

L1155905-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1155905-05 11/01/19 17:13 • (MS) R3467688-5 11/01/19 18:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	49700	95600	91.8	1	80.0-120	
Nitrate	5000	U	4990	99.9	1	80.0-120	
Sulfate	50000	2710	51900	98.3	1	80.0-120	

L1156212-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1156212-01 11/01/19 20:55 • (MS) R3467688-7 11/01/19 21:08

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	7210	56500	98.5	1	80.0-120	
Nitrate	5000	917	5900	99.7	1	80.0-120	
Sulfate	50000	53200	101000	95.4	1	80.0-120	E

Method Blank (MB)

(MB) R3468961-1 11/05/19 20:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	345	J	102	1000

L1156109-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1156109-01 11/05/19 22:49 • (DUP) R3468961-3 11/05/19 23:09

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	16800	16400	1	2.11		20

L1156246-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1156246-04 11/06/19 02:54 • (DUP) R3468961-6 11/06/19 03:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	ND	578	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3468961-2 11/05/19 20:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	75000	74100	98.8	85.0-115	

L1156483-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1156483-01 11/06/19 06:03 • (MS) R3468961-7 11/06/19 06:25 • (MSD) R3468961-8 11/06/19 06:44

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	50000	27500	76700	77000	98.5	99.1	1	80.0-120			0.390	20

Method Blank (MB)

(MB) R3469566-1 11/07/19 13:11

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

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

(LCS) R3469566-2 11/07/19 13:15 • (LCSD) R3469566-3 11/07/19 13:18

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Iron	5000	5050	5040	101	101	80.0-120			0.200	20
Manganese	50.0	51.5	50.1	103	100	80.0-120			2.56	20

L1156093-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1156093-01 11/07/19 13:21 • (MS) R3469566-5 11/07/19 13:28 • (MSD) R3469566-6 11/07/19 13:32

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	5000	9910	15500	16000	111	122	1	75.0-125			3.49	20
Manganese	50.0	1630	1620	1640	0.000	31.3	1	75.0-125	V	V	1.65	20

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

Method Blank (MB)

(MB) R3468700-1 11/05/19 15:11

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

L1156461-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1156461-01 11/05/19 15:13 • (DUP) R3468700-2 11/05/19 16:20

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

L1156483-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1156483-01 11/05/19 17:05 • (DUP) R3468700-3 11/05/19 17:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	33.6	32.3	1	3.95		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

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

(LCS) R3468700-4 11/05/19 17:20 • (LCSD) R3468700-5 11/05/19 17:23

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	73.6	75.6	109	112	85.0-115			2.68	20
Ethane	129	135	137	105	106	85.0-115			1.47	20
Ethene	127	141	143	111	113	85.0-115			1.41	20

Method Blank (MB)

(MB) R3469102-1 11/06/19 11:24

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678

L1156976-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1156976-01 11/06/19 11:27 • (DUP) R3469102-2 11/06/19 14:09

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

L1155754-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1155754-05 11/06/19 14:23 • (DUP) R3469102-3 11/06/19 14:55

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

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

(LCS) R3469102-4 11/06/19 14:57 • (LCSD) R3469102-5 11/06/19 15:01

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	73.4	75.7	108	112	85.0-115			3.09	20

Method Blank (MB)

(MB) R3470351-2 11/09/19 04:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3470351-2 11/09/19 04:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*93.8*			*80.0-120*
(S) 4-Bromofluorobenzene	*106*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3470351-1 11/09/19 04:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	41.6	166	19.0-160	J4
Acrylonitrile	25.0	38.7	155	55.0-149	J4
Benzene	5.00	4.66	93.2	70.0-123	
Bromobenzene	5.00	4.99	99.8	73.0-121	
Bromodichloromethane	5.00	4.70	94.0	75.0-120	
Bromochloromethane	5.00	5.14	103	76.0-122	
Bromoform	5.00	4.38	87.6	68.0-132	
Bromomethane	5.00	4.62	92.4	10.0-160	
n-Butylbenzene	5.00	3.64	72.8	73.0-125	J4
sec-Butylbenzene	5.00	5.00	100	75.0-125	
tert-Butylbenzene	5.00	5.28	106	76.0-124	
Carbon disulfide	5.00	4.63	92.6	61.0-128	
Carbon tetrachloride	5.00	4.83	96.6	68.0-126	
Chlorobenzene	5.00	4.78	95.6	80.0-121	
Chlorodibromomethane	5.00	4.30	86.0	77.0-125	
Chloroethane	5.00	4.77	95.4	47.0-150	
Chloroform	5.00	4.87	97.4	73.0-120	
Chloromethane	5.00	6.60	132	41.0-142	
2-Chlorotoluene	5.00	5.65	113	76.0-123	
4-Chlorotoluene	5.00	5.88	118	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	4.40	88.0	58.0-134	
1,2-Dibromoethane	5.00	4.05	81.0	80.0-122	
Dibromomethane	5.00	4.68	93.6	80.0-120	
1,2-Dichlorobenzene	5.00	4.15	83.0	79.0-121	
1,3-Dichlorobenzene	5.00	4.95	99.0	79.0-120	
1,4-Dichlorobenzene	5.00	4.68	93.6	79.0-120	
Dichlorodifluoromethane	5.00	5.30	106	51.0-149	
1,1-Dichloroethane	5.00	5.29	106	70.0-126	
1,2-Dichloroethane	5.00	5.38	108	70.0-128	
1,1-Dichloroethene	5.00	4.53	90.6	71.0-124	
cis-1,2-Dichloroethene	5.00	4.73	94.6	73.0-120	
trans-1,2-Dichloroethene	5.00	4.61	92.2	73.0-120	
1,2-Dichloropropane	5.00	4.93	98.6	77.0-125	
1,1-Dichloropropene	5.00	4.78	95.6	74.0-126	
1,3-Dichloropropane	5.00	4.08	81.6	80.0-120	
cis-1,3-Dichloropropene	5.00	4.72	94.4	80.0-123	
trans-1,3-Dichloropropene	5.00	4.15	83.0	78.0-124	
trans-1,4-Dichloro-2-butene	5.00	6.38	128	33.0-144	
2,2-Dichloropropane	5.00	4.19	83.8	58.0-130	
Di-isopropyl ether	5.00	5.54	111	58.0-138	

Laboratory Control Sample (LCS)

(LCS) R3470351-1 11/09/19 04:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	5.00	4.38	87.6	79.0-123	
Hexachloro-1,3-butadiene	5.00	3.88	77.6	54.0-138	
2-Hexanone	25.0	27.5	110	67.0-149	
n-Hexane	5.00	5.89	118	57.0-133	
Iodomethane	25.0	22.5	90.0	33.0-147	
Isopropylbenzene	5.00	4.49	89.8	76.0-127	
p-Isopropyltoluene	5.00	4.95	99.0	76.0-125	
2-Butanone (MEK)	25.0	38.9	156	44.0-160	
Methylene Chloride	5.00	3.65	73.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	25.8	103	68.0-142	
Methyl tert-butyl ether	5.00	4.78	95.6	68.0-125	
Naphthalene	5.00	5.06	101	54.0-135	
n-Propylbenzene	5.00	5.30	106	77.0-124	
Styrene	5.00	4.72	94.4	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	4.14	82.8	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	4.56	91.2	65.0-130	
1,1,2-Trichlorotrifluoroethane	5.00	3.36	67.2	69.0-132	J4
Tetrachloroethene	5.00	4.39	87.8	72.0-132	
Toluene	5.00	4.38	87.6	79.0-120	
1,2,3-Trichlorobenzene	5.00	4.49	89.8	50.0-138	
1,2,4-Trichlorobenzene	5.00	4.43	88.6	57.0-137	
1,1,1-Trichloroethane	5.00	5.08	102	73.0-124	
1,1,2-Trichloroethane	5.00	4.18	83.6	80.0-120	
Trichloroethene	5.00	5.23	105	78.0-124	
Trichlorofluoromethane	5.00	5.21	104	59.0-147	
1,2,3-Trichloropropane	5.00	5.97	119	73.0-130	
1,2,4-Trimethylbenzene	5.00	5.58	112	76.0-121	
1,2,3-Trimethylbenzene	5.00	4.53	90.6	77.0-120	
1,3,5-Trimethylbenzene	5.00	5.47	109	76.0-122	
Vinyl acetate	25.0	25.1	100	11.0-160	
Vinyl chloride	5.00	4.90	98.0	67.0-131	
Xylenes, Total	15.0	13.6	90.7	79.0-123	
(S) Toluene-d8			*96.2*	*80.0-120*	
(S) 4-Bromofluorobenzene			*105*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*111*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
J4	The associated batch QC was outside the established quality control range for accuracy.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

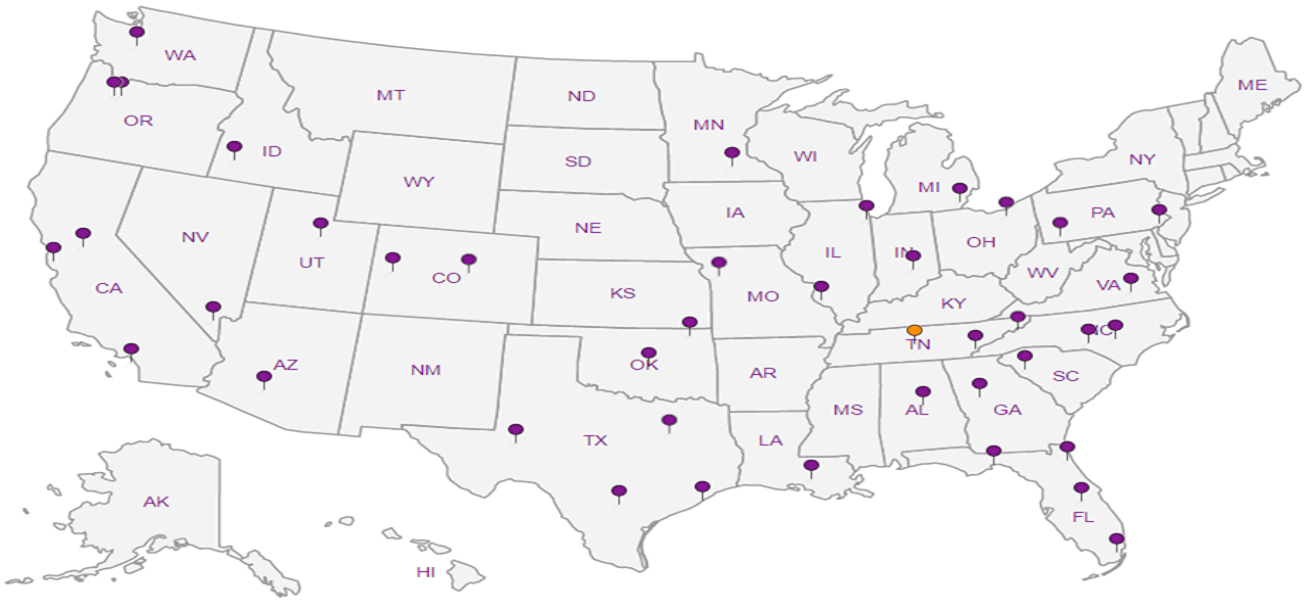
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: **PES Environmental, Inc.**	Billing Information: **Attn: Accounts Payable 1215 4th Ave STE 1350, Seattle, WA 98161**
Address: **1215 4th Ave STE 1350, Seattle, WA 98161**	
Report To: **Bill Haldeman/Brian O'Neal**	Email To: **bhaldeman@pesenv.com; boneal@pesenv.com**
Copy To: **Kim Vik, Shannon McKernan, Karsten Springstead**	Site Collection Info/Address: **700 Dexter Ave N**
Customer Project Name/Number: American Linen **1413.001.02.501E**	State: **WA** / County/City: **King/Seattle** Time Zone Collected: [x]PT [ ]MT [ ]CT [ ]ET
Phone: **206-529-3980** Email: **mjoiner@pesenv.com**	Site/Facility ID #: **1413.001.02.501E**
Collected By (print): Chris DeBoer	Purchase Order # : **1413.001.02.501E** Quote #: **PESENVSWA-ALP**
Collected By (signature): Chris DeBoer	Turnaround Date Required:
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Compliance Monitoring? [x] Yes [ ] No

DW PWS ID #:

DW Location Code:

Immediately Packed on Ice: [x] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **: 12 12

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	*NO3, SO4, Cl* 125mlHDPE-NoPres	Alkalinity 125mlHDPE-NoPres	EEM RSK175LL 40mlAmb-HCl	TOC 250mlAmb-HCl or 250mlHDPE-HCl	Total Fe, Mn 6020 250mlHDPE-HNO3	VOCs 8260LLC 40mlAmb-HCl
FMW-14B-103119	GW	Grab	10/31/19	0905				12	X	X	X	X	X	X
FMW-14A-103119	GW	Grab	10/31/19	1015				12	X	X	X	X	X	X
MW-116-103119	GW	Grab	10/31/19	1150			7.8 PH	3			X			X

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:

L1156109
-01
-02
-03

B036

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

LAB Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: T252
Cooler 1 Temp Upon Receipt: 3 oC
Cooler 1 Therm Corr. Factor: -3 oC
Cooler 1 Corrected Temp: -5 oC
Comments:
RAD SCREEN: <0.5 mR/hr OK

Relinquished by/Company: (Signature) Chris DeBoer PES	Date/Time: 10/31/19 1206	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: 11/1 0825

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ____ of: ____

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 11, 2019

PES Environmental, Inc.- WA

Sample Delivery Group:	L1156445
Samples Received:	11/02/2019
Project Number:	1413.001.02.501E
Description:	American Linen
Site:	1413.001.02.501E
Report To:	Brian O'Neal/Bill Haldeman 1215 Fourth Ave., Suite 1350 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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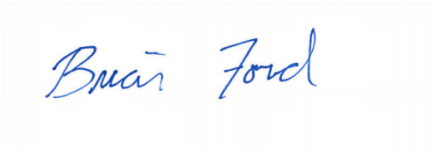
FMW-143-103119 L1156445-01 GW

Collected by	Collected date/time	Received date/time
Chris DeBoer	10/31/19 16:05	11/02/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1376629	1	11/07/19 17:54	11/07/19 17:54	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1373953	1	11/02/19 12:20	11/02/19 12:20	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1375433	1	11/06/19 04:59	11/06/19 04:59	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1375892	1	11/06/19 13:48	11/06/19 16:20	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1375047	1	11/05/19 16:34	11/05/19 16:34	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1378314	1	11/11/19 00:18	11/11/19 00:18	ACG	Mt. Juliet, TN

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



Brian Ford
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	405000		2710	20000	1	11/07/2019 17:54	WG1376629

Sample Narrative:

L1156445-01 WG1376629: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	68400		51.9	1000	1	11/02/2019 12:20	WG1373953
Nitrate	U		22.7	100	1	11/02/2019 12:20	WG1373953
Sulfate	28000		77.4	5000	1	11/02/2019 12:20	WG1373953

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4340		102	1000	1	11/06/2019 04:59	WG1375433

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3570		15.0	100	1	11/06/2019 16:20	WG1375892
Manganese	5180		0.250	5.00	1	11/06/2019 16:20	WG1375892

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1490		0.287	0.678	1	11/05/2019 16:34	WG1375047
Ethane	U		0.296	1.29	1	11/05/2019 16:34	WG1375047
Ethene	U		0.422	1.27	1	11/05/2019 16:34	WG1375047

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.15	J	1.05	25.0	1	11/11/2019 00:18	WG1378314
Acrylonitrile	U		0.873	5.00	1	11/11/2019 00:18	WG1378314
Benzene	U		0.0896	0.500	1	11/11/2019 00:18	WG1378314
Bromobenzene	U	J0	0.133	0.500	1	11/11/2019 00:18	WG1378314
Bromodichloromethane	U		0.0800	0.500	1	11/11/2019 00:18	WG1378314
Bromochloromethane	U		0.145	0.500	1	11/11/2019 00:18	WG1378314
Bromoform	U		0.186	0.500	1	11/11/2019 00:18	WG1378314
Bromomethane	U		0.157	2.50	1	11/11/2019 00:18	WG1378314
n-Butylbenzene	U	J0	0.143	0.500	1	11/11/2019 00:18	WG1378314
sec-Butylbenzene	U		0.134	0.500	1	11/11/2019 00:18	WG1378314
tert-Butylbenzene	U		0.183	0.500	1	11/11/2019 00:18	WG1378314
Carbon disulfide	U		0.101	0.500	1	11/11/2019 00:18	WG1378314
Carbon tetrachloride	U	J4	0.159	0.500	1	11/11/2019 00:18	WG1378314
Chlorobenzene	U		0.140	0.500	1	11/11/2019 00:18	WG1378314
Chlorodibromomethane	U		0.128	0.500	1	11/11/2019 00:18	WG1378314
Chloroethane	U		0.141	2.50	1	11/11/2019 00:18	WG1378314
Chloroform	U		0.0860	0.500	1	11/11/2019 00:18	WG1378314
Chloromethane	U		0.153	1.25	1	11/11/2019 00:18	WG1378314
2-Chlorotoluene	U		0.111	0.500	1	11/11/2019 00:18	WG1378314
4-Chlorotoluene	U		0.0972	0.500	1	11/11/2019 00:18	WG1378314

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	11/11/2019 00:18	WG1378314
1,2-Dibromoethane	U		0.193	0.500	1	11/11/2019 00:18	WG1378314
Dibromomethane	U		0.117	0.500	1	11/11/2019 00:18	WG1378314
1,2-Dichlorobenzene	U		0.101	0.500	1	11/11/2019 00:18	WG1378314
1,3-Dichlorobenzene	U		0.130	0.500	1	11/11/2019 00:18	WG1378314
1,4-Dichlorobenzene	U		0.121	0.500	1	11/11/2019 00:18	WG1378314
Dichlorodifluoromethane	U		0.127	2.50	1	11/11/2019 00:18	WG1378314
1,1-Dichloroethane	U		0.114	0.500	1	11/11/2019 00:18	WG1378314
1,2-Dichloroethane	U		0.108	0.500	1	11/11/2019 00:18	WG1378314
1,1-Dichloroethene	U		0.188	0.500	1	11/11/2019 00:18	WG1378314
cis-1,2-Dichloroethene	U		0.0933	0.500	1	11/11/2019 00:18	WG1378314
trans-1,2-Dichloroethene	U		0.152	0.500	1	11/11/2019 00:18	WG1378314
1,2-Dichloropropane	U		0.190	0.500	1	11/11/2019 00:18	WG1378314
1,1-Dichloropropene	U		0.128	0.500	1	11/11/2019 00:18	WG1378314
1,3-Dichloropropane	U		0.147	1.00	1	11/11/2019 00:18	WG1378314
cis-1,3-Dichloropropene	U		0.0976	0.500	1	11/11/2019 00:18	WG1378314
trans-1,3-Dichloropropene	U		0.222	0.500	1	11/11/2019 00:18	WG1378314
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	11/11/2019 00:18	WG1378314
2,2-Dichloropropane	U		0.0929	0.500	1	11/11/2019 00:18	WG1378314
Di-isopropyl ether	U		0.0924	0.500	1	11/11/2019 00:18	WG1378314
Ethylbenzene	U		0.158	0.500	1	11/11/2019 00:18	WG1378314
Hexachloro-1,3-butadiene	U		0.157	1.00	1	11/11/2019 00:18	WG1378314
2-Hexanone	U		0.757	5.00	1	11/11/2019 00:18	WG1378314
n-Hexane	U		0.305	5.00	1	11/11/2019 00:18	WG1378314
Iodomethane	U		0.377	10.0	1	11/11/2019 00:18	WG1378314
Isopropylbenzene	U		0.126	0.500	1	11/11/2019 00:18	WG1378314
p-Isopropyltoluene	U		0.138	0.500	1	11/11/2019 00:18	WG1378314
2-Butanone (MEK)	U		1.28	5.00	1	11/11/2019 00:18	WG1378314
Methylene Chloride	U		1.07	2.50	1	11/11/2019 00:18	WG1378314
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	11/11/2019 00:18	WG1378314
Methyl tert-butyl ether	U		0.102	0.500	1	11/11/2019 00:18	WG1378314
Naphthalene	U	J0	0.174	2.50	1	11/11/2019 00:18	WG1378314
n-Propylbenzene	U	J0	0.162	0.500	1	11/11/2019 00:18	WG1378314
Styrene	U		0.117	0.500	1	11/11/2019 00:18	WG1378314
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	11/11/2019 00:18	WG1378314
1,1,2,2-Tetrachloroethane	U	J0	0.130	0.500	1	11/11/2019 00:18	WG1378314
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	11/11/2019 00:18	WG1378314
Tetrachloroethene	U		0.199	0.500	1	11/11/2019 00:18	WG1378314
Toluene	U		0.412	0.500	1	11/11/2019 00:18	WG1378314
1,2,3-Trichlorobenzene	U		0.164	0.500	1	11/11/2019 00:18	WG1378314
1,2,4-Trichlorobenzene	U		0.355	0.500	1	11/11/2019 00:18	WG1378314
1,1,1-Trichloroethane	U		0.0940	0.500	1	11/11/2019 00:18	WG1378314
1,1,2-Trichloroethane	U		0.186	0.500	1	11/11/2019 00:18	WG1378314
Trichloroethene	U	J4	0.153	0.500	1	11/11/2019 00:18	WG1378314
Trichlorofluoromethane	U		0.130	2.50	1	11/11/2019 00:18	WG1378314
1,2,3-Trichloropropane	U		0.247	2.50	1	11/11/2019 00:18	WG1378314
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/11/2019 00:18	WG1378314
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	11/11/2019 00:18	WG1378314
1,3,5-Trimethylbenzene	U		0.124	0.500	1	11/11/2019 00:18	WG1378314
Vinyl acetate	U	J0	0.645	5.00	1	11/11/2019 00:18	WG1378314
Vinyl chloride	U		0.118	0.500	1	11/11/2019 00:18	WG1378314
Xylenes, Total	U		0.316	1.50	1	11/11/2019 00:18	WG1378314
(S) Toluene-d8	*107*			*80.0-120*		*11/11/2019 00:18*	WG1378314
(S) 4-Bromofluorobenzene	*111*			*77.0-126*		*11/11/2019 00:18*	WG1378314
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/11/2019 00:18*	WG1378314

Method Blank (MB)

(MB) R3469668-1 11/07/19 15:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	3970	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1156212-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1156212-01 11/07/19 15:42 • (DUP) R3469668-2 11/07/19 15:50

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	276000	276000	1	0.262		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1156460-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1156460-01 11/07/19 18:01 • (DUP) R3469668-4 11/07/19 18:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	1720000	1840000	1	6.52		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3469668-3 11/07/19 16:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	99600	99.6	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3467998-1 11/02/19 08:43

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

L1156445-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1156445-01 11/02/19 12:20 • (DUP) R3467998-3 11/02/19 12:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	68400	68400	1	0.0712		15
Nitrate	U	0.000	1	0.000		15
Sulfate	28000	28100	1	0.163		15

L1156483-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1156483-05 11/02/19 18:43 • (DUP) R3467998-6 11/02/19 19:01

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	12300	12300	1	0.271		15
Nitrate	U	0.000	1	0.000		15
Sulfate	15200	15200	1	0.0263		15

Laboratory Control Sample (LCS)

(LCS) R3467998-2 11/02/19 09:01

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	38900	97.4	80.0-120	
Nitrate	8000	8110	101	80.0-120	
Sulfate	40000	39400	98.5	80.0-120	

L1156445-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1156445-01 11/02/19 12:20 • (MS) R3467998-4 11/02/19 12:57 • (MSD) R3467998-5 11/02/19 13:14

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	68400	115000	116000	94.1	94.9	1	80.0-120	E	E	0.338	15
Nitrate	5000	U	4980	5000	99.7	100	1	80.0-120			0.369	15
Sulfate	50000	28000	77100	77500	98.2	99.0	1	80.0-120			0.516	15

L1156483-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1156483-05 11/02/19 18:43 • (MS) R3467998-7 11/02/19 19:19

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	12300	62400	100	1	80.0-120	
Nitrate	5000	U	5120	102	1	80.0-120	
Sulfate	50000	15200	64900	99.5	1	80.0-120	

Method Blank (MB)

(MB) R3468961-1 11/05/19 20:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	345	J	102	1000

L1156109-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1156109-01 11/05/19 22:49 • (DUP) R3468961-3 11/05/19 23:09

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	16800	16400	1	2.11		20

L1156246-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1156246-04 11/06/19 02:54 • (DUP) R3468961-6 11/06/19 03:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	ND	578	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3468961-2 11/05/19 20:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	75000	74100	98.8	85.0-115	

L1156483-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1156483-01 11/06/19 06:03 • (MS) R3468961-7 11/06/19 06:25 • (MSD) R3468961-8 11/06/19 06:44

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	50000	27500	76700	77000	98.5	99.1	1	80.0-120			0.390	20

Method Blank (MB)

(MB) R3469130-1 11/06/19 15:35

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	0.432	J	0.250	5.00

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

(LCS) R3469130-2 11/06/19 15:38 • (LCSD) R3469130-3 11/06/19 15:42

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Iron	5000	5010	5040	100	101	80.0-120			0.571	20
Manganese	50.0	51.3	51.1	103	102	80.0-120			0.320	20

L1154680-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1154680-01 11/06/19 15:45 • (MS) R3469130-5 11/06/19 15:52 • (MSD) R3469130-6 11/06/19 15:55

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	5000	242	5080	5080	96.8	96.7	1	75.0-125			0.0771	20
Manganese	50.0	163	206	208	86.2	89.0	1	75.0-125			0.673	20

Method Blank (MB)

(MB) R3468700-1 11/05/19 15:11

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

L1156461-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1156461-01 11/05/19 15:13 • (DUP) R3468700-2 11/05/19 16:20

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

L1156483-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1156483-01 11/05/19 17:05 • (DUP) R3468700-3 11/05/19 17:14

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	33.6	32.3	1	3.95		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

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

(LCS) R3468700-4 11/05/19 17:20 • (LCSD) R3468700-5 11/05/19 17:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	73.6	75.6	109	112	85.0-115			2.68	20
Ethane	129	135	137	105	106	85.0-115			1.47	20
Ethene	127	141	143	111	113	85.0-115			1.41	20

Method Blank (MB)

(MB) R3470534-3 11/10/19 21:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3470534-3 11/10/19 21:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*109*			*80.0-120*
(S) 4-Bromofluorobenzene	*110*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3470534-2 11/10/19 18:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	18.2	72.8	19.0-160	
Acrylonitrile	25.0	22.8	91.2	55.0-149	
Benzene	5.00	4.82	96.4	70.0-123	
Bromobenzene	5.00	3.71	74.2	73.0-121	
Bromodichloromethane	5.00	5.42	108	75.0-120	
Bromochloromethane	5.00	5.71	114	76.0-122	
Bromoform	5.00	6.10	122	68.0-132	
Bromomethane	5.00	5.61	112	10.0-160	
n-Butylbenzene	5.00	3.99	79.8	73.0-125	
sec-Butylbenzene	5.00	4.11	82.2	75.0-125	
tert-Butylbenzene	5.00	4.71	94.2	76.0-124	
Carbon disulfide	5.00	4.74	94.8	61.0-128	
Carbon tetrachloride	5.00	6.62	132	68.0-126	J4
Chlorobenzene	5.00	5.08	102	80.0-121	
Chlorodibromomethane	5.00	6.03	121	77.0-125	
Chloroethane	5.00	5.06	101	47.0-150	
Chloroform	5.00	5.12	102	73.0-120	
Chloromethane	5.00	4.86	97.2	41.0-142	
2-Chlorotoluene	5.00	4.09	81.8	76.0-123	
4-Chlorotoluene	5.00	4.15	83.0	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	4.35	87.0	58.0-134	
1,2-Dibromoethane	5.00	4.89	97.8	80.0-122	
Dibromomethane	5.00	5.81	116	80.0-120	
1,2-Dichlorobenzene	5.00	5.01	100	79.0-121	
1,3-Dichlorobenzene	5.00	4.77	95.4	79.0-120	
1,4-Dichlorobenzene	5.00	4.42	88.4	79.0-120	
Dichlorodifluoromethane	5.00	5.67	113	51.0-149	
1,1-Dichloroethane	5.00	5.14	103	70.0-126	
1,2-Dichloroethane	5.00	5.47	109	70.0-128	
1,1-Dichloroethene	5.00	5.58	112	71.0-124	
cis-1,2-Dichloroethene	5.00	5.06	101	73.0-120	
trans-1,2-Dichloroethene	5.00	5.27	105	73.0-120	
1,2-Dichloropropane	5.00	4.75	95.0	77.0-125	
1,1-Dichloropropene	5.00	5.27	105	74.0-126	
1,3-Dichloropropane	5.00	4.77	95.4	80.0-120	
cis-1,3-Dichloropropene	5.00	5.02	100	80.0-123	
trans-1,3-Dichloropropene	5.00	4.95	99.0	78.0-124	
trans-1,4-Dichloro-2-butene	5.00	3.46	69.2	33.0-144	
2,2-Dichloropropane	5.00	4.76	95.2	58.0-130	
Di-isopropyl ether	5.00	4.66	93.2	58.0-138	

Laboratory Control Sample (LCS)

(LCS) R3470534-2 11/10/19 18:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	5.00	4.92	98.4	79.0-123	
Hexachloro-1,3-butadiene	5.00	4.71	94.2	54.0-138	
2-Hexanone	25.0	21.4	85.6	67.0-149	
n-Hexane	5.00	4.29	85.8	57.0-133	
Iodomethane	25.0	31.2	125	33.0-147	
Isopropylbenzene	5.00	5.23	105	76.0-127	
p-Isopropyltoluene	5.00	4.39	87.8	76.0-125	
2-Butanone (MEK)	25.0	22.7	90.8	44.0-160	
Methylene Chloride	5.00	4.95	99.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	22.1	88.4	68.0-142	
Methyl tert-butyl ether	5.00	5.53	111	68.0-125	
Naphthalene	5.00	3.85	77.0	54.0-135	
n-Propylbenzene	5.00	3.96	79.2	77.0-124	
Styrene	5.00	5.13	103	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	5.87	117	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	3.31	66.2	65.0-130	
1,1,2-Trichlorotrifluoroethane	5.00	5.57	111	69.0-132	
Tetrachloroethene	5.00	5.57	111	72.0-132	
Toluene	5.00	4.91	98.2	79.0-120	
1,2,3-Trichlorobenzene	5.00	4.49	89.8	50.0-138	
1,2,4-Trichlorobenzene	5.00	4.49	89.8	57.0-137	
1,1,1-Trichloroethane	5.00	6.14	123	73.0-124	
1,1,2-Trichloroethane	5.00	5.02	100	80.0-120	
Trichloroethene	5.00	6.24	125	78.0-124	J4
Trichlorofluoromethane	5.00	6.03	121	59.0-147	
1,2,3-Trichloropropane	5.00	4.55	91.0	73.0-130	
1,2,4-Trimethylbenzene	5.00	4.13	82.6	76.0-121	
1,2,3-Trimethylbenzene	5.00	4.15	83.0	77.0-120	
1,3,5-Trimethylbenzene	5.00	4.19	83.8	76.0-122	
Vinyl acetate	25.0	12.3	49.2	11.0-160	
Vinyl chloride	5.00	4.98	99.6	67.0-131	
Xylenes, Total	15.0	15.2	101	79.0-123	
(S) Toluene-d8			*104*	*80.0-120*	
(S) 4-Bromofluorobenzene			*108*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*115*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
J4	The associated batch QC was outside the established quality control range for accuracy.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

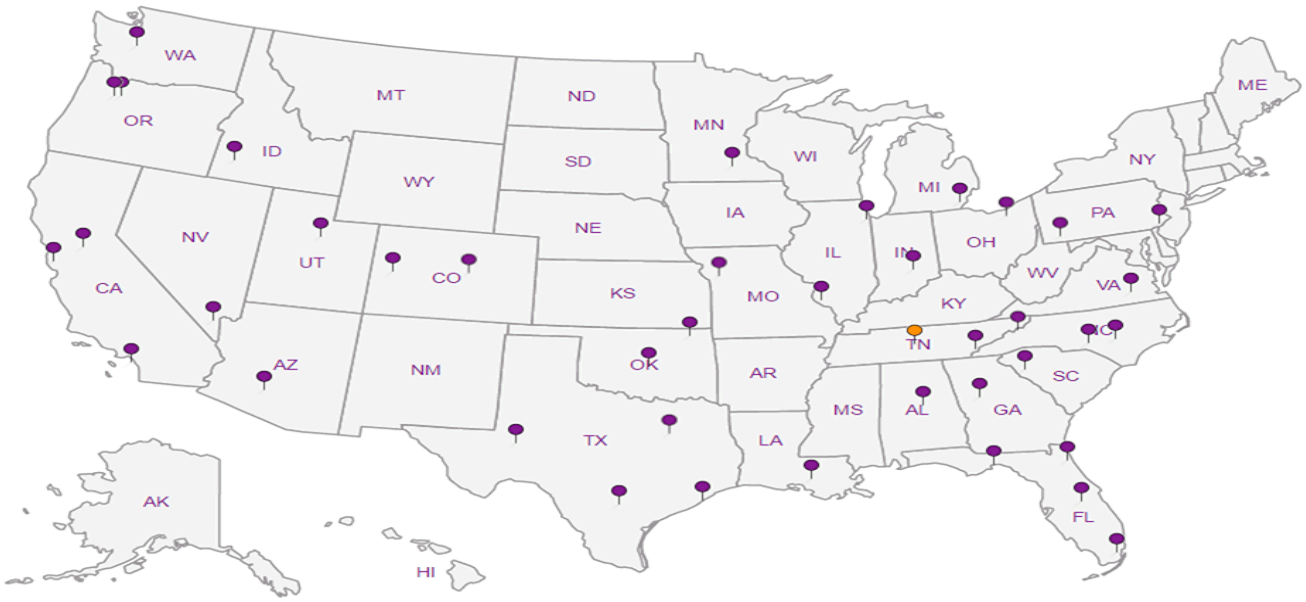
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: PES Environmental, Inc	Billing Information: Attn: Accounts Payable 1215 4th Ave STE 1350, Seattle, WA 98161
Address: 1215 4th Ave, STE 1350 Seattle, WA 98161	Email To: bhaldeman@pesenv.com, boneal@pesenv.com
Report To: Bill Haldeman/Brian O'Neal	Site Collection Info/Address: 700 Dexter Ave N
Copy To: Kim Vik, Shannon McKernan, Karsten Springstead	State: WA County/City: King/ Seattle Time Zone Collected: [✓] PT [ ] MT [ ] CT [ ] ET
Customer Project Name/Number: American Linen 1413.001.02.501E	Lab Project Manager:
Phone: (206) 529-3980 Email: mjoiner@pesenv.com	Site/Facility ID #: 1413.001.02.501E
Collected By (print): Chris DeBoer	Purchase Order #: Quote #:
Collected By (signature): Chris DeBoer	Turnaround Date Required:
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Compliance Monitoring? [✓] Yes [ ] No

DW PWS ID #:

DW Location Code:

Immediately Packed on Ice: [✓] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: _____

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Container Preservative Type **

Analyses

NO3, SO4, Cl 125mlHDPE-NoPres	Alkalinity 125mlHDPE-NoPres	EEM RSK175LL 40mlAmb-HCl	TOC 250mlAmb-HCL or 250mlHDPE-HCl	Total Fe, Mn, 6020 250HDPE-HNO3	VOCs 8260LLC 40mlAmb-Hcl				
22			22	22					

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns										
FMW-143-103119	GW	Grab	10/31/19	1605				12	X	X	X	X	X	X			X	

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	(NA)
Custody Signatures Present	Y	N	(NA)
Collector Signature Present	(Y)	N	NA
Bottles Intact	(Y)	N	NA
Correct Bottles	(Y)	N	NA
Sufficient Volume	(Y)	N	NA
Samples Received on Ice	(Y)	N	NA
VOA - Headspace Acceptable	(Y)	N	NA
USDA Regulated Soils	Y	N	(NA)
Samples in Holding Time	(Y)	N	NA
Residual Chlorine Present	Y	N	(NA)
Cl Strips: _____			
Sample pH Acceptable	Y	N	(NA)
pH Strips: _____			
Sulfide Present	Y	N	(NA)
Lead Acetate Strips: _____			

LAB USE ONLY: Lab Sample # / Comments: L1156445

RAD SCREEN: <0.5 mR/hr

-01

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: (Wet) Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N (NA)

SHORT HOLDS PRESENT (<72 hours): (Y) N N/A

Lab Tracking #:

Samples received via: (FEDEX) UPS Client Courier Pace Courier

Lab Sample Temperature Info:

Temp Blank Received: Y (N) NA

Therm ID#: 16

Cooler 1 Temp Upon Receipt: 4.9 oC

Cooler 1 Therm Corr. Factor: -.1 oC

Cooler 1 Corrected Temp: 4.8 oC

Comments: AR

Relinquished by/Company: (Signature) Chris DeBoer	Date/Time: 10/31/19 1300	Received by/Company: (Signature)	Date/Time:	E200
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Acctnum: Template: Prelogin:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature) Carol Kemp	Date/Time: 11/2/19 9:15	PM: PB:

Trip Blank Received: Y (N) NA

HCL MeOH TSP Other

Non Conformance(s): YES / (NO)

Page: _____ of: _____

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 08, 2019

PES Environmental, Inc.- WA

Sample Delivery Group:	L1156530
Samples Received:	11/02/2019
Project Number:	1413.001.02.501E
Description:	ALS

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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SV01-110119 L1156530-01 Air

Collected by: S. McKernan
Collected date/time: 11/01/19 11:18
Received date/time: 11/02/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1375952	1	11/06/19 21:35	11/06/19 21:35	CAW	Mt. Juliet, TN

SV01-110119-D L1156530-02 Air

Collected by: S. McKernan
Collected date/time: 11/01/19 11:18
Received date/time: 11/02/19 09:15

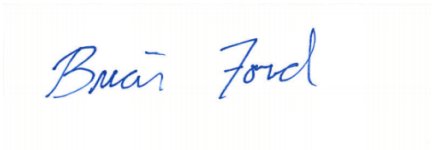
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1375952	1	11/06/19 22:14	11/06/19 22:14	CAW	Mt. Juliet, TN

SV02-110119 L1156530-03 Air

Collected by: S. McKernan
Collected date/time: 11/01/19 12:11
Received date/time: 11/02/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1375952	1	11/06/19 22:53	11/06/19 22:53	CAW	Mt. Juliet, TN

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



Brian Ford
Project Manager

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	11.6	27.6		1	WG1375952
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1375952
Benzene	71-43-2	78.10	0.200	0.639	0.225	0.719		1	WG1375952
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1375952
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1375952
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1375952
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1375952
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1375952
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1375952
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1375952
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1375952
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1375952
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1375952
Chloromethane	74-87-3	50.50	0.200	0.413	0.384	0.793		1	WG1375952
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1375952
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1375952
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1375952
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1375952
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1375952
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1375952
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1375952
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1375952
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1375952
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1375952
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1375952
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1375952
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1375952
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1375952
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1375952
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1375952
Ethanol	64-17-5	46.10	0.630	1.19	22.3	42.0		1	WG1375952
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1375952
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1375952
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1375952
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.488	2.41		1	WG1375952
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1375952
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1375952
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1375952
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1375952
n-Hexane	110-54-3	86.20	0.200	0.705	2.24	7.90		1	WG1375952
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1375952
Methylene Chloride	75-09-2	84.90	0.200	0.694	7.18	24.9		1	WG1375952
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1375952
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1375952
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1375952
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1375952
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1375952
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1375952
2-Propanol	67-63-0	60.10	1.25	3.07	6.65	16.3		1	WG1375952
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1375952
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1375952
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1375952
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1375952
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1375952
Toluene	108-88-3	92.10	0.200	0.753	1.43	5.39		1	WG1375952
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1375952

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	3.63	19.7		1	WG1375952
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1375952
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1375952
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1375952
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1375952
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1375952
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1375952
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1375952
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1375952
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1375952
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1375952
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.9*				WG1375952

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	8.72	20.7		1	WG1375952
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1375952
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1375952
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1375952
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1375952
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1375952
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1375952
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1375952
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1375952
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1375952
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1375952
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1375952
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1375952
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1375952
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1375952
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1375952
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1375952
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1375952
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1375952
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1375952
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1375952
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1375952
1,1-Dichloroethane	75-34-3	98	0.200	0.802	0.853	3.42		1	WG1375952
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1375952
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1375952
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1375952
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1375952
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1375952
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1375952
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.221	0.796		1	WG1375952
Ethanol	64-17-5	46.10	0.630	1.19	10.2	19.2		1	WG1375952
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1375952
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1375952
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1375952
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1375952
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1375952
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1375952
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1375952
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1375952
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1375952
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1375952
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1375952
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1375952
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1375952
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1375952
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1375952
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1375952
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1375952
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1375952
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1375952
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1375952
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1375952
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.405	2.75		1	WG1375952
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1375952
Toluene	108-88-3	92.10	0.200	0.753	0.431	1.62		1	WG1375952
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1375952

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	12.6	68.5		1	WG1375952
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1375952
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1375952
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1375952
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1375952
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1375952
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1375952
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1375952
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1375952
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1375952
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1375952
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*93.5*				WG1375952

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	ND		1	WG1375952
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1375952
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1375952
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1375952
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1375952
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1375952
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1375952
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1375952
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1375952
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1375952
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1375952
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1375952
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1375952
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1375952
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1375952
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1375952
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1375952
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1375952
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1375952
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1375952
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1375952
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1375952
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1375952
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1375952
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1375952
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1375952
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1375952
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1375952
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1375952
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1375952
Ethanol	64-17-5	46.10	0.630	1.19	16.6	31.3		1	WG1375952
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1375952
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1375952
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.851	4.78		1	WG1375952
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1375952
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1375952
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1375952
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1375952
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1375952
n-Hexane	110-54-3	86.20	0.200	0.705	0.309	1.09		1	WG1375952
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1375952
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.28	4.44		1	WG1375952
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1375952
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1375952
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1375952
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1375952
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1375952
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1375952
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1375952
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1375952
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1375952
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1375952
Tetrachloroethylene	127-18-4	166	0.200	1.36	2.14	14.5		1	WG1375952
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1375952
Toluene	108-88-3	92.10	0.200	0.753	0.386	1.45		1	WG1375952
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1375952

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1375952
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1375952
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1375952
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1375952
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1375952
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1375952
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1375952
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1375952
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1375952
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1375952
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1375952
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG1375952

Method Blank (MB)

(MB) R3469383-3 11/06/19 10:18

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

Method Blank (MB)

(MB) R3469383-3 11/06/19 10:18

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	U		0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	*88.8*			*60.0-140*

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

(LCS) R3469383-1 11/06/19 08:59 • (LCSD) R3469383-2 11/06/19 09:39

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	4.85	4.90	129	131	55.0-148			1.03	25
Propene	3.75	4.21	4.18	112	111	64.0-144			0.715	25
Dichlorodifluoromethane	3.75	4.26	4.24	114	113	64.0-139			0.471	25
1,2-Dichlorotetrafluoroethane	3.75	4.27	4.27	114	114	70.0-130			0.000	25
Chloromethane	3.75	4.34	4.13	116	110	70.0-130			4.96	25

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

(LCS) R3469383-1 11/06/19 08:59 • (LCSD) R3469383-2 11/06/19 09:39

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	3.75	4.35	4.44	116	118	70.0-130			2.05	25
1,3-Butadiene	3.75	4.26	4.30	114	115	70.0-130			0.935	25
Bromomethane	3.75	4.40	4.31	117	115	70.0-130			2.07	25
Chloroethane	3.75	4.37	4.27	117	114	70.0-130			2.31	25
Trichlorofluoromethane	3.75	4.29	4.22	114	113	70.0-130			1.65	25
1,1,2-Trichlorotrifluoroethane	3.75	4.33	4.25	115	113	70.0-130			1.86	25
1,1-Dichloroethene	3.75	4.29	4.26	114	114	70.0-130			0.702	25
1,1-Dichloroethane	3.75	4.19	4.13	112	110	70.0-130			1.44	25
Acetone	3.75	4.35	4.33	116	115	70.0-130			0.461	25
2-Propanol	3.75	4.26	4.17	114	111	70.0-139			2.14	25
Carbon disulfide	3.75	4.35	4.34	116	116	70.0-130			0.230	25
Methylene Chloride	3.75	4.10	4.09	109	109	70.0-130			0.244	25
MTBE	3.75	4.19	4.21	112	112	70.0-130			0.476	25
trans-1,2-Dichloroethene	3.75	4.21	4.23	112	113	70.0-130			0.474	25
n-Hexane	3.75	4.29	4.27	114	114	70.0-130			0.467	25
Vinyl acetate	3.75	4.19	4.18	112	111	70.0-130			0.239	25
Methyl Ethyl Ketone	3.75	4.35	4.27	116	114	70.0-130			1.86	25
cis-1,2-Dichloroethene	3.75	4.32	4.25	115	113	70.0-130			1.63	25
Chloroform	3.75	4.22	4.19	113	112	70.0-130			0.713	25
Cyclohexane	3.75	4.27	4.24	114	113	70.0-130			0.705	25
1,1,1-Trichloroethane	3.75	4.23	4.15	113	111	70.0-130			1.91	25
Carbon tetrachloride	3.75	4.18	4.19	111	112	70.0-130			0.239	25
Benzene	3.75	4.27	4.28	114	114	70.0-130			0.234	25
1,2-Dichloroethane	3.75	4.25	4.16	113	111	70.0-130			2.14	25
Heptane	3.75	4.16	4.21	111	112	70.0-130			1.19	25
Trichloroethylene	3.75	4.31	4.30	115	115	70.0-130			0.232	25
1,2-Dichloropropane	3.75	4.20	4.30	112	115	70.0-130			2.35	25
1,4-Dioxane	3.75	4.29	4.28	114	114	70.0-140			0.233	25
Bromodichloromethane	3.75	4.28	4.25	114	113	70.0-130			0.703	25
cis-1,3-Dichloropropene	3.75	4.30	4.35	115	116	70.0-130			1.16	25
4-Methyl-2-pentanone (MIBK)	3.75	4.16	4.18	111	111	70.0-139			0.480	25
Toluene	3.75	4.27	4.24	114	113	70.0-130			0.705	25
trans-1,3-Dichloropropene	3.75	4.31	4.31	115	115	70.0-130			0.000	25
1,1,2-Trichloroethane	3.75	4.37	4.42	117	118	70.0-130			1.14	25
Tetrachloroethylene	3.75	4.32	4.33	115	115	70.0-130			0.231	25
Methyl Butyl Ketone	3.75	4.23	4.14	113	110	70.0-149			2.15	25
Dibromochloromethane	3.75	4.38	4.36	117	116	70.0-130			0.458	25
1,2-Dibromoethane	3.75	4.30	4.33	115	115	70.0-130			0.695	25
Chlorobenzene	3.75	4.31	4.36	115	116	70.0-130			1.15	25
Ethylbenzene	3.75	4.29	4.24	114	113	70.0-130			1.17	25

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

(LCS) R3469383-1 11/06/19 08:59 • (LCSD) R3469383-2 11/06/19 09:39

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
m&p-Xylene	7.50	8.72	8.63	116	115	70.0-130			1.04	25
o-Xylene	3.75	4.33	4.26	115	114	70.0-130			1.63	25
Styrene	3.75	4.50	4.36	120	116	70.0-130			3.16	25
Bromoform	3.75	4.37	4.27	117	114	70.0-130			2.31	25
1,1,2,2-Tetrachloroethane	3.75	4.33	4.22	115	113	70.0-130			2.57	25
4-Ethyltoluene	3.75	4.31	4.27	115	114	70.0-130			0.932	25
1,3,5-Trimethylbenzene	3.75	4.36	4.32	116	115	70.0-130			0.922	25
1,2,4-Trimethylbenzene	3.75	4.38	4.30	117	115	70.0-130			1.84	25
1,3-Dichlorobenzene	3.75	4.35	4.18	116	111	70.0-130			3.99	25
1,4-Dichlorobenzene	3.75	4.45	4.17	119	111	70.0-130			6.50	25
Benzyl Chloride	3.75	4.09	3.99	109	106	70.0-152			2.48	25
1,2-Dichlorobenzene	3.75	4.27	4.14	114	110	70.0-130			3.09	25
1,2,4-Trichlorobenzene	3.75	4.11	4.09	110	109	70.0-160			0.488	25
Hexachloro-1,3-butadiene	3.75	4.40	4.32	117	115	70.0-151			1.83	25
Naphthalene	3.75	4.20	4.16	112	111	70.0-159			0.957	25
Allyl Chloride	3.75	4.25	4.23	113	113	70.0-130			0.472	25
2-Chlorotoluene	3.75	4.40	4.30	117	115	70.0-130			2.30	25
Methyl Methacrylate	3.75	4.29	4.26	114	114	70.0-130			0.702	25
Tetrahydrofuran	3.75	4.17	4.10	111	109	70.0-137			1.69	25
2,2,4-Trimethylpentane	3.75	4.25	4.22	113	113	70.0-130			0.708	25
Vinyl Bromide	3.75	4.42	4.34	118	116	70.0-130			1.83	25
Isopropylbenzene	3.75	4.30	4.33	115	115	70.0-130			0.695	25
(S) 1,4-Bromofluorobenzene				*100*	*99.7*	*60.0-140*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

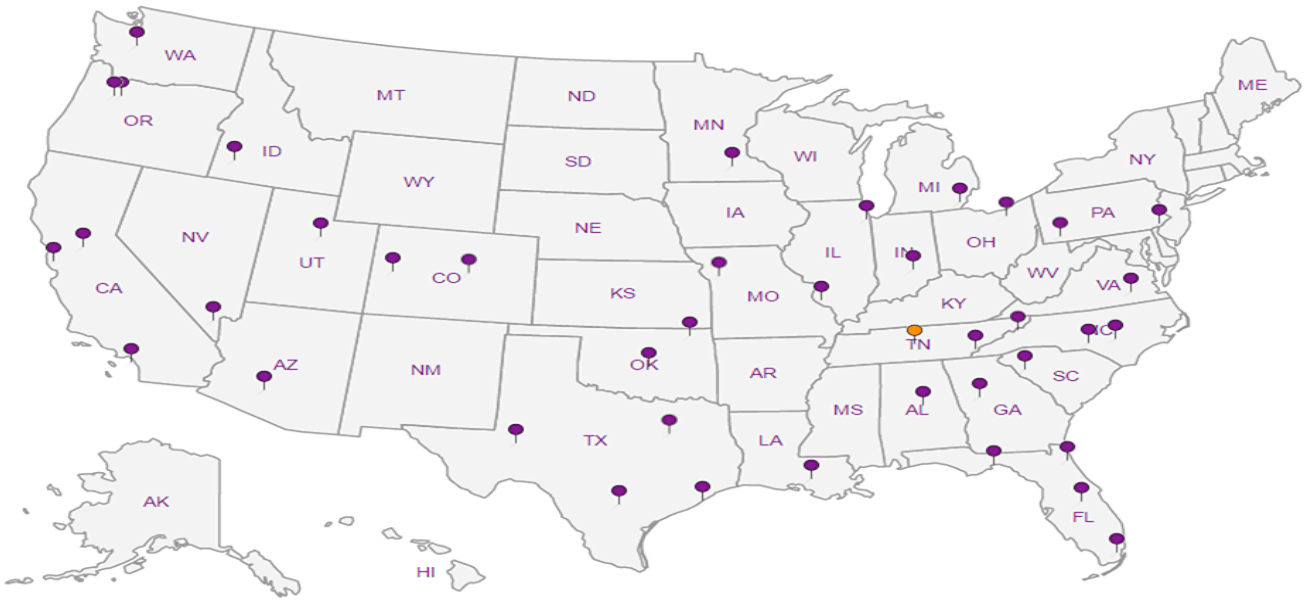
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



PES Environmental, Inc.- WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

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

Pres Chk

Report to: Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com; bhaldeman@pesenv.com;

Project Description: ALS

City/State Collected: SEATTLE, WA

Please Circle: PT MT CT ET

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

Client Project # 1413.001.02.501E

Lab Project # PESENVSWA-ALP

Collected by (print): S MCKERNAN

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N___ Y___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15 Summa	Remarks	Sample # (lab only)
SV01-110119	GRAB	Air	NA	11/01/19	1118	1	X		-01
SV01-110119-D	↓	Air	↓	↓	1118	1	X		02
SV02-110119	↓	Air	↓	↓	1211	1	X		03
		Air							
		Air							
					NA (SW)				

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

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

SDG # L1156530

A041

Acctnum: PESENVSWA
Template: T157329
Prelogin: P735089
PM: 110 - Brian Ford
PB: CSG 10/15/19
Shipped Via: FedEX Ground

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	✓NP	__Y __N
COC Signed/Accurate:		✓Y __N
Bottles arrive intact:		✓Y __N
Correct bottles used:		✓Y __N
Sufficient volume sent:		✓Y __N
If Applicable		
VOA Zero Headspace:		__Y __N
Preservation Correct/Checked:		__Y __N
RAD Screen <0.5 mR/hr:		✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	11/1/19 (SW)	1330	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes (No) HCL / MeoH TBR

Temp: Amb °C Bottles Received: 3

Date: 11-02 Time: 0915

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 20, 2019

PES Environmental, Inc.- WA

Sample Delivery Group:	L1158143
Samples Received:	11/07/2019
Project Number:	1413.001.02.501E
Description:	American Linen
Site:	1413.001.02.501E
Report To:	Brian O'Neal/Bill Haldeman 1215 Fourth Ave., Suite 1350 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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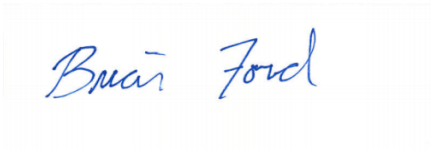
FMW-137-110619 L1158143-01 GW

Collected by	Collected date/time	Received date/time
Karsten Springstead	11/06/19 06:05	11/07/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1379400	1	11/14/19 02:40	11/14/19 02:40	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1376795	1	11/08/19 01:15	11/08/19 01:15	JD	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1378047	1	11/10/19 05:44	11/10/19 05:44	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1377945	1	11/09/19 16:00	11/10/19 22:05	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1378445	1	11/11/19 14:38	11/11/19 14:38	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1381516	1	11/16/19 01:30	11/16/19 01:30	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1382748	1	11/19/19 15:21	11/19/19 15:21	JHH	Mt. Juliet, TN

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



Brian Ford
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	408000		2710	20000	1	11/14/2019 02:40	WG1379400

Sample Narrative:

L1158143-01 WG1379400: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	24300		51.9	1000	1	11/08/2019 01:15	WG1376795
Nitrate	33.1	B J	22.7	100	1	11/08/2019 01:15	WG1376795
Sulfate	37000		77.4	5000	1	11/08/2019 01:15	WG1376795

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3200		102	1000	1	11/10/2019 05:44	WG1378047

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	400		15.0	100	1	11/10/2019 22:05	WG1377945
Manganese	2670		0.250	5.00	1	11/10/2019 22:05	WG1377945

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	11/11/2019 14:38	WG1378445
Ethane	U		0.296	1.29	1	11/11/2019 14:38	WG1378445
Ethene	U		0.422	1.27	1	11/11/2019 14:38	WG1378445

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.32	B J	1.05	25.0	1	11/16/2019 01:30	WG1381516
Acrylonitrile	U		0.873	5.00	1	11/16/2019 01:30	WG1381516
Benzene	U		0.0896	0.500	1	11/16/2019 01:30	WG1381516
Bromobenzene	U		0.133	0.500	1	11/16/2019 01:30	WG1381516
Bromodichloromethane	U		0.0800	0.500	1	11/16/2019 01:30	WG1381516
Bromochloromethane	U		0.145	0.500	1	11/16/2019 01:30	WG1381516
Bromoform	U		0.186	0.500	1	11/16/2019 01:30	WG1381516
Bromomethane	U		0.157	2.50	1	11/19/2019 15:21	WG1382748
n-Butylbenzene	U		0.143	0.500	1	11/16/2019 01:30	WG1381516
sec-Butylbenzene	U		0.134	0.500	1	11/16/2019 01:30	WG1381516
tert-Butylbenzene	U		0.183	0.500	1	11/16/2019 01:30	WG1381516
Carbon disulfide	0.990		0.101	0.500	1	11/16/2019 01:30	WG1381516
Carbon tetrachloride	U		0.159	0.500	1	11/16/2019 01:30	WG1381516
Chlorobenzene	U		0.140	0.500	1	11/16/2019 01:30	WG1381516
Chlorodibromomethane	U		0.128	0.500	1	11/16/2019 01:30	WG1381516
Chloroethane	U		0.141	2.50	1	11/16/2019 01:30	WG1381516
Chloroform	U		0.0860	0.500	1	11/16/2019 01:30	WG1381516
Chloromethane	U		0.153	1.25	1	11/16/2019 01:30	WG1381516
2-Chlorotoluene	U		0.111	0.500	1	11/16/2019 01:30	WG1381516
4-Chlorotoluene	U		0.0972	0.500	1	11/16/2019 01:30	WG1381516

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	11/16/2019 01:30	WG1381516
1,2-Dibromoethane	U		0.193	0.500	1	11/16/2019 01:30	WG1381516
Dibromomethane	U		0.117	0.500	1	11/16/2019 01:30	WG1381516
1,2-Dichlorobenzene	U		0.101	0.500	1	11/16/2019 01:30	WG1381516
1,3-Dichlorobenzene	U		0.130	0.500	1	11/16/2019 01:30	WG1381516
1,4-Dichlorobenzene	U		0.121	0.500	1	11/16/2019 01:30	WG1381516
Dichlorodifluoromethane	U		0.127	2.50	1	11/16/2019 01:30	WG1381516
1,1-Dichloroethane	U		0.114	0.500	1	11/16/2019 01:30	WG1381516
1,2-Dichloroethane	U		0.108	0.500	1	11/16/2019 01:30	WG1381516
1,1-Dichloroethene	U		0.188	0.500	1	11/16/2019 01:30	WG1381516
cis-1,2-Dichloroethene	1.27		0.0933	0.500	1	11/19/2019 15:21	WG1382748
trans-1,2-Dichloroethene	U		0.152	0.500	1	11/19/2019 15:21	WG1382748
1,2-Dichloropropane	U		0.190	0.500	1	11/16/2019 01:30	WG1381516
1,1-Dichloropropene	U		0.128	0.500	1	11/16/2019 01:30	WG1381516
1,3-Dichloropropane	U		0.147	1.00	1	11/16/2019 01:30	WG1381516
cis-1,3-Dichloropropene	U		0.0976	0.500	1	11/16/2019 01:30	WG1381516
trans-1,3-Dichloropropene	U		0.222	0.500	1	11/16/2019 01:30	WG1381516
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	11/16/2019 01:30	WG1381516
2,2-Dichloropropane	U		0.0929	0.500	1	11/16/2019 01:30	WG1381516
Di-isopropyl ether	U		0.0924	0.500	1	11/16/2019 01:30	WG1381516
Ethylbenzene	U		0.158	0.500	1	11/16/2019 01:30	WG1381516
Hexachloro-1,3-butadiene	U		0.157	1.00	1	11/16/2019 01:30	WG1381516
2-Hexanone	U		0.757	5.00	1	11/16/2019 01:30	WG1381516
n-Hexane	U		0.305	5.00	1	11/16/2019 01:30	WG1381516
Iodomethane	U	J0	0.377	10.0	1	11/16/2019 01:30	WG1381516
Isopropylbenzene	U		0.126	0.500	1	11/16/2019 01:30	WG1381516
p-Isopropyltoluene	U		0.138	0.500	1	11/16/2019 01:30	WG1381516
2-Butanone (MEK)	U		1.28	5.00	1	11/16/2019 01:30	WG1381516
Methylene Chloride	U		1.07	2.50	1	11/16/2019 01:30	WG1381516
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	11/16/2019 01:30	WG1381516
Methyl tert-butyl ether	U		0.102	0.500	1	11/16/2019 01:30	WG1381516
Naphthalene	U		0.174	2.50	1	11/16/2019 01:30	WG1381516
n-Propylbenzene	U		0.162	0.500	1	11/16/2019 01:30	WG1381516
Styrene	U		0.117	0.500	1	11/16/2019 01:30	WG1381516
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	11/16/2019 01:30	WG1381516
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	11/16/2019 01:30	WG1381516
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	11/16/2019 01:30	WG1381516
Tetrachloroethene	U		0.199	0.500	1	11/19/2019 15:21	WG1382748
Toluene	U		0.412	0.500	1	11/16/2019 01:30	WG1381516
1,2,3-Trichlorobenzene	U		0.164	0.500	1	11/16/2019 01:30	WG1381516
1,2,4-Trichlorobenzene	U		0.355	0.500	1	11/16/2019 01:30	WG1381516
1,1,1-Trichloroethane	U		0.0940	0.500	1	11/16/2019 01:30	WG1381516
1,1,2-Trichloroethane	U		0.186	0.500	1	11/16/2019 01:30	WG1381516
Trichloroethene	U		0.153	0.500	1	11/19/2019 15:21	WG1382748
Trichlorofluoromethane	U		0.130	2.50	1	11/16/2019 01:30	WG1381516
1,2,3-Trichloropropane	U	J0	0.247	2.50	1	11/19/2019 15:21	WG1382748
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/16/2019 01:30	WG1381516
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	11/16/2019 01:30	WG1381516
1,3,5-Trimethylbenzene	U		0.124	0.500	1	11/16/2019 01:30	WG1381516
Vinyl acetate	U		0.645	5.00	1	11/16/2019 01:30	WG1381516
Vinyl chloride	U		0.118	0.500	1	11/19/2019 15:21	WG1382748
Xylenes, Total	U		0.316	1.50	1	11/16/2019 01:30	WG1381516
(S) Toluene-d8	*98.4*			*80.0-120*		*11/16/2019 01:30*	WG1381516
(S) Toluene-d8	*109*			*80.0-120*		*11/19/2019 15:21*	WG1382748
(S) 4-Bromofluorobenzene	*96.1*			*77.0-126*		*11/16/2019 01:30*	WG1381516
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*11/19/2019 15:21*	WG1382748

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 1,2-Dichloroethane-d4	*98.4*			*70.0-130*		*11/16/2019 01:30*	WG1381516
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/19/2019 15:21*	WG1382748

Method Blank (MB)

(MB) R3471760-1 11/13/19 23:16

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	4200	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1158107-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1158107-01 11/13/19 23:30 • (DUP) R3471760-2 11/13/19 23:39

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	222000	221000	1	0.503		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1158133-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1158133-05 11/14/19 02:09 • (DUP) R3471760-4 11/14/19 02:16

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	1180000	1180000	1	0.113		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3471760-3 11/14/19 00:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	101000	101	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3469886-1 11/07/19 12:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	131	J	51.9	1000
Nitrate	30.1	J	22.7	100
Sulfate	221	J	77.4	5000

L1158126-19 Original Sample (OS) • Duplicate (DUP)

(OS) L1158126-19 11/07/19 18:29 • (DUP) R3469886-6 11/07/19 18:43

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	157000	159000	5	1.39		15
Nitrate	22900	23200	5	1.06		15
Sulfate	218000	223000	5	2.14		15

L1158135-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1158135-01 11/07/19 23:57 • (DUP) R3469886-7 11/08/19 00:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	12400	12000	1	3.64		15
Nitrate	7180	6830	1	4.89		15
Sulfate	14700	14300	1	3.10		15

Laboratory Control Sample (LCS)

(LCS) R3469886-2 11/07/19 12:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39100	97.7	80.0-120	
Nitrate	8000	8040	100	80.0-120	
Sulfate	40000	39400	98.4	80.0-120	

L1158135-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1158135-01 11/07/19 23:57 • (MS) R3469886-8 11/08/19 00:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	12400	61600	98.2	1	80.0-120	
Nitrate	5000	7180	11500	87.2	1	80.0-120	E
Sulfate	50000	14700	63200	97.0	1	80.0-120	

Method Blank (MB)

(MB) R3470339-1 11/09/19 19:32

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	296	J	102	1000

L1158107-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1158107-03 11/09/19 22:11 • (DUP) R3470339-3 11/09/19 22:29

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	ND	735	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3470339-2 11/09/19 20:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC	75000	80200	107	85.0-115	

L1158114-27 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1158114-27 11/10/19 00:33 • (MS) R3470339-4 11/10/19 00:55 • (MSD) R3470339-5 11/10/19 01:18

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	11100	63800	66100	105	110	1	80.0-120			3.51	20

L1158145-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1158145-01 11/10/19 06:04 • (MS) R3470339-7 11/10/19 10:53 • (MSD) R3470339-8 11/10/19 11:16

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	2790	58000	58900	110	112	1	80.0-120			1.56	20

Method Blank (MB)

(MB) R3470422-1 11/10/19 19:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	0.736	J	0.250	5.00

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

(LCS) R3470422-2 11/10/19 19:45 • (LCSD) R3470422-3 11/10/19 19:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Iron	5000	4770	4560	95.3	91.3	80.0-120			4.36	20
Manganese	50.0	48.1	48.6	96.1	97.2	80.0-120			1.13	20

L1155666-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1155666-01 11/10/19 19:52 • (MS) R3470422-5 11/10/19 19:59 • (MSD) R3470422-6 11/10/19 20:02

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	5000	123	4880	4790	95.2	93.3	1	75.0-125			1.89	20
Manganese	50.0	13.4	60.1	59.8	93.5	92.8	1	75.0-125			0.572	20

Method Blank (MB)

(MB) R3470714-1 11/11/19 13:51

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

L1158126-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1158126-24 11/11/19 14:01 • (DUP) R3470714-2 11/11/19 14:49

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

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

(LCS) R3470714-3 11/11/19 15:47 • (LCSD) R3470714-4 11/11/19 16:02

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	76.1	77.3	112	114	85.0-115			1.56	20
Ethane	129	138	134	107	104	85.0-115			2.94	20
Ethene	127	144	140	113	110	85.0-115			2.82	20

Method Blank (MB)

(MB) R3473319-3 11/15/19 22:11

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	1.05	J	1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00

Method Blank (MB)

(MB) R3473319-3 11/15/19 22:11

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*97.2*			*80.0-120*
(S) 4-Bromofluorobenzene	*101*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*99.4*			*70.0-130*

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

(LCS) R3473319-1 11/15/19 21:11 • (LCSD) R3473319-2 11/15/19 21:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	22.3	21.4	89.2	85.6	19.0-160			4.12	27
Acrylonitrile	25.0	22.3	22.6	89.2	90.4	55.0-149			1.34	20
Benzene	5.00	4.33	4.40	86.6	88.0	70.0-123			1.60	20
Bromobenzene	5.00	4.62	4.72	92.4	94.4	73.0-121			2.14	20
Bromodichloromethane	5.00	4.34	4.48	86.8	89.6	75.0-120			3.17	20

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

(LCS) R3473319-1 11/15/19 21:11 • (LCSD) R3473319-2 11/15/19 21:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	5.00	4.41	5.06	88.2	101	76.0-122			13.7	20
Bromoform	5.00	4.06	3.92	81.2	78.4	68.0-132			3.51	20
n-Butylbenzene	5.00	4.72	5.05	94.4	101	73.0-125			6.76	20
sec-Butylbenzene	5.00	4.60	4.78	92.0	95.6	75.0-125			3.84	20
tert-Butylbenzene	5.00	4.50	4.36	90.0	87.2	76.0-124			3.16	20
Carbon disulfide	5.00	4.68	4.66	93.6	93.2	61.0-128			0.428	20
Carbon tetrachloride	5.00	4.82	4.72	96.4	94.4	68.0-126			2.10	20
Chlorobenzene	5.00	4.83	4.70	96.6	94.0	80.0-121			2.73	20
Chlorodibromomethane	5.00	4.39	4.37	87.8	87.4	77.0-125			0.457	20
Chloroethane	5.00	5.10	4.69	102	93.8	47.0-150			8.38	20
Chloroform	5.00	4.35	4.39	87.0	87.8	73.0-120			0.915	20
Chloromethane	5.00	4.07	4.25	81.4	85.0	41.0-142			4.33	20
2-Chlorotoluene	5.00	4.72	4.73	94.4	94.6	76.0-123			0.212	20
4-Chlorotoluene	5.00	4.67	4.75	93.4	95.0	75.0-122			1.70	20
1,2-Dibromo-3-Chloropropane	5.00	4.04	3.71	80.8	74.2	58.0-134			8.52	20
1,2-Dibromoethane	5.00	4.64	4.69	92.8	93.8	80.0-122			1.07	20
Dibromomethane	5.00	4.74	4.86	94.8	97.2	80.0-120			2.50	20
1,2-Dichlorobenzene	5.00	4.75	5.00	95.0	100	79.0-121			5.13	20
1,3-Dichlorobenzene	5.00	4.99	4.98	99.8	99.6	79.0-120			0.201	20
1,4-Dichlorobenzene	5.00	5.06	5.19	101	104	79.0-120			2.54	20
trans-1,4-Dichloro-2-butene	5.00	3.92	3.49	78.4	69.8	33.0-144			11.6	20
Dichlorodifluoromethane	5.00	5.45	5.58	109	112	51.0-149			2.36	20
1,1-Dichloroethane	5.00	4.37	4.65	87.4	93.0	70.0-126			6.21	20
1,2-Dichloroethane	5.00	4.45	4.44	89.0	88.8	70.0-128			0.225	20
1,1-Dichloroethene	5.00	4.76	4.91	95.2	98.2	71.0-124			3.10	20
1,2-Dichloropropane	5.00	4.36	4.23	87.2	84.6	77.0-125			3.03	20
1,1-Dichloropropene	5.00	4.89	4.84	97.8	96.8	74.0-126			1.03	20
1,3-Dichloropropane	5.00	4.68	4.60	93.6	92.0	80.0-120			1.72	20
cis-1,3-Dichloropropene	5.00	4.32	4.59	86.4	91.8	80.0-123			6.06	20
trans-1,3-Dichloropropene	5.00	4.77	4.59	95.4	91.8	78.0-124			3.85	20
2,2-Dichloropropane	5.00	4.68	4.50	93.6	90.0	58.0-130			3.92	20
Di-isopropyl ether	5.00	4.55	4.60	91.0	92.0	58.0-138			1.09	20
Ethylbenzene	5.00	4.42	4.50	88.4	90.0	79.0-123			1.79	20
Hexachloro-1,3-butadiene	5.00	5.12	4.49	102	89.8	54.0-138			13.1	20
2-Hexanone	25.0	22.3	21.2	89.2	84.8	67.0-149			5.06	20
n-Hexane	5.00	4.95	5.01	99.0	100	57.0-133			1.20	20
Iodomethane	25.0	19.8	22.7	79.2	90.8	33.0-147			13.6	26
Isopropylbenzene	5.00	4.47	4.54	89.4	90.8	76.0-127			1.55	20
p-Isopropyltoluene	5.00	4.59	4.52	91.8	90.4	76.0-125			1.54	20
2-Butanone (MEK)	25.0	23.5	21.8	94.0	87.2	44.0-160			7.51	20

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

(LCS) R3473319-1 11/15/19 21:11 • (LCSD) R3473319-2 11/15/19 21:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methylene Chloride	5.00	4.43	4.36	88.6	87.2	67.0-120			1.59	20
4-Methyl-2-pentanone (MIBK)	25.0	22.3	21.0	89.2	84.0	68.0-142			6.00	20
Methyl tert-butyl ether	5.00	4.50	4.58	90.0	91.6	68.0-125			1.76	20
Naphthalene	5.00	4.36	4.06	87.2	81.2	54.0-135			7.13	20
n-Propylbenzene	5.00	4.52	4.75	90.4	95.0	77.0-124			4.96	20
Styrene	5.00	4.72	4.67	94.4	93.4	73.0-130			1.06	20
1,1,1,2-Tetrachloroethane	5.00	4.54	4.63	90.8	92.6	75.0-125			1.96	20
1,1,2,2-Tetrachloroethane	5.00	4.55	4.28	91.0	85.6	65.0-130			6.12	20
Toluene	5.00	4.49	4.67	89.8	93.4	79.0-120			3.93	20
1,1,2-Trichlorotrifluoroethane	5.00	5.25	5.47	105	109	69.0-132			4.10	20
1,2,3-Trichlorobenzene	5.00	4.67	4.48	93.4	89.6	50.0-138			4.15	20
1,2,4-Trichlorobenzene	5.00	5.40	5.44	108	109	57.0-137			0.738	20
1,1,1-Trichloroethane	5.00	4.73	4.84	94.6	96.8	73.0-124			2.30	20
1,1,2-Trichloroethane	5.00	4.80	4.68	96.0	93.6	80.0-120			2.53	20
Trichlorofluoromethane	5.00	5.30	5.22	106	104	59.0-147			1.52	20
1,2,3-Trimethylbenzene	5.00	4.85	4.73	97.0	94.6	77.0-120			2.51	20
1,2,4-Trimethylbenzene	5.00	4.62	4.82	92.4	96.4	76.0-121			4.24	20
1,3,5-Trimethylbenzene	5.00	4.77	4.60	95.4	92.0	76.0-122			3.63	20
Vinyl acetate	25.0	20.5	19.4	82.0	77.6	11.0-160			5.51	20
Xylenes, Total	15.0	14.0	13.8	93.3	92.0	79.0-123			1.44	20
(S) Toluene-d8				*99.2*	*96.6*	*80.0-120*				
(S) 4-Bromofluorobenzene				*103*	*97.5*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*97.1*	*97.3*	*70.0-130*				

Method Blank (MB)

(MB) R3473794-4 11/19/19 10:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Bromomethane	U		0.157	2.50
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
Tetrachloroethene	U		0.199	0.500
Trichloroethene	U		0.153	0.500
1,2,3-Trichloropropane	U		0.247	2.50
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	*112*			*80.0-120*
(S) 4-Bromofluorobenzene	*112*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*

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

(LCS) R3473794-1 11/19/19 09:08 • (LCSD) R3473794-2 11/19/19 09:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromomethane	5.00	5.27	5.07	105	101	10.0-160			3.87	25
cis-1,2-Dichloroethene	5.00	5.12	4.61	102	92.2	73.0-120			10.5	20
trans-1,2-Dichloroethene	5.00	4.99	4.45	99.8	89.0	73.0-120			11.4	20
Tetrachloroethene	5.00	5.55	5.47	111	109	72.0-132			1.45	20
Trichloroethene	5.00	5.49	5.33	110	107	78.0-124			2.96	20
1,2,3-Trichloropropane	5.00	3.78	4.02	75.6	80.4	73.0-130			6.15	20
Vinyl chloride	5.00	4.88	4.77	97.6	95.4	67.0-131			2.28	20
(S) Toluene-d8				*107*	*108*	*80.0-120*				
(S) 4-Bromofluorobenzene				*110*	*112*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*114*	*112*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

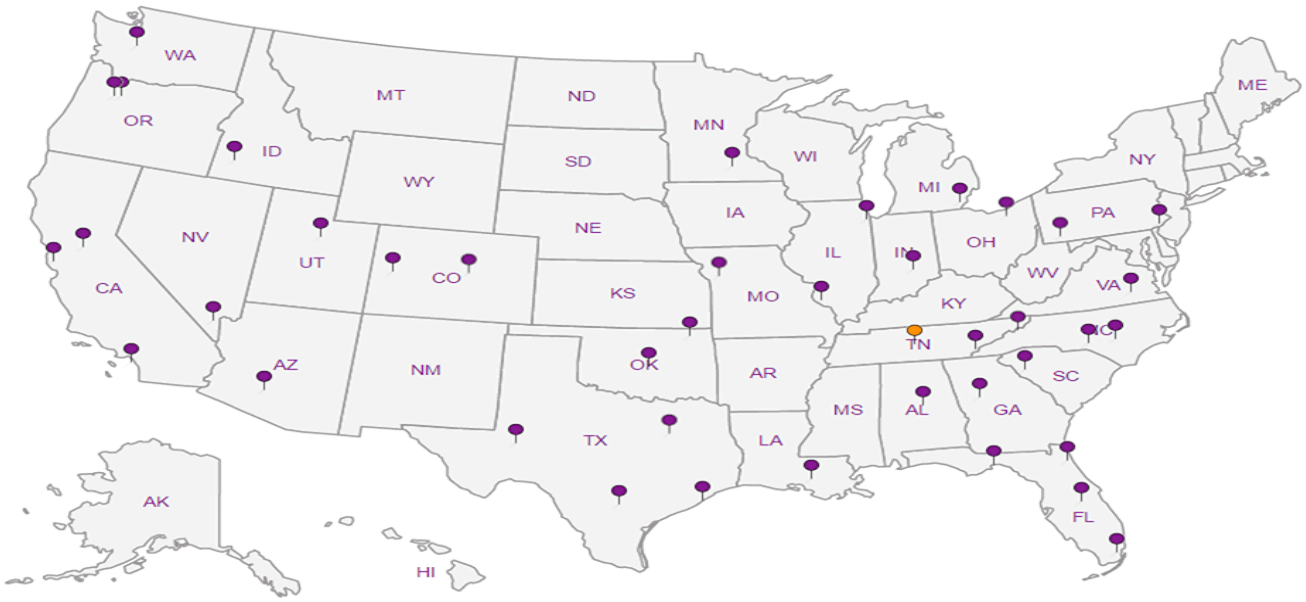
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: **PES Environmental, Inc.**	Billing Information: **Attn: Accounts Payable 1215 4th Ave STE 1350, Seattle, WA 98161**
Address: **1215 4th Ave STE 1350, Seattle, WA 98161**	
Report To: **Bill Haldeman/Brian O'Neal**	Email To: **bhaldeman@pesenv.com; boneal@pesenv.com**
Copy To: **Kim Vik, Shannon McKernan, Karsten Springstead**	Site Collection Info/Address: **700 Dexter Ave N**
Customer Project Name/Number: American Linen **1413.001.02.501E**	State: **WA** / County/City: **King/Seattle** Time Zone Collected: [x]PT [ ]MT [ ]CT [ ]ET
Phone: 206-529-3980 Email: **mjoiner@pesenv.com**	Site/Facility ID #: 1413.001.02.501E
Collected By (print): Karsten Springstead	Purchase Order # : Quote #: **PESENVSWA-ALP**
Collected By (signature):	Turnaround Date Required: STANDARD
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)
Compliance Monitoring? [x] Yes [ ] No	DW PWS ID #: DW Location Code:
Immediately Packed on Ice: [x] Yes [ ] No	Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: *NO3, SO4, Cl* 125mlHDPE-NoPres	Alkalinity 125mlHDPE-NoPres	EEM RSK175LL 40mlAmb-HCl	TOC 250mlAmb-HCl or 250mlHDPE-HCl	Total Fe, Mn 6020 250mlHDPE-HNO3	VOCs 8260LLC 40mlAmb-HCl
FMW-137-110619	GW	Grab	11-6-19	605	—	—	—	9	X	X	X	X	X	X

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:
L1158143
-01

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 120357840133

Samples received via: FEDEX UPS Client Courier Pace Courier

LAB Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: 2.2 oC
Cooler 1 Therm Corr. Factor: -.2 oC
Cooler 1 Corrected Temp: 2.0 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	11-6-19/630		
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
			11/7/19 8:30

D007

RAD SCREEN: <0.5 mR/hr

Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: _____ of: _____

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 26, 2019

PES Environmental, Inc.- WA

Sample Delivery Group:	L1161106
Samples Received:	11/15/2019
Project Number:	1413.001.02.501E
Description:	American Linen
Site:	AMERICAN LINEN
Report To:	Brian O'Neal/Bill Haldeman 1215 Fourth Ave., Suite 1350 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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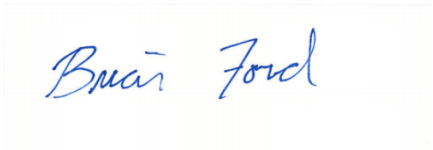
MW102-111419 L1161106-01 GW

Collected by: Hannah Cohen
Collected date/time: 11/14/19 10:45
Received date/time: 11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1384195	1	11/21/19 14:32	11/21/19 14:32	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1381079	1	11/15/19 17:07	11/15/19 17:07	MCG	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1382360	1	11/19/19 03:34	11/19/19 03:34	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1381630	1	11/16/19 10:14	11/16/19 14:53	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383395	1	11/20/19 08:45	11/20/19 08:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1383583	1	11/20/19 11:40	11/20/19 11:40	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1385753	1	11/23/19 01:56	11/23/19 01:56	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1386329	1	11/24/19 11:49	11/24/19 11:49	ACG	Mt. Juliet, TN

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



Brian Ford
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	176000		2710	20000	1	11/21/2019 14:32	WG1384195

Sample Narrative:

L1161106-01 WG1384195: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	8170		51.9	1000	1	11/15/2019 17:07	WG1381079
Nitrate	161	P1	22.7	100	1	11/15/2019 17:07	WG1381079
Sulfate	2570	J	77.4	5000	1	11/15/2019 17:07	WG1381079

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4190		102	1000	1	11/19/2019 03:34	WG1382360

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	4010		15.0	100	1	11/16/2019 14:53	WG1381630
Manganese	329		0.250	5.00	1	11/16/2019 14:53	WG1381630

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	11/20/2019 08:45	WG1383395
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*11/20/2019 08:45*	WG1383395

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	224		0.287	0.678	1	11/20/2019 11:40	WG1383583
Ethane	U		0.296	1.29	1	11/20/2019 11:40	WG1383583
Ethene	U		0.422	1.27	1	11/20/2019 11:40	WG1383583

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.19	J	1.05	25.0	1	11/24/2019 11:49	WG1386329
Acrylonitrile	U		0.873	5.00	1	11/23/2019 01:56	WG1385753
Benzene	U		0.0896	0.500	1	11/23/2019 01:56	WG1385753
Bromobenzene	U		0.133	0.500	1	11/23/2019 01:56	WG1385753
Bromodichloromethane	U		0.0800	0.500	1	11/23/2019 01:56	WG1385753
Bromochloromethane	U		0.145	0.500	1	11/23/2019 01:56	WG1385753
Bromoform	U		0.186	0.500	1	11/23/2019 01:56	WG1385753
Bromomethane	U	J0	0.157	2.50	1	11/23/2019 01:56	WG1385753
n-Butylbenzene	U		0.143	0.500	1	11/23/2019 01:56	WG1385753
sec-Butylbenzene	U		0.134	0.500	1	11/23/2019 01:56	WG1385753
tert-Butylbenzene	U		0.183	0.500	1	11/23/2019 01:56	WG1385753
Carbon disulfide	U		0.101	0.500	1	11/23/2019 01:56	WG1385753
Carbon tetrachloride	U		0.159	0.500	1	11/23/2019 01:56	WG1385753

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	11/23/2019 01:56	WG1385753
Chlorodibromomethane	U		0.128	0.500	1	11/23/2019 01:56	WG1385753
Chloroethane	U		0.141	2.50	1	11/23/2019 01:56	WG1385753
Chloroform	U		0.0860	0.500	1	11/23/2019 01:56	WG1385753
Chloromethane	U		0.153	1.25	1	11/23/2019 01:56	WG1385753
2-Chlorotoluene	U		0.111	0.500	1	11/23/2019 01:56	WG1385753
4-Chlorotoluene	U		0.0972	0.500	1	11/23/2019 01:56	WG1385753
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	11/23/2019 01:56	WG1385753
1,2-Dibromoethane	U		0.193	0.500	1	11/23/2019 01:56	WG1385753
Dibromomethane	U		0.117	0.500	1	11/23/2019 01:56	WG1385753
1,2-Dichlorobenzene	U		0.101	0.500	1	11/23/2019 01:56	WG1385753
1,3-Dichlorobenzene	U		0.130	0.500	1	11/23/2019 01:56	WG1385753
1,4-Dichlorobenzene	U		0.121	0.500	1	11/23/2019 01:56	WG1385753
Dichlorodifluoromethane	U		0.127	2.50	1	11/23/2019 01:56	WG1385753
1,1-Dichloroethane	U		0.114	0.500	1	11/23/2019 01:56	WG1385753
1,2-Dichloroethane	U		0.108	0.500	1	11/23/2019 01:56	WG1385753
1,1-Dichloroethene	U		0.188	0.500	1	11/23/2019 01:56	WG1385753
cis-1,2-Dichloroethene	U		0.0933	0.500	1	11/23/2019 01:56	WG1385753
trans-1,2-Dichloroethene	U		0.152	0.500	1	11/23/2019 01:56	WG1385753
1,2-Dichloropropane	U		0.190	0.500	1	11/23/2019 01:56	WG1385753
1,1-Dichloropropene	U		0.128	0.500	1	11/23/2019 01:56	WG1385753
1,3-Dichloropropane	U		0.147	1.00	1	11/23/2019 01:56	WG1385753
cis-1,3-Dichloropropene	U		0.0976	0.500	1	11/23/2019 01:56	WG1385753
trans-1,3-Dichloropropene	U		0.222	0.500	1	11/23/2019 01:56	WG1385753
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	11/23/2019 01:56	WG1385753
2,2-Dichloropropane	U		0.0929	0.500	1	11/23/2019 01:56	WG1385753
Di-isopropyl ether	U		0.0924	0.500	1	11/23/2019 01:56	WG1385753
Ethylbenzene	U		0.158	0.500	1	11/23/2019 01:56	WG1385753
Hexachloro-1,3-butadiene	U		0.157	1.00	1	11/23/2019 01:56	WG1385753
2-Hexanone	U		0.757	5.00	1	11/23/2019 01:56	WG1385753
n-Hexane	U		0.305	5.00	1	11/23/2019 01:56	WG1385753
Iodomethane	U	J0	0.377	10.0	1	11/23/2019 01:56	WG1385753
Isopropylbenzene	U		0.126	0.500	1	11/23/2019 01:56	WG1385753
p-Isopropyltoluene	U		0.138	0.500	1	11/23/2019 01:56	WG1385753
2-Butanone (MEK)	U		1.28	5.00	1	11/23/2019 01:56	WG1385753
Methylene Chloride	U		1.07	2.50	1	11/23/2019 01:56	WG1385753
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	11/23/2019 01:56	WG1385753
Methyl tert-butyl ether	U		0.102	0.500	1	11/23/2019 01:56	WG1385753
Naphthalene	U		0.174	2.50	1	11/23/2019 01:56	WG1385753
n-Propylbenzene	U		0.162	0.500	1	11/23/2019 01:56	WG1385753
Styrene	U		0.117	0.500	1	11/23/2019 01:56	WG1385753
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	11/23/2019 01:56	WG1385753
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	11/23/2019 01:56	WG1385753
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	11/23/2019 01:56	WG1385753
Tetrachloroethene	U		0.199	0.500	1	11/23/2019 01:56	WG1385753
Toluene	U		0.412	0.500	1	11/23/2019 01:56	WG1385753
1,2,3-Trichlorobenzene	U		0.164	0.500	1	11/23/2019 01:56	WG1385753
1,2,4-Trichlorobenzene	U		0.355	0.500	1	11/23/2019 01:56	WG1385753
1,1,1-Trichloroethane	U		0.0940	0.500	1	11/23/2019 01:56	WG1385753
1,1,2-Trichloroethane	U		0.186	0.500	1	11/23/2019 01:56	WG1385753
Trichloroethene	U		0.153	0.500	1	11/23/2019 01:56	WG1385753
Trichlorofluoromethane	U		0.130	2.50	1	11/23/2019 01:56	WG1385753
1,2,3-Trichloropropane	U		0.247	2.50	1	11/23/2019 01:56	WG1385753
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/23/2019 01:56	WG1385753
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	11/23/2019 01:56	WG1385753
1,3,5-Trimethylbenzene	U		0.124	0.500	1	11/23/2019 01:56	WG1385753

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	11/23/2019 01:56	WG1385753
Vinyl chloride	U		0.118	0.500	1	11/23/2019 01:56	WG1385753
Xylenes, Total	U		0.316	1.50	1	11/23/2019 01:56	WG1385753
(S) Toluene-d8	*90.2*			*80.0-120*		*11/23/2019 01:56*	WG1385753
(S) Toluene-d8	*87.9*			*80.0-120*		*11/24/2019 11:49*	WG1386329
(S) 4-Bromofluorobenzene	*93.4*			*77.0-126*		*11/23/2019 01:56*	WG1385753
(S) 4-Bromofluorobenzene	*95.6*			*77.0-126*		*11/24/2019 11:49*	WG1386329
(S) 1,2-Dichloroethane-d4	*90.6*			*70.0-130*		*11/23/2019 01:56*	WG1385753
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*11/24/2019 11:49*	WG1386329

Method Blank (MB)

(MB) R3474875-1 11/21/19 13:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	8120	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1160584-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1160584-01 11/21/19 14:10 • (DUP) R3474875-2 11/21/19 14:22

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	68700	71200	1	3.55		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1161135-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1161135-01 11/21/19 16:03 • (DUP) R3474875-4 11/21/19 16:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	316000	316000	1	0.0209		20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3474875-3 11/21/19 15:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	99000	99.0	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3472603-1 11/15/19 16:11

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

L1161106-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1161106-01 11/15/19 17:07 • (DUP) R3472603-3 11/15/19 17:24

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	8170	8060	1	1.36		15
Nitrate	161	133	1	19.5	P1	15
Sulfate	2570	2430	1	5.81	J	15

L1161161-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1161161-02 11/15/19 21:54 • (DUP) R3472603-6 11/15/19 22:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	430000	430000	1	0.00365	E	15
Nitrate	245	259	1	5.55		15
Sulfate	11200	11200	1	0.101		15

Laboratory Control Sample (LCS)

(LCS) R3472603-2 11/15/19 16:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39100	97.8	80.0-120	
Nitrate	8000	8110	101	80.0-120	
Sulfate	40000	39400	98.4	80.0-120	

L1161157-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161157-01 11/15/19 20:18 • (MS) R3472603-4 11/15/19 20:34 • (MSD) R3472603-5 11/15/19 20:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	8210	57800	57500	99.2	98.6	1	80.0-120			0.519	15
Nitrate	5000	2570	7510	7680	98.8	102	1	80.0-120			2.26	15
Sulfate	50000	50100	98800	98800	97.4	97.3	1	80.0-120			0.0738	15

L1161161-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1161161-03 11/15/19 22:57 • (MS) R3472603-7 11/15/19 23:13

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	331000	365000	67.1	1	80.0-120	E V
Nitrate	5000	197	5040	96.8	1	80.0-120	
Sulfate	50000	11900	62000	100	1	80.0-120	

Method Blank (MB)

(MB) R3473520-1 11/18/19 20:36

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	242	J	102	1000

L1160695-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1160695-08 11/19/19 01:15 • (DUP) R3473520-6 11/19/19 01:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	ND	742	1	6.24	J	20

L1161108-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1161108-04 11/19/19 04:34 • (DUP) R3473520-7 11/19/19 04:48

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	5650	5670	1	0.389		20

Laboratory Control Sample (LCS)

(LCS) R3473520-2 11/18/19 21:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	75000	75300	100	85.0-115	

L1160577-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1160577-02 11/18/19 21:21 • (MS) R3473520-3 11/18/19 21:38 • (MSD) R3473520-8 11/18/19 21:56

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	50000	ND	51100	50700	101	101	1	80.0-120			0.668	20

L1160584-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1160584-01 11/18/19 22:47 • (MS) R3473520-4 11/19/19 00:08 • (MSD) R3473520-5 11/19/19 00:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	50000	1680	51800	51400	100	99.5	1	80.0-120			0.736	20

Method Blank (MB)

(MB) R3472691-1 11/16/19 14:01

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	0.438	J	0.250	5.00

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

(LCS) R3472691-2 11/16/19 14:04 • (LCSD) R3472691-3 11/16/19 14:08

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Iron	5000	5010	4900	100	98.0	80.0-120			2.12	20
Manganese	50.0	49.7	47.9	99.4	95.7	80.0-120			3.71	20

L1161396-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161396-03 11/16/19 14:12 • (MS) R3472691-5 11/16/19 14:19 • (MSD) R3472691-6 11/16/19 14:23

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	5000	3470	8250	8820	95.5	107	1	75.0-125			6.70	20
Manganese	50.0	3120	3150	3220	40.7	181	1	75.0-125	V	V	2.21	20

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

Method Blank (MB)

(MB) R3474256-2 11/20/19 00:36

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3474256-1 11/19/19 22:33

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5070	92.2	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*90.8*	*78.0-120*	

Method Blank (MB)

(MB) R3474091-1 11/20/19 10:37

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

L1161021-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1161021-01 11/20/19 10:42 • (DUP) R3474091-2 11/20/19 11:19

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	173	172	1	0.580		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

L1161021-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1161021-14 11/20/19 11:38 • (DUP) R3474091-3 11/20/19 13:04

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	18.2	17.6	1	3.35		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

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

(LCS) R3474091-4 11/20/19 13:07 • (LCSD) R3474091-5 11/20/19 13:11

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	64.6	64.7	95.3	95.4	85.0-115			0.155	20
Ethane	129	121	120	93.8	93.0	85.0-115			0.830	20
Ethene	127	116	115	91.3	90.6	85.0-115			0.866	20

Method Blank (MB)

(MB) R3475511-2 11/22/19 22:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500

Method Blank (MB)

(MB) R3475511-2 11/22/19 22:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*90.1*			*80.0-120*
(S) 4-Bromofluorobenzene	*92.3*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*91.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3475511-1 11/22/19 21:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acrylonitrile	25.0	26.5	106	55.0-149	
Benzene	5.00	4.70	94.0	70.0-123	
Bromobenzene	5.00	4.36	87.2	73.0-121	
Bromodichloromethane	5.00	4.54	90.8	75.0-120	
Bromochloromethane	5.00	5.23	105	76.0-122	
Bromoform	5.00	4.52	90.4	68.0-132	
Bromomethane	5.00	1.80	36.0	10.0-160	
n-Butylbenzene	5.00	4.12	82.4	73.0-125	
sec-Butylbenzene	5.00	4.17	83.4	75.0-125	
tert-Butylbenzene	5.00	4.24	84.8	76.0-124	
Carbon disulfide	5.00	4.60	92.0	61.0-128	
Carbon tetrachloride	5.00	4.62	92.4	68.0-126	
Chlorobenzene	5.00	4.63	92.6	80.0-121	
Chlorodibromomethane	5.00	4.26	85.2	77.0-125	
Chloroethane	5.00	4.55	91.0	47.0-150	
Chloroform	5.00	4.59	91.8	73.0-120	
Chloromethane	5.00	3.94	78.8	41.0-142	
2-Chlorotoluene	5.00	4.29	85.8	76.0-123	
4-Chlorotoluene	5.00	4.21	84.2	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	4.84	96.8	58.0-134	
1,2-Dibromoethane	5.00	4.86	97.2	80.0-122	
Dibromomethane	5.00	4.92	98.4	80.0-120	
1,2-Dichlorobenzene	5.00	4.31	86.2	79.0-121	
1,3-Dichlorobenzene	5.00	4.61	92.2	79.0-120	
1,4-Dichlorobenzene	5.00	4.39	87.8	79.0-120	
trans-1,4-Dichloro-2-butene	5.00	4.03	80.6	33.0-144	
Dichlorodifluoromethane	5.00	6.63	133	51.0-149	
1,1-Dichloroethane	5.00	4.57	91.4	70.0-126	
1,2-Dichloroethane	5.00	4.87	97.4	70.0-128	
1,1-Dichloroethene	5.00	4.81	96.2	71.0-124	
cis-1,2-Dichloroethene	5.00	5.04	101	73.0-120	
trans-1,2-Dichloroethene	5.00	4.45	89.0	73.0-120	
1,2-Dichloropropane	5.00	4.56	91.2	77.0-125	
1,1-Dichloropropene	5.00	4.57	91.4	74.0-126	
1,3-Dichloropropane	5.00	4.81	96.2	80.0-120	
cis-1,3-Dichloropropene	5.00	4.42	88.4	80.0-123	
trans-1,3-Dichloropropene	5.00	4.48	89.6	78.0-124	
2,2-Dichloropropane	5.00	4.47	89.4	58.0-130	
Di-isopropyl ether	5.00	4.72	94.4	58.0-138	
Ethylbenzene	5.00	4.35	87.0	79.0-123	

Laboratory Control Sample (LCS)

(LCS) R3475511-1 11/22/19 21:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexachloro-1,3-butadiene	5.00	3.77	75.4	54.0-138	
2-Hexanone	25.0	25.4	102	67.0-149	
n-Hexane	5.00	4.34	86.8	57.0-133	
Iodomethane	25.0	13.8	55.2	33.0-147	
Isopropylbenzene	5.00	4.47	89.4	76.0-127	
p-Isopropyltoluene	5.00	4.20	84.0	76.0-125	
2-Butanone (MEK)	25.0	27.4	110	44.0-160	
Methylene Chloride	5.00	4.85	97.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	23.5	94.0	68.0-142	
Methyl tert-butyl ether	5.00	5.05	101	68.0-125	
Naphthalene	5.00	4.56	91.2	54.0-135	
n-Propylbenzene	5.00	4.25	85.0	77.0-124	
Styrene	5.00	4.47	89.4	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	4.35	87.0	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	4.41	88.2	65.0-130	
Tetrachloroethene	5.00	4.39	87.8	72.0-132	
Toluene	5.00	4.28	85.6	79.0-120	
1,1,2-Trichlorotrifluoroethane	5.00	5.27	105	69.0-132	
1,2,3-Trichlorobenzene	5.00	4.26	85.2	50.0-138	
1,2,4-Trichlorobenzene	5.00	4.22	84.4	57.0-137	
1,1,1-Trichloroethane	5.00	4.92	98.4	73.0-124	
1,1,2-Trichloroethane	5.00	4.93	98.6	80.0-120	
Trichloroethene	5.00	4.95	99.0	78.0-124	
Trichlorofluoromethane	5.00	4.92	98.4	59.0-147	
1,2,3-Trichloropropane	5.00	4.98	99.6	73.0-130	
1,2,3-Trimethylbenzene	5.00	4.32	86.4	77.0-120	
1,2,4-Trimethylbenzene	5.00	4.35	87.0	76.0-121	
1,3,5-Trimethylbenzene	5.00	4.29	85.8	76.0-122	
Vinyl acetate	25.0	19.9	79.6	11.0-160	
Vinyl chloride	5.00	4.36	87.2	67.0-131	
Xylenes, Total	15.0	13.1	87.3	79.0-123	
(S) Toluene-d8			*90.5*	*80.0-120*	
(S) 4-Bromofluorobenzene			*98.3*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*93.7*	*70.0-130*	

Method Blank (MB)

(MB) R3475890-3 11/24/19 10:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
(S) Toluene-d8	*91.4*			*80.0-120*
(S) 4-Bromofluorobenzene	*94.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*

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

(LCS) R3475890-1 11/24/19 09:03 • (LCSD) R3475890-2 11/24/19 09:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	20.7	21.8	82.8	87.2	19.0-160			5.18	27
(S) Toluene-d8				*91.7*	*85.0*	*80.0-120*				
(S) 4-Bromofluorobenzene				*107*	*91.9*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*112*	*113*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

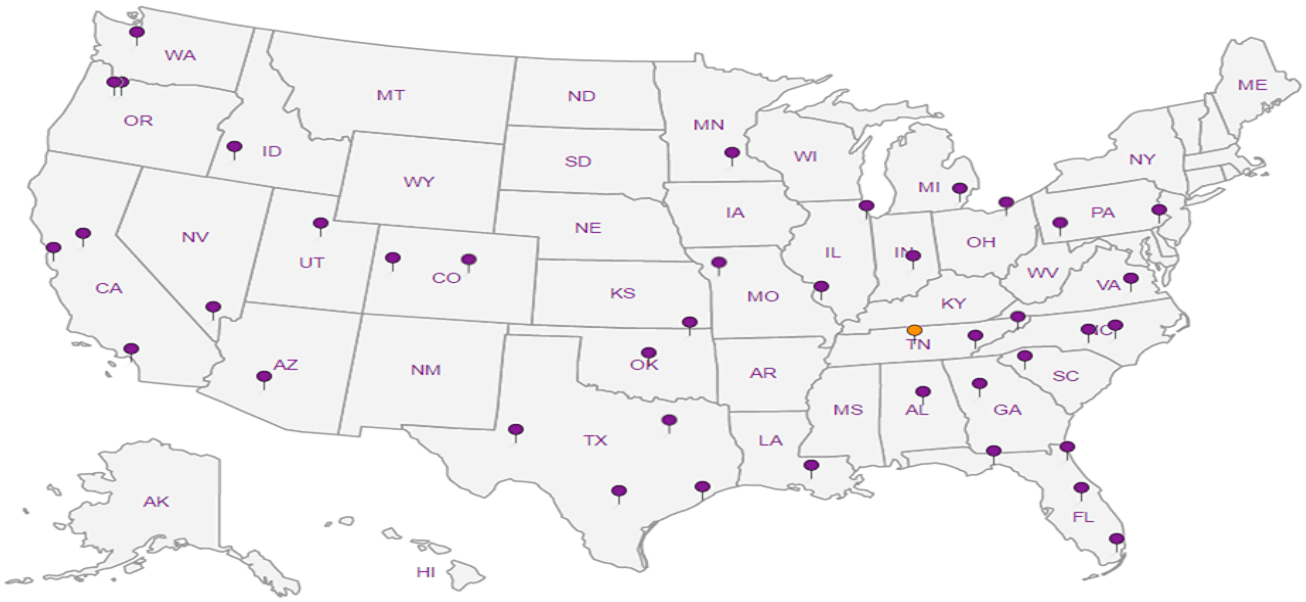
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



PES-Seattle

Billing Information: PES-Seattle

Report to: Bill Haldeman/Brian O'neal

Email To: on file

Project Description: American Liner

City/State Collected: Seattle, WA

Phone: on file
Fax:

Client Project # 1413.001.02.SOIE

Lab Project # PESENVSWA-ALP

Collected by (print): Hannah Cohen

Site/Facility ID # American Liner

P.O. #

Collected by (signature): Hannah Cohen

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote #

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	**NO3,SO4,Chloride**48 hour hold	NWTPHGX	VOCs (V8260LLC)	Total Fe Mn 6020 (27)	TOC (22)	Alkalinity	EEM (RSK175LL)				Remarks	Sample # (lab only)
MW102-111419	Grab	GW	120'	11/14/19	1045	12	X	X	X	X	X	X	X					01
		GW																
		GW																
		GW																
		GW																
		GW																
		GW																
		GW																
		GW																
		GW																

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

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

L# 116106
G095

Acctnum: PESENVSWA
Template:
Prelogin:
TSR: Brian Ford
PB:
Shipped Via:

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 1145 2231 0202

Sample Receipt Checklist
COC Seal Present/Intact: ✓NP __Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: ✓Y __N
Preservation Correct/Checked: ✓Y __N

RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	If preservation required by Login: Date/Time
Hannah Cohen	11/14/19	1200			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 0.8-.2=0.6 12	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/19 Time: 8:30	Hold: / Condition: NCF / (OK)

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

December 24, 2019

PES Environmental, Inc.- WA

Sample Delivery Group:	L1171422
Samples Received:	12/17/2019
Project Number:	1413.001.02.501E
Description:	American Linen Supply
Site:	AMERICAN LINEN
Report To:	Brian O'Neal/Bill Haldeman
	1215 Fourth Ave., Suite 1350
	Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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MW-145R-121619 L1171422-01 GW

Collected by: Hannah Cohen | Collected date/time: 12/16/19 11:45 | Received date/time: 12/17/19 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1397937	1	12/17/19 20:16	12/17/19 20:16	DGR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1397791	1	12/17/19 14:26	12/17/19 14:26	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1398101	1	12/17/19 17:50	12/17/19 17:50	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1398362	1	12/18/19 08:27	12/18/19 10:59	TM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1398191	1	12/18/19 01:11	12/18/19 01:11	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1400030	1	12/20/19 16:12	12/20/19 16:12	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1398295	1	12/18/19 06:20	12/18/19 06:20	ACG	Mt. Juliet, TN

MW-144R-121619 L1171422-02 GW

Collected by: Hannah Cohen | Collected date/time: 12/16/19 13:20 | Received date/time: 12/17/19 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1397937	1	12/17/19 20:25	12/17/19 20:25	DGR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1397791	1	12/17/19 14:38	12/17/19 14:38	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1398101	1	12/17/19 18:19	12/17/19 18:19	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1398362	1	12/18/19 08:27	12/18/19 11:09	TM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1398191	1	12/18/19 01:32	12/18/19 01:32	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1400030	1	12/20/19 16:14	12/20/19 16:14	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1400614	10	12/21/19 09:03	12/21/19 09:03	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1398295	1	12/18/19 06:40	12/18/19 06:40	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1398556	10	12/18/19 15:30	12/18/19 15:30	KMC	Mt. Juliet, TN

EQ-121619 L1171422-03 GW

Collected by: Hannah Cohen | Collected date/time: 12/16/19 14:10 | Received date/time: 12/17/19 11:30

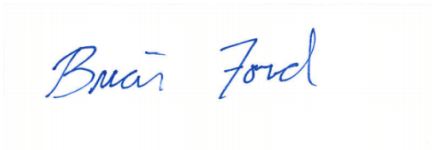
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1397937	1	12/17/19 20:33	12/17/19 20:33	DGR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1397791	1	12/17/19 15:01	12/17/19 15:01	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1398101	1	12/17/19 18:32	12/17/19 18:32	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1398362	1	12/18/19 08:27	12/18/19 11:13	TM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1399030	1	12/18/19 17:56	12/18/19 17:56	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1400030	1	12/20/19 16:19	12/20/19 16:19	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1398295	1	12/18/19 07:00	12/18/19 07:00	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1398556	1	12/18/19 15:50	12/18/19 15:50	KMC	Mt. Juliet, TN

TRIP BLANK-121619 L1171422-04 GW

Collected by: Hannah Cohen | Collected date/time: 12/16/19 00:00 | Received date/time: 12/17/19 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1398191	1	12/17/19 21:35	12/17/19 21:35	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1398295	1	12/18/19 05:19	12/18/19 05:19	ACG	Mt. Juliet, TN

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



Brian Ford
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	258000		2710	20000	1	12/17/2019 20:16	WG1397937

Sample Narrative:

L1171422-01 WG1397937: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	20100		51.9	1000	1	12/17/2019 14:26	WG1397791
Nitrate	U		22.7	100	1	12/17/2019 14:26	WG1397791
Sulfate	16600		77.4	5000	1	12/17/2019 14:26	WG1397791

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4120		102	1000	1	12/17/2019 17:50	WG1398101

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1220		15.0	100	1	12/18/2019 10:59	WG1398362
Manganese	256		0.250	5.00	1	12/18/2019 10:59	WG1398362

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	140	B	31.6	100	1	12/18/2019 01:11	WG1398191
(S) a,a,a-Trifluorotoluene(FID)	*97.6*			*78.0-120*		*12/18/2019 01:11*	WG1398191

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	272		0.287	0.678	1	12/20/2019 16:12	WG1400030
Ethane	U		0.296	1.29	1	12/20/2019 16:12	WG1400030
Ethene	U		0.422	1.27	1	12/20/2019 16:12	WG1400030

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.35	J	1.05	25.0	1	12/18/2019 06:20	WG1398295
Acrylonitrile	U		0.873	5.00	1	12/18/2019 06:20	WG1398295
Benzene	U		0.0896	0.500	1	12/18/2019 06:20	WG1398295
Bromobenzene	U		0.133	0.500	1	12/18/2019 06:20	WG1398295
Bromodichloromethane	U		0.0800	0.500	1	12/18/2019 06:20	WG1398295
Bromochloromethane	U		0.145	0.500	1	12/18/2019 06:20	WG1398295
Bromoform	U		0.186	0.500	1	12/18/2019 06:20	WG1398295
Bromomethane	U		0.157	2.50	1	12/18/2019 06:20	WG1398295
n-Butylbenzene	U		0.143	0.500	1	12/18/2019 06:20	WG1398295
sec-Butylbenzene	U		0.134	0.500	1	12/18/2019 06:20	WG1398295
tert-Butylbenzene	U		0.183	0.500	1	12/18/2019 06:20	WG1398295
Carbon disulfide	U		0.101	0.500	1	12/18/2019 06:20	WG1398295
Carbon tetrachloride	U		0.159	0.500	1	12/18/2019 06:20	WG1398295

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	12/18/2019 06:20	WG1398295
Chlorodibromomethane	U		0.128	0.500	1	12/18/2019 06:20	WG1398295
Chloroethane	U		0.141	2.50	1	12/18/2019 06:20	WG1398295
Chloroform	U		0.0860	0.500	1	12/18/2019 06:20	WG1398295
Chloromethane	U		0.153	1.25	1	12/18/2019 06:20	WG1398295
2-Chlorotoluene	U		0.111	0.500	1	12/18/2019 06:20	WG1398295
4-Chlorotoluene	U		0.0972	0.500	1	12/18/2019 06:20	WG1398295
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/18/2019 06:20	WG1398295
1,2-Dibromoethane	U		0.193	0.500	1	12/18/2019 06:20	WG1398295
Dibromomethane	U		0.117	0.500	1	12/18/2019 06:20	WG1398295
1,2-Dichlorobenzene	U		0.101	0.500	1	12/18/2019 06:20	WG1398295
1,3-Dichlorobenzene	U		0.130	0.500	1	12/18/2019 06:20	WG1398295
1,4-Dichlorobenzene	U		0.121	0.500	1	12/18/2019 06:20	WG1398295
Dichlorodifluoromethane	U		0.127	2.50	1	12/18/2019 06:20	WG1398295
1,1-Dichloroethane	U		0.114	0.500	1	12/18/2019 06:20	WG1398295
1,2-Dichloroethane	U		0.108	0.500	1	12/18/2019 06:20	WG1398295
1,1-Dichloroethene	U		0.188	0.500	1	12/18/2019 06:20	WG1398295
cis-1,2-Dichloroethene	0.193	J	0.0933	0.500	1	12/18/2019 06:20	WG1398295
trans-1,2-Dichloroethene	U		0.152	0.500	1	12/18/2019 06:20	WG1398295
1,2-Dichloropropane	U		0.190	0.500	1	12/18/2019 06:20	WG1398295
1,1-Dichloropropene	U		0.128	0.500	1	12/18/2019 06:20	WG1398295
1,3-Dichloropropane	U		0.147	1.00	1	12/18/2019 06:20	WG1398295
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/18/2019 06:20	WG1398295
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/18/2019 06:20	WG1398295
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	12/18/2019 06:20	WG1398295
2,2-Dichloropropane	U		0.0929	0.500	1	12/18/2019 06:20	WG1398295
Di-isopropyl ether	U		0.0924	0.500	1	12/18/2019 06:20	WG1398295
Ethylbenzene	U		0.158	0.500	1	12/18/2019 06:20	WG1398295
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/18/2019 06:20	WG1398295
2-Hexanone	U		0.757	5.00	1	12/18/2019 06:20	WG1398295
n-Hexane	U		0.305	5.00	1	12/18/2019 06:20	WG1398295
Iodomethane	U		0.377	10.0	1	12/18/2019 06:20	WG1398295
Isopropylbenzene	U		0.126	0.500	1	12/18/2019 06:20	WG1398295
p-Isopropyltoluene	U		0.138	0.500	1	12/18/2019 06:20	WG1398295
2-Butanone (MEK)	U		1.28	5.00	1	12/18/2019 06:20	WG1398295
Methylene Chloride	U		1.07	2.50	1	12/18/2019 06:20	WG1398295
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/18/2019 06:20	WG1398295
Methyl tert-butyl ether	U		0.102	0.500	1	12/18/2019 06:20	WG1398295
Naphthalene	U		0.174	2.50	1	12/18/2019 06:20	WG1398295
n-Propylbenzene	U		0.162	0.500	1	12/18/2019 06:20	WG1398295
Styrene	U		0.117	0.500	1	12/18/2019 06:20	WG1398295
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/18/2019 06:20	WG1398295
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/18/2019 06:20	WG1398295
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/18/2019 06:20	WG1398295
Tetrachloroethene	U		0.199	0.500	1	12/18/2019 06:20	WG1398295
Toluene	U		0.412	0.500	1	12/18/2019 06:20	WG1398295
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/18/2019 06:20	WG1398295
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/18/2019 06:20	WG1398295
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/18/2019 06:20	WG1398295
1,1,2-Trichloroethane	U		0.186	0.500	1	12/18/2019 06:20	WG1398295
Trichloroethene	U		0.153	0.500	1	12/18/2019 06:20	WG1398295
Trichlorofluoromethane	U		0.130	2.50	1	12/18/2019 06:20	WG1398295
1,2,3-Trichloropropane	U		0.247	2.50	1	12/18/2019 06:20	WG1398295
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/18/2019 06:20	WG1398295
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/18/2019 06:20	WG1398295
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/18/2019 06:20	WG1398295

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	12/18/2019 06:20	WG1398295
Vinyl chloride	U		0.118	0.500	1	12/18/2019 06:20	WG1398295
Xylenes, Total	U		0.316	1.50	1	12/18/2019 06:20	WG1398295
(S) Toluene-d8	*108*			*80.0-120*		*12/18/2019 06:20*	WG1398295
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*12/18/2019 06:20*	WG1398295
(S) 1,2-Dichloroethane-d4	*98.1*			*70.0-130*		*12/18/2019 06:20*	WG1398295

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	673000		2710	20000	1	12/17/2019 20:25	WG1397937

Sample Narrative:
L1171422-02 WG1397937: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	93100		51.9	1000	1	12/17/2019 14:38	WG1397791
Nitrate	U		22.7	100	1	12/17/2019 14:38	WG1397791
Sulfate	11300		77.4	5000	1	12/17/2019 14:38	WG1397791

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	46500		102	1000	1	12/17/2019 18:19	WG1398101

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2040		15.0	100	1	12/18/2019 11:09	WG1398362
Manganese	1930		0.250	5.00	1	12/18/2019 11:09	WG1398362

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	325	B	31.6	100	1	12/18/2019 01:32	WG1398191
(S) a,a,a-Trifluorotoluene(FID)	*96.8*			*78.0-120*		*12/18/2019 01:32*	WG1398191

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	8640		2.87	6.78	10	12/21/2019 09:03	WG1400614
Ethane	16.5		0.296	1.29	1	12/20/2019 16:14	WG1400030
Ethene	305		0.422	1.27	1	12/20/2019 16:14	WG1400030

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.99	J	1.05	25.0	1	12/18/2019 06:40	WG1398295
Acrylonitrile	U		0.873	5.00	1	12/18/2019 06:40	WG1398295
Benzene	U		0.0896	0.500	1	12/18/2019 06:40	WG1398295
Bromobenzene	U		0.133	0.500	1	12/18/2019 06:40	WG1398295
Bromodichloromethane	U		0.0800	0.500	1	12/18/2019 06:40	WG1398295
Bromochloromethane	U		0.145	0.500	1	12/18/2019 06:40	WG1398295
Bromoform	U		0.186	0.500	1	12/18/2019 06:40	WG1398295
Bromomethane	U		0.157	2.50	1	12/18/2019 06:40	WG1398295
n-Butylbenzene	U		0.143	0.500	1	12/18/2019 06:40	WG1398295
sec-Butylbenzene	U		0.134	0.500	1	12/18/2019 06:40	WG1398295
tert-Butylbenzene	U		0.183	0.500	1	12/18/2019 06:40	WG1398295
Carbon disulfide	0.470	J	0.101	0.500	1	12/18/2019 06:40	WG1398295
Carbon tetrachloride	U		0.159	0.500	1	12/18/2019 06:40	WG1398295

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	12/18/2019 06:40	WG1398295
Chlorodibromomethane	U		0.128	0.500	1	12/18/2019 06:40	WG1398295
Chloroethane	U		0.141	2.50	1	12/18/2019 06:40	WG1398295
Chloroform	U		0.0860	0.500	1	12/18/2019 06:40	WG1398295
Chloromethane	U		0.153	1.25	1	12/18/2019 06:40	WG1398295
2-Chlorotoluene	U		0.111	0.500	1	12/18/2019 06:40	WG1398295
4-Chlorotoluene	U		0.0972	0.500	1	12/18/2019 06:40	WG1398295
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/18/2019 06:40	WG1398295
1,2-Dibromoethane	U		0.193	0.500	1	12/18/2019 06:40	WG1398295
Dibromomethane	U		0.117	0.500	1	12/18/2019 06:40	WG1398295
1,2-Dichlorobenzene	U		0.101	0.500	1	12/18/2019 06:40	WG1398295
1,3-Dichlorobenzene	U		0.130	0.500	1	12/18/2019 06:40	WG1398295
1,4-Dichlorobenzene	U		0.121	0.500	1	12/18/2019 06:40	WG1398295
Dichlorodifluoromethane	U		0.127	2.50	1	12/18/2019 06:40	WG1398295
1,1-Dichloroethane	U		0.114	0.500	1	12/18/2019 06:40	WG1398295
1,2-Dichloroethane	U		0.108	0.500	1	12/18/2019 06:40	WG1398295
1,1-Dichloroethene	0.589		0.188	0.500	1	12/18/2019 06:40	WG1398295
cis-1,2-Dichloroethene	251		0.933	5.00	10	12/18/2019 15:30	WG1398556
trans-1,2-Dichloroethene	0.818		0.152	0.500	1	12/18/2019 06:40	WG1398295
1,2-Dichloropropane	U		0.190	0.500	1	12/18/2019 06:40	WG1398295
1,1-Dichloropropene	U		0.128	0.500	1	12/18/2019 06:40	WG1398295
1,3-Dichloropropane	U		0.147	1.00	1	12/18/2019 06:40	WG1398295
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/18/2019 06:40	WG1398295
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/18/2019 06:40	WG1398295
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	12/18/2019 06:40	WG1398295
2,2-Dichloropropane	U		0.0929	0.500	1	12/18/2019 06:40	WG1398295
Di-isopropyl ether	U		0.0924	0.500	1	12/18/2019 06:40	WG1398295
Ethylbenzene	U		0.158	0.500	1	12/18/2019 06:40	WG1398295
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/18/2019 06:40	WG1398295
2-Hexanone	U		0.757	5.00	1	12/18/2019 06:40	WG1398295
n-Hexane	U		0.305	5.00	1	12/18/2019 06:40	WG1398295
Iodomethane	U		0.377	10.0	1	12/18/2019 06:40	WG1398295
Isopropylbenzene	U		0.126	0.500	1	12/18/2019 06:40	WG1398295
p-Isopropyltoluene	U		0.138	0.500	1	12/18/2019 06:40	WG1398295
2-Butanone (MEK)	2.23	J	1.28	5.00	1	12/18/2019 06:40	WG1398295
Methylene Chloride	U		1.07	2.50	1	12/18/2019 06:40	WG1398295
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/18/2019 06:40	WG1398295
Methyl tert-butyl ether	U		0.102	0.500	1	12/18/2019 06:40	WG1398295
Naphthalene	U		0.174	2.50	1	12/18/2019 06:40	WG1398295
n-Propylbenzene	U		0.162	0.500	1	12/18/2019 06:40	WG1398295
Styrene	U		0.117	0.500	1	12/18/2019 06:40	WG1398295
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/18/2019 06:40	WG1398295
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/18/2019 06:40	WG1398295
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/18/2019 06:40	WG1398295
Tetrachloroethene	11.0		0.199	0.500	1	12/18/2019 06:40	WG1398295
Toluene	U		0.412	0.500	1	12/18/2019 06:40	WG1398295
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/18/2019 06:40	WG1398295
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/18/2019 06:40	WG1398295
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/18/2019 06:40	WG1398295
1,1,2-Trichloroethane	U		0.186	0.500	1	12/18/2019 06:40	WG1398295
Trichloroethene	11.5		0.153	0.500	1	12/18/2019 06:40	WG1398295
Trichlorofluoromethane	U		0.130	2.50	1	12/18/2019 06:40	WG1398295
1,2,3-Trichloropropane	U		0.247	2.50	1	12/18/2019 06:40	WG1398295
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/18/2019 06:40	WG1398295
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/18/2019 06:40	WG1398295
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/18/2019 06:40	WG1398295

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	12/18/2019 06:40	WG1398295
Vinyl chloride	71.6		0.118	0.500	1	12/18/2019 06:40	WG1398295
Xylenes, Total	U		0.316	1.50	1	12/18/2019 06:40	WG1398295
(S) Toluene-d8	*110*			*80.0-120*		*12/18/2019 06:40*	WG1398295
(S) Toluene-d8	*106*			*80.0-120*		*12/18/2019 15:30*	WG1398556
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*12/18/2019 06:40*	WG1398295
(S) 4-Bromofluorobenzene	*97.9*			*77.0-126*		*12/18/2019 15:30*	WG1398556
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*12/18/2019 06:40*	WG1398295
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*12/18/2019 15:30*	WG1398556

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	6460	B J	2710	20000	1	12/17/2019 20:33	WG1397937

Sample Narrative:

L1171422-03 WG1397937: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	U		51.9	1000	1	12/17/2019 15:01	WG1397791
Nitrate	U		22.7	100	1	12/17/2019 15:01	WG1397791
Sulfate	U		77.4	5000	1	12/17/2019 15:01	WG1397791

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	333	B J	102	1000	1	12/17/2019 18:32	WG1398101

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	22.3	J	15.0	100	1	12/18/2019 11:13	WG1398362
Manganese	1.11	B J	0.250	5.00	1	12/18/2019 11:13	WG1398362

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	33.3	B J	31.6	100	1	12/18/2019 17:56	WG1399030
(S) a,a,a-Trifluorotoluene(FID)	*96.6*			*78.0-120*		*12/18/2019 17:56*	WG1399030

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	12/20/2019 16:19	WG1400030
Ethane	U		0.296	1.29	1	12/20/2019 16:19	WG1400030
Ethene	U		0.422	1.27	1	12/20/2019 16:19	WG1400030

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.92	J	1.05	25.0	1	12/18/2019 07:00	WG1398295
Acrylonitrile	U		0.873	5.00	1	12/18/2019 07:00	WG1398295
Benzene	U		0.0896	0.500	1	12/18/2019 07:00	WG1398295
Bromobenzene	U		0.133	0.500	1	12/18/2019 07:00	WG1398295
Bromodichloromethane	U		0.0800	0.500	1	12/18/2019 07:00	WG1398295
Bromochloromethane	U		0.145	0.500	1	12/18/2019 07:00	WG1398295
Bromoform	U		0.186	0.500	1	12/18/2019 07:00	WG1398295
Bromomethane	U		0.157	2.50	1	12/18/2019 07:00	WG1398295
n-Butylbenzene	U		0.143	0.500	1	12/18/2019 07:00	WG1398295
sec-Butylbenzene	U		0.134	0.500	1	12/18/2019 07:00	WG1398295
tert-Butylbenzene	U		0.183	0.500	1	12/18/2019 07:00	WG1398295
Carbon disulfide	U		0.101	0.500	1	12/18/2019 07:00	WG1398295
Carbon tetrachloride	U		0.159	0.500	1	12/18/2019 07:00	WG1398295

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	12/18/2019 07:00	WG1398295
Chlorodibromomethane	U		0.128	0.500	1	12/18/2019 07:00	WG1398295
Chloroethane	U		0.141	2.50	1	12/18/2019 07:00	WG1398295
Chloroform	0.369	J	0.0860	0.500	1	12/18/2019 07:00	WG1398295
Chloromethane	U		0.153	1.25	1	12/18/2019 07:00	WG1398295
2-Chlorotoluene	U		0.111	0.500	1	12/18/2019 07:00	WG1398295
4-Chlorotoluene	U		0.0972	0.500	1	12/18/2019 07:00	WG1398295
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/18/2019 07:00	WG1398295
1,2-Dibromoethane	U		0.193	0.500	1	12/18/2019 07:00	WG1398295
Dibromomethane	U		0.117	0.500	1	12/18/2019 07:00	WG1398295
1,2-Dichlorobenzene	U		0.101	0.500	1	12/18/2019 07:00	WG1398295
1,3-Dichlorobenzene	U		0.130	0.500	1	12/18/2019 07:00	WG1398295
1,4-Dichlorobenzene	U		0.121	0.500	1	12/18/2019 07:00	WG1398295
Dichlorodifluoromethane	U		0.127	2.50	1	12/18/2019 07:00	WG1398295
1,1-Dichloroethane	U		0.114	0.500	1	12/18/2019 07:00	WG1398295
1,2-Dichloroethane	U		0.108	0.500	1	12/18/2019 07:00	WG1398295
1,1-Dichloroethene	U		0.188	0.500	1	12/18/2019 07:00	WG1398295
cis-1,2-Dichloroethene	U		0.0933	0.500	1	12/18/2019 15:50	WG1398556
trans-1,2-Dichloroethene	U		0.152	0.500	1	12/18/2019 07:00	WG1398295
1,2-Dichloropropane	U		0.190	0.500	1	12/18/2019 07:00	WG1398295
1,1-Dichloropropene	U		0.128	0.500	1	12/18/2019 07:00	WG1398295
1,3-Dichloropropane	U		0.147	1.00	1	12/18/2019 07:00	WG1398295
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/18/2019 07:00	WG1398295
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/18/2019 07:00	WG1398295
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	12/18/2019 07:00	WG1398295
2,2-Dichloropropane	U		0.0929	0.500	1	12/18/2019 07:00	WG1398295
Di-isopropyl ether	U		0.0924	0.500	1	12/18/2019 07:00	WG1398295
Ethylbenzene	U		0.158	0.500	1	12/18/2019 07:00	WG1398295
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/18/2019 07:00	WG1398295
2-Hexanone	U		0.757	5.00	1	12/18/2019 07:00	WG1398295
n-Hexane	U		0.305	5.00	1	12/18/2019 07:00	WG1398295
Iodomethane	U		0.377	10.0	1	12/18/2019 07:00	WG1398295
Isopropylbenzene	U		0.126	0.500	1	12/18/2019 07:00	WG1398295
p-Isopropyltoluene	U		0.138	0.500	1	12/18/2019 07:00	WG1398295
2-Butanone (MEK)	U		1.28	5.00	1	12/18/2019 07:00	WG1398295
Methylene Chloride	U		1.07	2.50	1	12/18/2019 07:00	WG1398295
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/18/2019 07:00	WG1398295
Methyl tert-butyl ether	U		0.102	0.500	1	12/18/2019 07:00	WG1398295
Naphthalene	U		0.174	2.50	1	12/18/2019 07:00	WG1398295
n-Propylbenzene	U		0.162	0.500	1	12/18/2019 07:00	WG1398295
Styrene	U		0.117	0.500	1	12/18/2019 07:00	WG1398295
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/18/2019 07:00	WG1398295
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/18/2019 07:00	WG1398295
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/18/2019 07:00	WG1398295
Tetrachloroethene	U		0.199	0.500	1	12/18/2019 07:00	WG1398295
Toluene	U		0.412	0.500	1	12/18/2019 07:00	WG1398295
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/18/2019 07:00	WG1398295
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/18/2019 07:00	WG1398295
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/18/2019 07:00	WG1398295
1,1,2-Trichloroethane	U		0.186	0.500	1	12/18/2019 07:00	WG1398295
Trichloroethene	U		0.153	0.500	1	12/18/2019 07:00	WG1398295
Trichlorofluoromethane	U		0.130	2.50	1	12/18/2019 07:00	WG1398295
1,2,3-Trichloropropane	U		0.247	2.50	1	12/18/2019 07:00	WG1398295
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/18/2019 07:00	WG1398295
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/18/2019 07:00	WG1398295
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/18/2019 07:00	WG1398295

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	12/18/2019 07:00	WG1398295
Vinyl chloride	U		0.118	0.500	1	12/18/2019 07:00	WG1398295
Xylenes, Total	U		0.316	1.50	1	12/18/2019 07:00	WG1398295
(S) Toluene-d8	*107*			*80.0-120*		*12/18/2019 07:00*	WG1398295
(S) Toluene-d8	*87.2*			*80.0-120*		*12/18/2019 15:50*	WG1398556
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*12/18/2019 07:00*	WG1398295
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*12/18/2019 15:50*	WG1398556
(S) 1,2-Dichloroethane-d4	*99.3*			*70.0-130*		*12/18/2019 07:00*	WG1398295
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*12/18/2019 15:50*	WG1398556

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	32.3	B J	31.6	100	1	12/17/2019 21:35	WG1398191
(S) a,a,a-Trifluorotoluene(FID)	*97.6*			*78.0-120*		*12/17/2019 21:35*	WG1398191

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.72	J	1.05	25.0	1	12/18/2019 05:19	WG1398295
Acrylonitrile	U		0.873	5.00	1	12/18/2019 05:19	WG1398295
Benzene	U		0.0896	0.500	1	12/18/2019 05:19	WG1398295
Bromobenzene	U		0.133	0.500	1	12/18/2019 05:19	WG1398295
Bromodichloromethane	U		0.0800	0.500	1	12/18/2019 05:19	WG1398295
Bromochloromethane	U		0.145	0.500	1	12/18/2019 05:19	WG1398295
Bromoform	U		0.186	0.500	1	12/18/2019 05:19	WG1398295
Bromomethane	U		0.157	2.50	1	12/18/2019 05:19	WG1398295
n-Butylbenzene	U		0.143	0.500	1	12/18/2019 05:19	WG1398295
sec-Butylbenzene	U		0.134	0.500	1	12/18/2019 05:19	WG1398295
tert-Butylbenzene	U		0.183	0.500	1	12/18/2019 05:19	WG1398295
Carbon disulfide	U		0.101	0.500	1	12/18/2019 05:19	WG1398295
Carbon tetrachloride	U		0.159	0.500	1	12/18/2019 05:19	WG1398295
Chlorobenzene	U		0.140	0.500	1	12/18/2019 05:19	WG1398295
Chlorodibromomethane	U		0.128	0.500	1	12/18/2019 05:19	WG1398295
Chloroethane	U		0.141	2.50	1	12/18/2019 05:19	WG1398295
Chloroform	U		0.0860	0.500	1	12/18/2019 05:19	WG1398295
Chloromethane	U		0.153	1.25	1	12/18/2019 05:19	WG1398295
2-Chlorotoluene	U		0.111	0.500	1	12/18/2019 05:19	WG1398295
4-Chlorotoluene	U		0.0972	0.500	1	12/18/2019 05:19	WG1398295
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/18/2019 05:19	WG1398295
1,2-Dibromoethane	U		0.193	0.500	1	12/18/2019 05:19	WG1398295
Dibromomethane	U		0.117	0.500	1	12/18/2019 05:19	WG1398295
1,2-Dichlorobenzene	U		0.101	0.500	1	12/18/2019 05:19	WG1398295
1,3-Dichlorobenzene	U		0.130	0.500	1	12/18/2019 05:19	WG1398295
1,4-Dichlorobenzene	U		0.121	0.500	1	12/18/2019 05:19	WG1398295
Dichlorodifluoromethane	U		0.127	2.50	1	12/18/2019 05:19	WG1398295
1,1-Dichloroethane	U		0.114	0.500	1	12/18/2019 05:19	WG1398295
1,2-Dichloroethane	U		0.108	0.500	1	12/18/2019 05:19	WG1398295
1,1-Dichloroethene	U		0.188	0.500	1	12/18/2019 05:19	WG1398295
cis-1,2-Dichloroethene	U		0.0933	0.500	1	12/18/2019 05:19	WG1398295
trans-1,2-Dichloroethene	U		0.152	0.500	1	12/18/2019 05:19	WG1398295
1,2-Dichloropropane	U		0.190	0.500	1	12/18/2019 05:19	WG1398295
1,1-Dichloropropene	U		0.128	0.500	1	12/18/2019 05:19	WG1398295
1,3-Dichloropropane	U		0.147	1.00	1	12/18/2019 05:19	WG1398295
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/18/2019 05:19	WG1398295
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/18/2019 05:19	WG1398295
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	12/18/2019 05:19	WG1398295
2,2-Dichloropropane	U		0.0929	0.500	1	12/18/2019 05:19	WG1398295
Di-isopropyl ether	U		0.0924	0.500	1	12/18/2019 05:19	WG1398295
Ethylbenzene	U		0.158	0.500	1	12/18/2019 05:19	WG1398295
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/18/2019 05:19	WG1398295
2-Hexanone	U		0.757	5.00	1	12/18/2019 05:19	WG1398295
n-Hexane	U		0.305	5.00	1	12/18/2019 05:19	WG1398295
Iodomethane	U		0.377	10.0	1	12/18/2019 05:19	WG1398295
Isopropylbenzene	U		0.126	0.500	1	12/18/2019 05:19	WG1398295
p-Isopropyltoluene	U		0.138	0.500	1	12/18/2019 05:19	WG1398295
2-Butanone (MEK)	U		1.28	5.00	1	12/18/2019 05:19	WG1398295

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	12/18/2019 05:19	WG1398295
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/18/2019 05:19	WG1398295
Methyl tert-butyl ether	U		0.102	0.500	1	12/18/2019 05:19	WG1398295
Naphthalene	0.363	J	0.174	2.50	1	12/18/2019 05:19	WG1398295
n-Propylbenzene	U		0.162	0.500	1	12/18/2019 05:19	WG1398295
Styrene	U		0.117	0.500	1	12/18/2019 05:19	WG1398295
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/18/2019 05:19	WG1398295
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/18/2019 05:19	WG1398295
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/18/2019 05:19	WG1398295
Tetrachloroethene	U		0.199	0.500	1	12/18/2019 05:19	WG1398295
Toluene	U		0.412	0.500	1	12/18/2019 05:19	WG1398295
1,2,3-Trichlorobenzene	0.193	J	0.164	0.500	1	12/18/2019 05:19	WG1398295
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/18/2019 05:19	WG1398295
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/18/2019 05:19	WG1398295
1,1,2-Trichloroethane	U		0.186	0.500	1	12/18/2019 05:19	WG1398295
Trichloroethene	U		0.153	0.500	1	12/18/2019 05:19	WG1398295
Trichlorofluoromethane	U		0.130	2.50	1	12/18/2019 05:19	WG1398295
1,2,3-Trichloropropane	U		0.247	2.50	1	12/18/2019 05:19	WG1398295
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/18/2019 05:19	WG1398295
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/18/2019 05:19	WG1398295
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/18/2019 05:19	WG1398295
Vinyl acetate	U		0.645	5.00	1	12/18/2019 05:19	WG1398295
Vinyl chloride	U		0.118	0.500	1	12/18/2019 05:19	WG1398295
Xylenes, Total	U		0.316	1.50	1	12/18/2019 05:19	WG1398295
(S) Toluene-d8	*108*			*80.0-120*		*12/18/2019 05:19*	WG1398295
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*12/18/2019 05:19*	WG1398295
(S) 1,2-Dichloroethane-d4	*98.7*			*70.0-130*		*12/18/2019 05:19*	WG1398295

Method Blank (MB)

(MB) R3483385-1 12/17/19 17:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	4160	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1171302-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1171302-01 12/17/19 18:46 • (DUP) R3483385-2 12/17/19 18:54

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	48200	48200	1	0.00968		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1171461-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1171461-01 12/17/19 20:43 • (DUP) R3483385-4 12/17/19 20:51

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	129000	129000	1	0.208		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3483385-3 12/17/19 19:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	100000	100	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3483415-1 12/17/19 09:28

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

L1167653-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1167653-09 12/17/19 11:23 • (DUP) R3483415-4 12/17/19 11:35

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	6850	6800	1	0.773		15
Nitrate	1680	1530	1	9.25		15
Sulfate	16800	16800	1	0.0518		15

L1171038-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1171038-16 12/17/19 18:23 • (DUP) R3483415-7 12/17/19 18:35

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	2060	2060	1	0.199		15
Nitrate	188	178	1	5.31		15
Sulfate	ND	1360	1	0.000		15

Laboratory Control Sample (LCS)

(LCS) R3483415-2 12/17/19 09:40

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	38500	96.2	80.0-120	
Nitrate	8000	8080	101	80.0-120	
Sulfate	40000	38500	96.3	80.0-120	

L1171461-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1171461-01 12/17/19 15:13 • (MS) R3483415-5 12/17/19 15:24 • (MSD) R3483415-6 12/17/19 15:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	7510	56800	57000	98.6	99.0	1	80.0-120			0.345	15
Nitrate	5000	1180	6280	6350	102	104	1	80.0-120			1.08	15
Sulfate	50000	18800	67900	68100	98.2	98.6	1	80.0-120			0.287	15

L1171038-16 Original Sample (OS) • Matrix Spike (MS)

(OS) L1171038-16 12/17/19 18:23 • (MS) R3483415-8 12/17/19 18:46

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	2060	51100	98.2	1	80.0-120	
Nitrate	5000	188	5170	99.7	1	80.0-120	
Sulfate	50000	ND	50200	97.7	1	80.0-120	

Method Blank (MB)

(MB) R3483464-1 12/17/19 16:55

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	219	J	102	1000

L1171422-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1171422-01 12/17/19 17:50 • (DUP) R3483464-3 12/17/19 18:05

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	4120	4120	1	0.0243		20

Laboratory Control Sample (LCS)

(LCS) R3483464-2 12/17/19 17:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	75000	70500	94.0	85.0-115	

L1171428-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1171428-02 12/17/19 18:50 • (MS) R3483464-4 12/17/19 19:10 • (MSD) R3483464-5 12/17/19 19:27

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	50000	10600	56200	56800	91.4	92.4	1	80.0-120			0.956	20

Method Blank (MB)

(MB) R3483612-1 12/18/19 10:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		15.0	100
Manganese	0.283	J	0.250	5.00

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

(LCS) R3483612-2 12/18/19 10:33 • (LCSD) R3483612-3 12/18/19 10:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Iron	5000	5340	5210	107	104	80.0-120			2.44	20
Manganese	50.0	51.5	50.9	103	102	80.0-120			1.16	20

L1170462-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1170462-02 12/18/19 10:40 • (MS) R3483612-5 12/18/19 10:46 • (MSD) R3483612-6 12/18/19 10:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	5000	611	5790	5920	104	106	1	75.0-125			2.20	20
Manganese	50.0	24.3	73.5	75.7	98.3	103	1	75.0-125			2.98	20

Method Blank (MB)

(MB) R3483474-3 12/17/19 19:57

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	47.8	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*78.0-120*

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

(LCS) R3483474-1 12/17/19 18:02 • (LCSD) R3483474-2 12/17/19 18:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5500	6040	6310	110	115	70.0-124			4.37	20
(S) a,a,a-Trifluorotoluene(FID)				*103*	*104*	*78.0-120*				

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

Method Blank (MB)

(MB) R3484908-2 12/18/19 10:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	51.1	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3484908-1 12/18/19 09:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5780	105	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*104*	*78.0-120*	

Method Blank (MB)

(MB) R3484689-1 12/20/19 16:07

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

L1171422-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1171422-03 12/20/19 16:19 • (DUP) R3484689-2 12/20/19 16:48

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

L1171561-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1171561-13 12/20/19 17:04 • (DUP) R3484689-3 12/20/19 17:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	65.6	66.7	1	1.66		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

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

(LCS) R3484689-4 12/20/19 17:26 • (LCSD) R3484689-5 12/20/19 17:31

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	59.4	62.7	87.6	92.5	85.0-115			5.41	20
Ethane	129	113	119	87.6	92.2	85.0-115			5.17	20
Ethene	127	109	115	85.8	90.6	85.0-115			5.36	20

Method Blank (MB)

(MB) R3484768-1 12/21/19 08:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1170981-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1170981-09 12/21/19 08:36 • (DUP) R3484768-2 12/21/19 08:39

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

L1170981-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1170981-05 12/21/19 09:32 • (DUP) R3484768-3 12/21/19 09:34

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	1920	2100	1	8.96		20

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

(LCS) R3484768-4 12/21/19 09:38 • (LCSD) R3484768-5 12/21/19 09:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	65.2	64.3	96.2	94.8	85.0-115			1.39	20

Method Blank (MB)

(MB) R3483485-3 12/18/19 04:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3483485-3 12/18/19 04:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*108*			*80.0-120*
(S) 4-Bromofluorobenzene	*102*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*

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

(LCS) R3483485-1 12/18/19 02:57 • (LCSD) R3483485-2 12/18/19 03:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	21.4	22.4	85.6	89.6	19.0-160			4.57	27
Acrylonitrile	25.0	24.0	23.8	96.0	95.2	55.0-149			0.837	20
Benzene	5.00	4.73	5.16	94.6	103	70.0-123			8.70	20
Bromobenzene	5.00	4.05	4.18	81.0	83.6	73.0-121			3.16	20
Bromodichloromethane	5.00	4.59	4.81	91.8	96.2	75.0-120			4.68	20
Bromochloromethane	5.00	5.11	5.27	102	105	76.0-122			3.08	20
Bromoform	5.00	5.09	5.06	102	101	68.0-132			0.591	20
Bromomethane	5.00	5.43	5.84	109	117	10.0-160			7.28	25
n-Butylbenzene	5.00	4.73	5.11	94.6	102	73.0-125			7.72	20
sec-Butylbenzene	5.00	4.44	4.70	88.8	94.0	75.0-125			5.69	20
tert-Butylbenzene	5.00	4.16	4.47	83.2	89.4	76.0-124			7.18	20
Carbon disulfide	5.00	4.50	4.98	90.0	99.6	61.0-128			10.1	20
Carbon tetrachloride	5.00	4.68	5.03	93.6	101	68.0-126			7.21	20
Chlorobenzene	5.00	5.10	5.41	102	108	80.0-121			5.90	20
Chlorodibromomethane	5.00	4.83	4.96	96.6	99.2	77.0-125			2.66	20
Chloroethane	5.00	4.24	4.66	84.8	93.2	47.0-150			9.44	20
Chloroform	5.00	4.90	5.19	98.0	104	73.0-120			5.75	20
Chloromethane	5.00	4.50	4.75	90.0	95.0	41.0-142			5.41	20
2-Chlorotoluene	5.00	4.22	4.49	84.4	89.8	76.0-123			6.20	20
4-Chlorotoluene	5.00	4.18	4.41	83.6	88.2	75.0-122			5.36	20
1,2-Dibromo-3-Chloropropane	5.00	4.46	4.54	89.2	90.8	58.0-134			1.78	20
1,2-Dibromoethane	5.00	5.09	5.16	102	103	80.0-122			1.37	20
Dibromomethane	5.00	4.77	4.92	95.4	98.4	80.0-120			3.10	20
1,2-Dichlorobenzene	5.00	4.94	5.12	98.8	102	79.0-121			3.58	20
1,3-Dichlorobenzene	5.00	4.84	5.13	96.8	103	79.0-120			5.82	20
1,4-Dichlorobenzene	5.00	4.87	5.14	97.4	103	79.0-120			5.39	20
trans-1,4-Dichloro-2-butene	5.00	3.10	3.30	62.0	66.0	33.0-144			6.25	20
Dichlorodifluoromethane	5.00	4.76	5.12	95.2	102	51.0-149			7.29	20
1,1-Dichloroethane	5.00	4.58	4.92	91.6	98.4	70.0-126			7.16	20
1,2-Dichloroethane	5.00	4.72	4.91	94.4	98.2	70.0-128			3.95	20
1,1-Dichloroethene	5.00	4.73	5.26	94.6	105	71.0-124			10.6	20
cis-1,2-Dichloroethene	5.00	4.89	5.27	97.8	105	73.0-120			7.48	20
trans-1,2-Dichloroethene	5.00	4.86	5.35	97.2	107	73.0-120			9.60	20
1,2-Dichloropropane	5.00	4.65	4.95	93.0	99.0	77.0-125			6.25	20
1,1-Dichloropropene	5.00	4.75	5.07	95.0	101	74.0-126			6.52	20
1,3-Dichloropropane	5.00	4.93	4.99	98.6	99.8	80.0-120			1.21	20
cis-1,3-Dichloropropene	5.00	4.54	4.74	90.8	94.8	80.0-123			4.31	20
trans-1,3-Dichloropropene	5.00	4.56	4.80	91.2	96.0	78.0-124			5.13	20
2,2-Dichloropropane	5.00	4.84	5.22	96.8	104	58.0-130			7.55	20
Di-isopropyl ether	5.00	4.22	4.47	84.4	89.4	58.0-138			5.75	20

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

(LCS) R3483485-1 12/18/19 02:57 • (LCSD) R3483485-2 12/18/19 03:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	5.00	5.06	5.35	101	107	79.0-123			5.57	20
Hexachloro-1,3-butadiene	5.00	4.72	5.14	94.4	103	54.0-138			8.52	20
2-Hexanone	25.0	25.5	25.5	102	102	67.0-149			0.000	20
n-Hexane	5.00	4.93	5.23	98.6	105	57.0-133			5.91	20
Iodomethane	25.0	25.6	27.7	102	111	33.0-147			7.88	26
Isopropylbenzene	5.00	5.16	5.49	103	110	76.0-127			6.20	20
p-Isopropyltoluene	5.00	4.49	4.76	89.8	95.2	76.0-125			5.84	20
2-Butanone (MEK)	25.0	22.7	23.0	90.8	92.0	44.0-160			1.31	20
Methylene Chloride	5.00	5.08	5.36	102	107	67.0-120			5.36	20
4-Methyl-2-pentanone (MIBK)	25.0	24.6	24.8	98.4	99.2	68.0-142			0.810	20
Methyl tert-butyl ether	5.00	4.81	4.91	96.2	98.2	68.0-125			2.06	20
Naphthalene	5.00	4.80	4.97	96.0	99.4	54.0-135			3.48	20
n-Propylbenzene	5.00	4.17	4.43	83.4	88.6	77.0-124			6.05	20
Styrene	5.00	4.92	5.10	98.4	102	73.0-130			3.59	20
1,1,1,2-Tetrachloroethane	5.00	5.02	5.22	100	104	75.0-125			3.91	20
1,1,2,2-Tetrachloroethane	5.00	4.15	4.25	83.0	85.0	65.0-130			2.38	20
Tetrachloroethene	5.00	5.38	5.83	108	117	72.0-132			8.03	20
Toluene	5.00	5.08	5.48	102	110	79.0-120			7.58	20
1,1,2-Trichlorotrifluoroethane	5.00	4.95	5.32	99.0	106	69.0-132			7.21	20
1,2,3-Trichlorobenzene	5.00	4.91	5.18	98.2	104	50.0-138			5.35	20
1,2,4-Trichlorobenzene	5.00	4.95	5.32	99.0	106	57.0-137			7.21	20
1,1,1-Trichloroethane	5.00	4.84	5.27	96.8	105	73.0-124			8.51	20
1,1,2-Trichloroethane	5.00	5.30	5.31	106	106	80.0-120			0.189	20
Trichloroethene	5.00	4.81	5.24	96.2	105	78.0-124			8.56	20
Trichlorofluoromethane	5.00	4.97	5.31	99.4	106	59.0-147			6.61	20
1,2,3-Trichloropropane	5.00	4.33	4.54	86.6	90.8	73.0-130			4.74	20
1,2,3-Trimethylbenzene	5.00	4.74	4.89	94.8	97.8	77.0-120			3.12	20
1,2,4-Trimethylbenzene	5.00	4.21	4.45	84.2	89.0	76.0-121			5.54	20
1,3,5-Trimethylbenzene	5.00	4.20	4.44	84.0	88.8	76.0-122			5.56	20
Vinyl acetate	25.0	21.2	20.5	84.8	82.0	11.0-160			3.36	20
Vinyl chloride	5.00	4.13	4.58	82.6	91.6	67.0-131			10.3	20
Xylenes, Total	15.0	15.1	16.0	101	107	79.0-123			5.79	20
(S) Toluene-d8				*107*	*106*	*80.0-120*				
(S) 4-Bromofluorobenzene				*103*	*103*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*98.4*	*98.9*	*70.0-130*				

Method Blank (MB)

(MB) R3484162-3 12/18/19 11:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
(S) Toluene-d8	*105*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*

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

(LCS) R3484162-1 12/18/19 10:30 • (LCSD) R3484162-2 12/18/19 11:00

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
cis-1,2-Dichloroethene	5.00	4.49	4.26	89.8	85.2	73.0-120			5.26	20
(S) Toluene-d8				*105*	*107*	*80.0-120*				
(S) 4-Bromofluorobenzene				*102*	*105*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*103*	*101*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

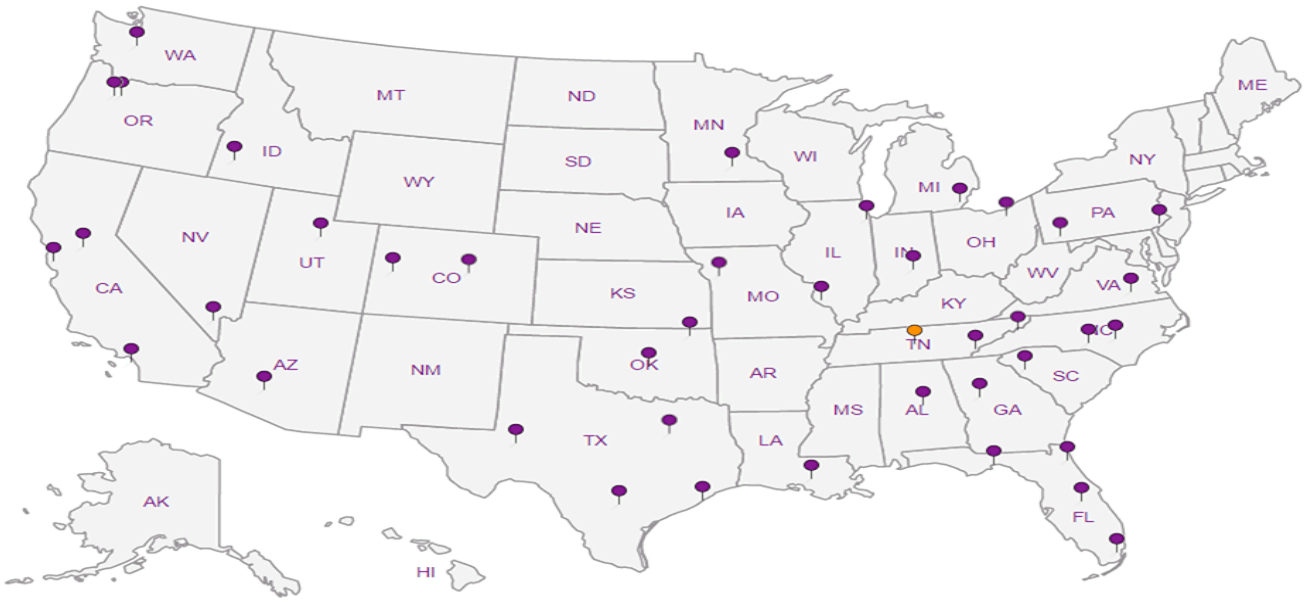
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



PES Environmental, Inc.- WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

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

Pres Chk

Report to: Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com; bhaldeman@pesenv.com;

Project Description: American Linen Supply

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

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

Client Project # 1413.001.02.501E

Lab Project # PESENVSWA-ALP

Collected by (print): Hannah Cohen

Site/Facility ID # American Linen

P.O. #

Collected by (signature): Hannah Cohen

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	*NO3,SO4,Cl* 125mlHDPE-NoPres	Alkalinity 125mlHDPE-NoPres	EEM RSK175LL 40mlAmb-HCl	NWTPHGX 40mlAmb HCl	TOC 250mlHDPE-HCl	Total Fe Mn 6020 250mlHDPE-HNO3	VOCs (V8260LLC) 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-145R-121619	Grab	GW	74'	12/16/19	1145	12	X	X	X	X	X	X	X		-01
MW-144R-121619	"	GW	44'	"	1320	12	X	X	X	X	X	X	X		02
EQ-121619	"	~~GW~~	-	"	1410	12	X	X	X	X	X	X	X		03
TRIP BLANK-121619	-	~~GW~~	-	"	1430	2				X			X		04
								HC							

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

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

SDG # 117422

G046

Acctnum: PESENVSWA
Template: T159835
Prelogin: P744908
PM: 110 - Brian Ford
PB:
Shipped Via:

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

Remarks:
*Nitrate has a 48 hour holding time.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 1275 8607 5761

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Hannah Cohen	12/16/19	1515	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Carol Kemp

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 2.2+0.2=2.4 °C Bottles Received: 36

Date: 12/17/19 Time: 11:30

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

January 31, 2020

PES Environmental, Inc.- WA

Sample Delivery Group:	L1183594
Samples Received:	01/28/2020
Project Number:	
Description:	American Linen Supply
Report To:	Brian O'Neal/Bill Haldeman
	1215 Fourth Ave., Suite 1350
	Seattle, WA 98161

Entire Report Reviewed By:

Jason Romer
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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SV01-012720 L1183594-01 Air

Collected by: S. McKernan
Collected date/time: 01/27/20 08:18
Received date/time: 01/28/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1419175	1	01/29/20 23:26	01/29/20 23:26	CAW	Mt. Juliet, TN

SV01-012720-D L1183594-02 Air

Collected by: S. McKernan
Collected date/time: 01/27/20 08:18
Received date/time: 01/28/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1419175	1	01/30/20 00:03	01/30/20 00:03	CAW	Mt. Juliet, TN

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

Jason Romer
Project Manager

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	9.05	21.5		1	WG1419175
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1419175
Benzene	71-43-2	78.10	0.200	0.639	0.243	0.776		1	WG1419175
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1419175
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1419175
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1419175
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1419175
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1419175
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1419175
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1419175
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1419175
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1419175
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1419175
Chloromethane	74-87-3	50.50	0.200	0.413	0.419	0.865		1	WG1419175
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1419175
Cyclohexane	110-82-7	84.20	0.200	0.689	0.449	1.55		1	WG1419175
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1419175
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1419175
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1419175
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1419175
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1419175
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1419175
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1419175
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1419175
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1419175
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1419175
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1419175
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1419175
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1419175
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1419175
Ethanol	64-17-5	46.10	0.630	1.19	19.6	37.0		1	WG1419175
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1419175
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1419175
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1419175
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.441	2.18		1	WG1419175
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1419175
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1419175
Heptane	142-82-5	100	0.200	0.818	0.393	1.61		1	WG1419175
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1419175
n-Hexane	110-54-3	86.20	0.200	0.705	0.532	1.88		1	WG1419175
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1419175
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.203	0.705		1	WG1419175
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1419175
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1419175
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1419175
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1419175
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1419175
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1419175
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1419175
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1419175
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1419175
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1419175
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1419175
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1419175
Toluene	108-88-3	92.10	0.200	0.753	0.704	2.65		1	WG1419175
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1419175

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	2.05	11.2		1	WG1419175
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1419175
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1419175
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1419175
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1419175
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1419175
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1419175
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1419175
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1419175
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1419175
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1419175
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1419175

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.86	4.42		1	WG1419175
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1419175
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1419175
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1419175
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1419175
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1419175
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1419175
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1419175
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1419175
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1419175
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1419175
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1419175
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1419175
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1419175
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1419175
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1419175
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1419175
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1419175
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1419175
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1419175
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1419175
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1419175
1,1-Dichloroethane	75-34-3	98	0.200	0.802	0.448	1.80		1	WG1419175
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1419175
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1419175
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1419175
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1419175
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1419175
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1419175
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1419175
Ethanol	64-17-5	46.10	0.630	1.19	2.28	4.30		1	WG1419175
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1419175
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1419175
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1419175
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.310	1.53		1	WG1419175
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1419175
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1419175
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1419175
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1419175
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1419175
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1419175
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1419175
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1419175
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1419175
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1419175
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1419175
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1419175
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1419175
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1419175
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1419175
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1419175
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1419175
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1419175
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1419175
Toluene	108-88-3	92.10	0.200	0.753	ND	ND		1	WG1419175
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1419175

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	6.84	37.2		1	WG1419175
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1419175
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1419175
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1419175
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1419175
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1419175
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1419175
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1419175
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1419175
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1419175
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1419175
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1419175

Method Blank (MB)

(MB) R3495507-3 01/29/20 14:53

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

Method Blank (MB)

(MB) R3495507-3 01/29/20 14:53

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	U		0.0882	1.25
Propene	0.184	J	0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	*99.6*			*60.0-140*

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

(LCS) R3495507-1 01/29/20 09:45 • (LCSD) R3495507-2 01/29/20 14:16

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.57	3.70	95.2	98.7	55.0-148			3.58	25
Propene	3.75	3.47	3.42	92.5	91.2	64.0-144			1.45	25
Dichlorodifluoromethane	3.75	3.76	3.66	100	97.6	64.0-139			2.70	25
1,2-Dichlorotetrafluoroethane	3.75	3.75	3.65	100	97.3	70.0-130			2.70	25
Chloromethane	3.75	3.51	3.54	93.6	94.4	70.0-130			0.851	25

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

(LCS) R3495507-1 01/29/20 09:45 • (LCSD) R3495507-2 01/29/20 14:16

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	3.75	3.66	3.56	97.6	94.9	70.0-130			2.77	25
1,3-Butadiene	3.75	3.65	3.45	97.3	92.0	70.0-130			5.63	25
Bromomethane	3.75	3.71	3.46	98.9	92.3	70.0-130			6.97	25
Chloroethane	3.75	3.61	3.39	96.3	90.4	70.0-130			6.29	25
Trichlorofluoromethane	3.75	3.78	3.59	101	95.7	70.0-130			5.16	25
1,1,2-Trichlorotrifluoroethane	3.75	3.79	3.69	101	98.4	70.0-130			2.67	25
1,1-Dichloroethene	3.75	3.77	3.64	101	97.1	70.0-130			3.51	25
1,1-Dichloroethane	3.75	3.75	3.66	100	97.6	70.0-130			2.43	25
Acetone	3.75	3.69	3.59	98.4	95.7	70.0-130			2.75	25
2-Propanol	3.75	3.78	3.69	101	98.4	70.0-139			2.41	25
Carbon disulfide	3.75	3.88	3.76	103	100	70.0-130			3.14	25
Methylene Chloride	3.75	3.67	3.54	97.9	94.4	70.0-130			3.61	25
MTBE	3.75	3.84	3.72	102	99.2	70.0-130			3.17	25
trans-1,2-Dichloroethene	3.75	3.71	3.64	98.9	97.1	70.0-130			1.90	25
n-Hexane	3.75	3.79	3.70	101	98.7	70.0-130			2.40	25
Vinyl acetate	3.75	3.75	3.76	100	100	70.0-130			0.266	25
Methyl Ethyl Ketone	3.75	3.82	3.70	102	98.7	70.0-130			3.19	25
cis-1,2-Dichloroethene	3.75	3.78	3.69	101	98.4	70.0-130			2.41	25
Chloroform	3.75	3.73	3.65	99.5	97.3	70.0-130			2.17	25
Cyclohexane	3.75	3.75	3.63	100	96.8	70.0-130			3.25	25
1,1,1-Trichloroethane	3.75	3.76	3.67	100	97.9	70.0-130			2.42	25
Carbon tetrachloride	3.75	3.75	3.70	100	98.7	70.0-130			1.34	25
Benzene	3.75	3.69	3.59	98.4	95.7	70.0-130			2.75	25
1,2-Dichloroethane	3.75	3.66	3.60	97.6	96.0	70.0-130			1.65	25
Heptane	3.75	3.70	3.54	98.7	94.4	70.0-130			4.42	25
Trichloroethylene	3.75	3.69	3.62	98.4	96.5	70.0-130			1.92	25
1,2-Dichloropropane	3.75	3.60	3.50	96.0	93.3	70.0-130			2.82	25
1,4-Dioxane	3.75	3.76	3.66	100	97.6	70.0-140			2.70	25
Bromodichloromethane	3.75	3.67	3.62	97.9	96.5	70.0-130			1.37	25
cis-1,3-Dichloropropene	3.75	3.71	3.64	98.9	97.1	70.0-130			1.90	25
4-Methyl-2-pentanone (MIBK)	3.75	3.69	3.58	98.4	95.5	70.0-139			3.03	25
Toluene	3.75	3.75	3.68	100	98.1	70.0-130			1.88	25
trans-1,3-Dichloropropene	3.75	3.73	3.65	99.5	97.3	70.0-130			2.17	25
1,1,2-Trichloroethane	3.75	3.68	3.59	98.1	95.7	70.0-130			2.48	25
Tetrachloroethylene	3.75	3.78	3.67	101	97.9	70.0-130			2.95	25
Methyl Butyl Ketone	3.75	3.83	3.70	102	98.7	70.0-149			3.45	25
Dibromochloromethane	3.75	3.72	3.65	99.2	97.3	70.0-130			1.90	25
1,2-Dibromoethane	3.75	3.72	3.64	99.2	97.1	70.0-130			2.17	25
Chlorobenzene	3.75	3.68	3.58	98.1	95.5	70.0-130			2.75	25
Ethylbenzene	3.75	3.85	3.74	103	99.7	70.0-130			2.90	25

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

(LCS) R3495507-1 01/29/20 09:45 • (LCSD) R3495507-2 01/29/20 14:16

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
m&p-Xylene	7.50	7.70	7.48	103	99.7	70.0-130			2.90	25
o-Xylene	3.75	3.83	3.72	102	99.2	70.0-130			2.91	25
Styrene	3.75	3.88	3.80	103	101	70.0-130			2.08	25
Bromoform	3.75	3.83	3.77	102	101	70.0-130			1.58	25
1,1,2,2-Tetrachloroethane	3.75	3.72	3.64	99.2	97.1	70.0-130			2.17	25
4-Ethyltoluene	3.75	3.89	3.78	104	101	70.0-130			2.87	25
1,3,5-Trimethylbenzene	3.75	3.86	3.75	103	100	70.0-130			2.89	25
1,2,4-Trimethylbenzene	3.75	3.94	3.82	105	102	70.0-130			3.09	25
1,3-Dichlorobenzene	3.75	3.86	3.79	103	101	70.0-130			1.83	25
1,4-Dichlorobenzene	3.75	3.88	3.78	103	101	70.0-130			2.61	25
Benzyl Chloride	3.75	3.86	3.80	103	101	70.0-152			1.57	25
1,2-Dichlorobenzene	3.75	3.82	3.74	102	99.7	70.0-130			2.12	25
1,2,4-Trichlorobenzene	3.75	4.39	4.18	117	111	70.0-160			4.90	25
Hexachloro-1,3-butadiene	3.75	3.89	3.78	104	101	70.0-151			2.87	25
Naphthalene	3.75	4.29	4.10	114	109	70.0-159			4.53	25
Allyl Chloride	3.75	3.44	3.57	91.7	95.2	70.0-130			3.71	25
2-Chlorotoluene	3.75	3.75	3.69	100	98.4	70.0-130			1.61	25
Methyl Methacrylate	3.75	3.67	3.55	97.9	94.7	70.0-130			3.32	25
Tetrahydrofuran	3.75	3.71	3.60	98.9	96.0	70.0-137			3.01	25
2,2,4-Trimethylpentane	3.75	3.78	3.71	101	98.9	70.0-130			1.87	25
Vinyl Bromide	3.75	3.87	3.53	103	94.1	70.0-130			9.19	25
Isopropylbenzene	3.75	3.88	3.78	103	101	70.0-130			2.61	25
(S) 1,4-Bromofluorobenzene				*99.6*	*99.1*	*60.0-140*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

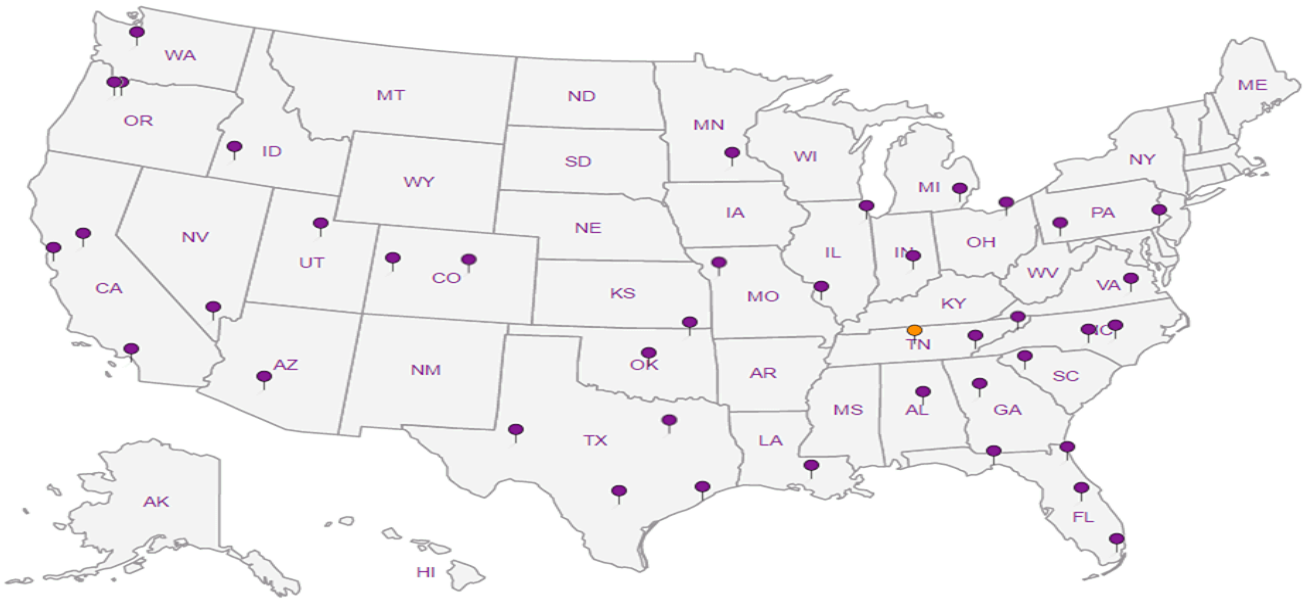
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



PES Environmental, Inc.- WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

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

Report to: Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com; bhaldeman@pesenv.com;

Project Description: American Linen Supply

City/State Collected: SEATTLE, WA

Please Circle: PT MT CT ET

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

Client Project # 1413.001.02.E01F

Lab Project # PESENVSWA-ALP

Collected by (print): S. MCKERNAN

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Pres Chk

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15 Summa	Remarks	Sample # (lab only)
SV01-012720		Air		1/27/20	0818	1	X		-01
SV01-012720-D		Air		↓	0818	1	X		02
		Air							
		Air							

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

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

SDG # L1183594

G248

Acctnum: PESENVSWA

Template: T161407

Prelogin: P750446

PM: 110 - Brian Ford

PB: CSG 01/15/20

Shipped Via: FedEx Ground

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y	N
COC Signed/Accurate:		Y	N
Bottles arrive intact:		Y	N
Correct bottles used:		Y	N
Sufficient volume sent:		Y	N
If Applicable			
VOA Zero Headspace:		Y	N
Preservation Correct/Checked:		Y	N
RAD Screen <0.5 mR/hr:		Y	N

Relinquished by : (Signature)	Date: 1/27/20	Time: 1500	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 2	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/28/2020 Time: 830	Hold: / Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

March 27, 2020

PES Environmental, Inc.- WA

Sample Delivery Group:	L1200814
Samples Received:	03/19/2020
Project Number:	1413. 001.05.202
Description:	American Linen

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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B-277-1 L1200814-01 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 08:15 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447722	1	03/22/20 02:54	03/22/20 03:01	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447769	25	03/18/20 08:15	03/20/20 23:12	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 08:15	03/21/20 09:44	DWR	Mt. Juliet, TN

B-277-3 L1200814-02 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 08:18 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447722	1	03/22/20 02:54	03/22/20 03:01	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447769	25	03/18/20 08:18	03/20/20 23:35	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 08:18	03/21/20 10:03	DWR	Mt. Juliet, TN

B-277-5 L1200814-03 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 08:25 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447722	1	03/22/20 02:54	03/22/20 03:01	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447769	25	03/18/20 08:25	03/20/20 23:59	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 08:25	03/21/20 10:22	DWR	Mt. Juliet, TN

B-277-9.5 L1200814-04 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 08:32 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447722	1	03/22/20 02:54	03/22/20 03:01	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447769	29.5	03/18/20 08:32	03/21/20 00:23	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1.42	03/18/20 08:32	03/21/20 10:41	DWR	Mt. Juliet, TN

B-277-11 L1200814-05 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 08:35 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447722	1	03/22/20 02:54	03/22/20 03:01	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447769	25	03/18/20 08:35	03/21/20 00:47	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 08:35	03/21/20 11:00	DWR	Mt. Juliet, TN

B-278-3 L1200814-06 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 09:40 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447726	1	03/21/20 19:21	03/21/20 19:42	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447769	25	03/18/20 09:40	03/21/20 01:11	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 09:40	03/21/20 11:19	DWR	Mt. Juliet, TN

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

B-278-6 L1200814-07 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 09:50 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447726	1	03/21/20 19:21	03/21/20 19:42	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447769	25	03/18/20 09:50	03/21/20 01:35	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 09:50	03/21/20 11:38	DWR	Mt. Juliet, TN

B-279-3 L1200814-08 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 10:20 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447726	1	03/21/20 19:21	03/21/20 19:42	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447769	25	03/18/20 10:20	03/21/20 01:59	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 10:20	03/21/20 11:57	DWR	Mt. Juliet, TN

B-279-5 L1200814-09 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 10:35 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447726	1	03/21/20 19:21	03/21/20 19:42	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447775	25	03/18/20 10:35	03/21/20 11:37	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 10:35	03/21/20 12:16	DWR	Mt. Juliet, TN

B-279-10 L1200814-10 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 10:40 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447726	1	03/21/20 19:21	03/21/20 19:42	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447775	25	03/18/20 10:40	03/21/20 12:06	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 10:40	03/21/20 12:35	DWR	Mt. Juliet, TN

B-280-4.5 L1200814-11 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 11:20 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447726	1	03/21/20 19:21	03/21/20 19:42	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447775	25	03/18/20 11:20	03/21/20 12:30	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 11:20	03/21/20 12:54	DWR	Mt. Juliet, TN

B-280-6 L1200814-12 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 11:23 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447726	1	03/21/20 19:21	03/21/20 19:42	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447775	25	03/18/20 11:23	03/21/20 12:54	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 11:23	03/21/20 13:13	DWR	Mt. Juliet, TN

B-281-2 L1200814-13 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 11:48 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447726	1	03/21/20 19:21	03/21/20 19:42	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447775	25	03/18/20 11:48	03/21/20 13:18	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 11:48	03/21/20 13:32	DWR	Mt. Juliet, TN

B-281-5 L1200814-14 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 11:52 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447726	1	03/21/20 19:21	03/21/20 19:42	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447775	25	03/18/20 11:52	03/21/20 13:42	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 11:52	03/21/20 13:51	DWR	Mt. Juliet, TN

B-282-2 L1200814-15 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 12:28 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447726	1	03/21/20 19:21	03/21/20 19:42	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447775	25	03/18/20 12:28	03/21/20 14:06	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447912	1	03/18/20 12:28	03/21/20 14:10	DWR	Mt. Juliet, TN

B-282-4 L1200814-16 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 12:30 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447729	1	03/21/20 18:59	03/21/20 19:16	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447775	25	03/18/20 12:30	03/21/20 14:29	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/18/20 12:30	03/21/20 14:37	BMB	Mt. Juliet, TN

B-971-5 L1200814-17 Solid

Collected by: R. McLaughlin | Collected date/time: 03/18/20 13:30 | Received date/time: 03/19/20 08:30

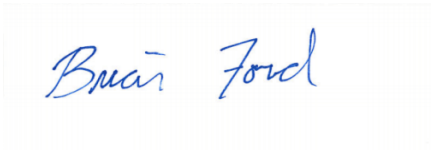
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447729	1	03/21/20 18:59	03/21/20 19:16	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447775	25	03/18/20 13:30	03/21/20 15:18	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/18/20 13:30	03/21/20 14:56	BMB	Mt. Juliet, TN

TB-031820 L1200814-18 GW

Collected by: R. McLaughlin | Collected date/time: 03/18/20 13:35 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1449272	1	03/24/20 13:41	03/24/20 13:41	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1450695	1	03/26/20 11:35	03/26/20 11:35	DWR	Mt. Juliet, TN

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



Brian Ford
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.3		1	03/22/2020 03:01	WG1447722

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.07	3.15	25	03/20/2020 23:12	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*03/20/2020 23:12*	WG1447769

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0173	0.0315	1	03/21/2020 09:44	WG1447912
Acrylonitrile	U		0.00239	0.0158	1	03/21/2020 09:44	WG1447912
Benzene	U		0.000504	0.00126	1	03/21/2020 09:44	WG1447912
Bromobenzene	U		0.00132	0.0158	1	03/21/2020 09:44	WG1447912
Bromodichloromethane	U		0.000993	0.00315	1	03/21/2020 09:44	WG1447912
Bromochloromethane	U		0.00142	0.00630	1	03/21/2020 09:44	WG1447912
Bromoform	U		0.00754	0.0315	1	03/21/2020 09:44	WG1447912
Bromomethane	U		0.00466	0.0158	1	03/21/2020 09:44	WG1447912
n-Butylbenzene	U		0.00484	0.0158	1	03/21/2020 09:44	WG1447912
sec-Butylbenzene	U		0.00319	0.0158	1	03/21/2020 09:44	WG1447912
tert-Butylbenzene	U		0.00195	0.00630	1	03/21/2020 09:44	WG1447912
Carbon disulfide	U		0.00512	0.0158	1	03/21/2020 09:44	WG1447912
Carbon tetrachloride	U		0.00136	0.00630	1	03/21/2020 09:44	WG1447912
Chlorobenzene	U		0.000722	0.00315	1	03/21/2020 09:44	WG1447912
Chlorodibromomethane	U		0.000567	0.00315	1	03/21/2020 09:44	WG1447912
Chloroethane	U		0.00136	0.00630	1	03/21/2020 09:44	WG1447912
Chloroform	0.000971	B J	0.000523	0.00315	1	03/21/2020 09:44	WG1447912
Chloromethane	U	J0	0.00175	0.0158	1	03/21/2020 09:44	WG1447912
2-Chlorotoluene	U		0.00116	0.00315	1	03/21/2020 09:44	WG1447912
4-Chlorotoluene	U		0.00142	0.00630	1	03/21/2020 09:44	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00643	0.0315	1	03/21/2020 09:44	WG1447912
1,2-Dibromoethane	U		0.000662	0.00315	1	03/21/2020 09:44	WG1447912
Dibromomethane	U		0.00126	0.00630	1	03/21/2020 09:44	WG1447912
1,2-Dichlorobenzene	U		0.00183	0.00630	1	03/21/2020 09:44	WG1447912
1,3-Dichlorobenzene	U		0.00214	0.00630	1	03/21/2020 09:44	WG1447912
1,4-Dichlorobenzene	U		0.00248	0.00630	1	03/21/2020 09:44	WG1447912
Dichlorodifluoromethane	U		0.00103	0.00315	1	03/21/2020 09:44	WG1447912
1,1-Dichloroethane	U		0.000725	0.00315	1	03/21/2020 09:44	WG1447912
1,2-Dichloroethane	U		0.000599	0.00315	1	03/21/2020 09:44	WG1447912
1,1-Dichloroethene	U		0.000630	0.00315	1	03/21/2020 09:44	WG1447912
cis-1,2-Dichloroethene	U		0.000870	0.00315	1	03/21/2020 09:44	WG1447912
trans-1,2-Dichloroethene	U		0.00180	0.00630	1	03/21/2020 09:44	WG1447912
1,2-Dichloropropane	U		0.00160	0.00630	1	03/21/2020 09:44	WG1447912
1,1-Dichloropropene	U		0.000882	0.00315	1	03/21/2020 09:44	WG1447912
1,3-Dichloropropane	U		0.00221	0.00630	1	03/21/2020 09:44	WG1447912
cis-1,3-Dichloropropene	U		0.000855	0.00315	1	03/21/2020 09:44	WG1447912
trans-1,3-Dichloropropene	U		0.00193	0.00630	1	03/21/2020 09:44	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00176	0.00630	1	03/21/2020 09:44	WG1447912
2,2-Dichloropropane	U		0.00100	0.00315	1	03/21/2020 09:44	WG1447912
Di-isopropyl ether	U		0.000441	0.00126	1	03/21/2020 09:44	WG1447912
Ethylbenzene	U		0.000668	0.00315	1	03/21/2020 09:44	WG1447912
Hexachloro-1,3-butadiene	U		0.0160	0.0315	1	03/21/2020 09:44	WG1447912
2-Hexanone	U		0.0126	0.0315	1	03/21/2020 09:44	WG1447912
n-Hexane	U		0.00134	0.00630	1	03/21/2020 09:44	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00763	0.0158	1	03/21/2020 09:44	WG1447912
Isopropylbenzene	U		0.00109	0.00315	1	03/21/2020 09:44	WG1447912
p-Isopropyltoluene	U		0.00294	0.00630	1	03/21/2020 09:44	WG1447912
2-Butanone (MEK)	0.0193	B J	0.0158	0.0315	1	03/21/2020 09:44	WG1447912
Methylene Chloride	U		0.00837	0.0315	1	03/21/2020 09:44	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0126	0.0315	1	03/21/2020 09:44	WG1447912
Methyl tert-butyl ether	U		0.000372	0.00126	1	03/21/2020 09:44	WG1447912
Naphthalene	0.00421	B J	0.00393	0.0158	1	03/21/2020 09:44	WG1447912
n-Propylbenzene	U		0.00149	0.00630	1	03/21/2020 09:44	WG1447912
Styrene	U		0.00344	0.0158	1	03/21/2020 09:44	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000630	0.00315	1	03/21/2020 09:44	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000492	0.00315	1	03/21/2020 09:44	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000851	0.00315	1	03/21/2020 09:44	WG1447912
Tetrachloroethene	0.00434		0.000882	0.00315	1	03/21/2020 09:44	WG1447912
Toluene	U		0.00158	0.00630	1	03/21/2020 09:44	WG1447912
1,2,3-Trichlorobenzene	U		0.000788	0.0158	1	03/21/2020 09:44	WG1447912
1,2,4-Trichlorobenzene	U		0.00608	0.0158	1	03/21/2020 09:44	WG1447912
1,1,1-Trichloroethane	U		0.000347	0.00315	1	03/21/2020 09:44	WG1447912
1,1,2-Trichloroethane	U		0.00111	0.00315	1	03/21/2020 09:44	WG1447912
Trichloroethene	U		0.000504	0.00126	1	03/21/2020 09:44	WG1447912
Trichlorofluoromethane	U		0.000630	0.00315	1	03/21/2020 09:44	WG1447912
1,2,3-Trichloropropane	U		0.00643	0.0158	1	03/21/2020 09:44	WG1447912
1,2,4-Trimethylbenzene	U		0.00146	0.00630	1	03/21/2020 09:44	WG1447912
1,2,3-Trimethylbenzene	U		0.00145	0.00630	1	03/21/2020 09:44	WG1447912
1,3,5-Trimethylbenzene	U		0.00136	0.00630	1	03/21/2020 09:44	WG1447912
Vinyl acetate	U	J0	0.00444	0.0158	1	03/21/2020 09:44	WG1447912
Vinyl chloride	U		0.000861	0.00315	1	03/21/2020 09:44	WG1447912
Xylenes, Total	U		0.00602	0.00819	1	03/21/2020 09:44	WG1447912
(S) Toluene-d8	*106*			*75.0-131*		*03/21/2020 09:44*	WG1447912
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*03/21/2020 09:44*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.5*			*70.0-130*		*03/21/2020 09:44*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.0		1	03/22/2020 03:01	WG1447722

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.932	2.75	25	03/20/2020 23:35	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*97.2*			*77.0-120*		*03/20/2020 23:35*	WG1447769

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0151	0.0275	1	03/21/2020 10:03	WG1447912
Acrylonitrile	U		0.00209	0.0137	1	03/21/2020 10:03	WG1447912
Benzene	U		0.000440	0.00110	1	03/21/2020 10:03	WG1447912
Bromobenzene	U		0.00115	0.0137	1	03/21/2020 10:03	WG1447912
Bromodichloromethane	U		0.000866	0.00275	1	03/21/2020 10:03	WG1447912
Bromochloromethane	U		0.00124	0.00549	1	03/21/2020 10:03	WG1447912
Bromoform	U		0.00657	0.0275	1	03/21/2020 10:03	WG1447912
Bromomethane	U		0.00407	0.0137	1	03/21/2020 10:03	WG1447912
n-Butylbenzene	U		0.00422	0.0137	1	03/21/2020 10:03	WG1447912
sec-Butylbenzene	U		0.00278	0.0137	1	03/21/2020 10:03	WG1447912
tert-Butylbenzene	U		0.00170	0.00549	1	03/21/2020 10:03	WG1447912
Carbon disulfide	U		0.00446	0.0137	1	03/21/2020 10:03	WG1447912
Carbon tetrachloride	U		0.00119	0.00549	1	03/21/2020 10:03	WG1447912
Chlorobenzene	U		0.000630	0.00275	1	03/21/2020 10:03	WG1447912
Chlorodibromomethane	U		0.000495	0.00275	1	03/21/2020 10:03	WG1447912
Chloroethane	U		0.00119	0.00549	1	03/21/2020 10:03	WG1447912
Chloroform	0.00107	B J	0.000456	0.00275	1	03/21/2020 10:03	WG1447912
Chloromethane	U	J0	0.00153	0.0137	1	03/21/2020 10:03	WG1447912
2-Chlorotoluene	U		0.00101	0.00275	1	03/21/2020 10:03	WG1447912
4-Chlorotoluene	U		0.00124	0.00549	1	03/21/2020 10:03	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00560	0.0275	1	03/21/2020 10:03	WG1447912
1,2-Dibromoethane	U		0.000577	0.00275	1	03/21/2020 10:03	WG1447912
Dibromomethane	U		0.00110	0.00549	1	03/21/2020 10:03	WG1447912
1,2-Dichlorobenzene	U		0.00159	0.00549	1	03/21/2020 10:03	WG1447912
1,3-Dichlorobenzene	U		0.00187	0.00549	1	03/21/2020 10:03	WG1447912
1,4-Dichlorobenzene	U		0.00216	0.00549	1	03/21/2020 10:03	WG1447912
Dichlorodifluoromethane	U		0.000899	0.00275	1	03/21/2020 10:03	WG1447912
1,1-Dichloroethane	U		0.000632	0.00275	1	03/21/2020 10:03	WG1447912
1,2-Dichloroethane	U		0.000522	0.00275	1	03/21/2020 10:03	WG1447912
1,1-Dichloroethene	U		0.000549	0.00275	1	03/21/2020 10:03	WG1447912
cis-1,2-Dichloroethene	U		0.000758	0.00275	1	03/21/2020 10:03	WG1447912
trans-1,2-Dichloroethene	U		0.00157	0.00549	1	03/21/2020 10:03	WG1447912
1,2-Dichloropropane	U		0.00140	0.00549	1	03/21/2020 10:03	WG1447912
1,1-Dichloropropene	U		0.000769	0.00275	1	03/21/2020 10:03	WG1447912
1,3-Dichloropropane	U		0.00192	0.00549	1	03/21/2020 10:03	WG1447912
cis-1,3-Dichloropropene	U		0.000745	0.00275	1	03/21/2020 10:03	WG1447912
trans-1,3-Dichloropropene	U		0.00168	0.00549	1	03/21/2020 10:03	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00154	0.00549	1	03/21/2020 10:03	WG1447912
2,2-Dichloropropane	U		0.000871	0.00275	1	03/21/2020 10:03	WG1447912
Di-isopropyl ether	U		0.000385	0.00110	1	03/21/2020 10:03	WG1447912
Ethylbenzene	U		0.000582	0.00275	1	03/21/2020 10:03	WG1447912
Hexachloro-1,3-butadiene	U		0.0140	0.0275	1	03/21/2020 10:03	WG1447912
2-Hexanone	U		0.0110	0.0275	1	03/21/2020 10:03	WG1447912
n-Hexane	U		0.00116	0.00549	1	03/21/2020 10:03	WG1447912

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

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00665	0.0137	1	03/21/2020 10:03	WG1447912
Isopropylbenzene	U		0.000948	0.00275	1	03/21/2020 10:03	WG1447912
p-Isopropyltoluene	U		0.00256	0.00549	1	03/21/2020 10:03	WG1447912
2-Butanone (MEK)	0.0277	B	0.0137	0.0275	1	03/21/2020 10:03	WG1447912
Methylene Chloride	U		0.00730	0.0275	1	03/21/2020 10:03	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0275	1	03/21/2020 10:03	WG1447912
Methyl tert-butyl ether	U		0.000324	0.00110	1	03/21/2020 10:03	WG1447912
Naphthalene	0.00373	B J	0.00343	0.0137	1	03/21/2020 10:03	WG1447912
n-Propylbenzene	U		0.00130	0.00549	1	03/21/2020 10:03	WG1447912
Styrene	U		0.00300	0.0137	1	03/21/2020 10:03	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000549	0.00275	1	03/21/2020 10:03	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000429	0.00275	1	03/21/2020 10:03	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000742	0.00275	1	03/21/2020 10:03	WG1447912
Tetrachloroethene	0.00327		0.000769	0.00275	1	03/21/2020 10:03	WG1447912
Toluene	U		0.00137	0.00549	1	03/21/2020 10:03	WG1447912
1,2,3-Trichlorobenzene	U		0.000687	0.0137	1	03/21/2020 10:03	WG1447912
1,2,4-Trichlorobenzene	U		0.00530	0.0137	1	03/21/2020 10:03	WG1447912
1,1,1-Trichloroethane	U		0.000302	0.00275	1	03/21/2020 10:03	WG1447912
1,1,2-Trichloroethane	U		0.000970	0.00275	1	03/21/2020 10:03	WG1447912
Trichloroethene	U		0.000440	0.00110	1	03/21/2020 10:03	WG1447912
Trichlorofluoromethane	U		0.000549	0.00275	1	03/21/2020 10:03	WG1447912
1,2,3-Trichloropropane	U		0.00560	0.0137	1	03/21/2020 10:03	WG1447912
1,2,4-Trimethylbenzene	U		0.00127	0.00549	1	03/21/2020 10:03	WG1447912
1,2,3-Trimethylbenzene	U		0.00126	0.00549	1	03/21/2020 10:03	WG1447912
1,3,5-Trimethylbenzene	U		0.00119	0.00549	1	03/21/2020 10:03	WG1447912
Vinyl acetate	U	J0	0.00387	0.0137	1	03/21/2020 10:03	WG1447912
Vinyl chloride	U		0.000751	0.00275	1	03/21/2020 10:03	WG1447912
Xylenes, Total	U		0.00525	0.00714	1	03/21/2020 10:03	WG1447912
(S) Toluene-d8	*106*			*75.0-131*		*03/21/2020 10:03*	WG1447912
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*		*03/21/2020 10:03*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*03/21/2020 10:03*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	60.5		1	03/22/2020 03:01	WG1447722

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.40	4.13	25	03/20/2020 23:59	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*98.8*			*77.0-120*		*03/20/2020 23:59*	WG1447769

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0226	0.0413	1	03/21/2020 10:22	WG1447912
Acrylonitrile	U		0.00314	0.0206	1	03/21/2020 10:22	WG1447912
Benzene	U		0.000661	0.00165	1	03/21/2020 10:22	WG1447912
Bromobenzene	U		0.00173	0.0206	1	03/21/2020 10:22	WG1447912
Bromodichloromethane	U		0.00130	0.00413	1	03/21/2020 10:22	WG1447912
Bromochloromethane	U		0.00187	0.00826	1	03/21/2020 10:22	WG1447912
Bromoform	U		0.00988	0.0413	1	03/21/2020 10:22	WG1447912
Bromomethane	U		0.00611	0.0206	1	03/21/2020 10:22	WG1447912
n-Butylbenzene	U		0.00634	0.0206	1	03/21/2020 10:22	WG1447912
sec-Butylbenzene	U		0.00418	0.0206	1	03/21/2020 10:22	WG1447912
tert-Butylbenzene	U		0.00256	0.00826	1	03/21/2020 10:22	WG1447912
Carbon disulfide	U		0.00671	0.0206	1	03/21/2020 10:22	WG1447912
Carbon tetrachloride	U		0.00178	0.00826	1	03/21/2020 10:22	WG1447912
Chlorobenzene	U		0.000946	0.00413	1	03/21/2020 10:22	WG1447912
Chlorodibromomethane	U		0.000743	0.00413	1	03/21/2020 10:22	WG1447912
Chloroethane	U		0.00178	0.00826	1	03/21/2020 10:22	WG1447912
Chloroform	0.00107	B J	0.000685	0.00413	1	03/21/2020 10:22	WG1447912
Chloromethane	U	J0	0.00230	0.0206	1	03/21/2020 10:22	WG1447912
2-Chlorotoluene	U		0.00152	0.00413	1	03/21/2020 10:22	WG1447912
4-Chlorotoluene	U		0.00187	0.00826	1	03/21/2020 10:22	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00842	0.0413	1	03/21/2020 10:22	WG1447912
1,2-Dibromoethane	U		0.000867	0.00413	1	03/21/2020 10:22	WG1447912
Dibromomethane	U		0.00165	0.00826	1	03/21/2020 10:22	WG1447912
1,2-Dichlorobenzene	U		0.00239	0.00826	1	03/21/2020 10:22	WG1447912
1,3-Dichlorobenzene	U		0.00281	0.00826	1	03/21/2020 10:22	WG1447912
1,4-Dichlorobenzene	U		0.00325	0.00826	1	03/21/2020 10:22	WG1447912
Dichlorodifluoromethane	U		0.00135	0.00413	1	03/21/2020 10:22	WG1447912
1,1-Dichloroethane	U		0.000950	0.00413	1	03/21/2020 10:22	WG1447912
1,2-Dichloroethane	U		0.000784	0.00413	1	03/21/2020 10:22	WG1447912
1,1-Dichloroethene	U		0.000826	0.00413	1	03/21/2020 10:22	WG1447912
cis-1,2-Dichloroethene	U		0.00114	0.00413	1	03/21/2020 10:22	WG1447912
trans-1,2-Dichloroethene	U		0.00236	0.00826	1	03/21/2020 10:22	WG1447912
1,2-Dichloropropane	U		0.00210	0.00826	1	03/21/2020 10:22	WG1447912
1,1-Dichloropropene	U		0.00116	0.00413	1	03/21/2020 10:22	WG1447912
1,3-Dichloropropane	U		0.00289	0.00826	1	03/21/2020 10:22	WG1447912
cis-1,3-Dichloropropene	U		0.00112	0.00413	1	03/21/2020 10:22	WG1447912
trans-1,3-Dichloropropene	U		0.00253	0.00826	1	03/21/2020 10:22	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00231	0.00826	1	03/21/2020 10:22	WG1447912
2,2-Dichloropropane	U		0.00131	0.00413	1	03/21/2020 10:22	WG1447912
Di-isopropyl ether	U		0.000578	0.00165	1	03/21/2020 10:22	WG1447912
Ethylbenzene	U		0.000875	0.00413	1	03/21/2020 10:22	WG1447912
Hexachloro-1,3-butadiene	U		0.0210	0.0413	1	03/21/2020 10:22	WG1447912
2-Hexanone	U		0.0165	0.0413	1	03/21/2020 10:22	WG1447912
n-Hexane	U		0.00175	0.00826	1	03/21/2020 10:22	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00999	0.0206	1	03/21/2020 10:22	WG1447912
Isopropylbenzene	U		0.00143	0.00413	1	03/21/2020 10:22	WG1447912
p-Isopropyltoluene	U		0.00385	0.00826	1	03/21/2020 10:22	WG1447912
2-Butanone (MEK)	0.0337	B J	0.0206	0.0413	1	03/21/2020 10:22	WG1447912
Methylene Chloride	U		0.0110	0.0413	1	03/21/2020 10:22	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0165	0.0413	1	03/21/2020 10:22	WG1447912
Methyl tert-butyl ether	U		0.000487	0.00165	1	03/21/2020 10:22	WG1447912
Naphthalene	U		0.00515	0.0206	1	03/21/2020 10:22	WG1447912
n-Propylbenzene	U		0.00195	0.00826	1	03/21/2020 10:22	WG1447912
Styrene	U		0.00451	0.0206	1	03/21/2020 10:22	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000826	0.00413	1	03/21/2020 10:22	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000644	0.00413	1	03/21/2020 10:22	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.00111	0.00413	1	03/21/2020 10:22	WG1447912
Tetrachloroethene	0.00401	J	0.00116	0.00413	1	03/21/2020 10:22	WG1447912
Toluene	U		0.00206	0.00826	1	03/21/2020 10:22	WG1447912
1,2,3-Trichlorobenzene	U		0.00103	0.0206	1	03/21/2020 10:22	WG1447912
1,2,4-Trichlorobenzene	U		0.00796	0.0206	1	03/21/2020 10:22	WG1447912
1,1,1-Trichloroethane	U		0.000454	0.00413	1	03/21/2020 10:22	WG1447912
1,1,2-Trichloroethane	U		0.00146	0.00413	1	03/21/2020 10:22	WG1447912
Trichloroethene	U		0.000661	0.00165	1	03/21/2020 10:22	WG1447912
Trichlorofluoromethane	U		0.000826	0.00413	1	03/21/2020 10:22	WG1447912
1,2,3-Trichloropropane	U		0.00842	0.0206	1	03/21/2020 10:22	WG1447912
1,2,4-Trimethylbenzene	U		0.00192	0.00826	1	03/21/2020 10:22	WG1447912
1,2,3-Trimethylbenzene	U		0.00190	0.00826	1	03/21/2020 10:22	WG1447912
1,3,5-Trimethylbenzene	U		0.00178	0.00826	1	03/21/2020 10:22	WG1447912
Vinyl acetate	U	J0	0.00581	0.0206	1	03/21/2020 10:22	WG1447912
Vinyl chloride	U		0.00113	0.00413	1	03/21/2020 10:22	WG1447912
Xylenes, Total	U		0.00789	0.0107	1	03/21/2020 10:22	WG1447912
(S) Toluene-d8	*105*			*75.0-131*		*03/21/2020 10:22*	WG1447912
(S) 4-Bromofluorobenzene	*98.5*			*67.0-138*		*03/21/2020 10:22*	WG1447912
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*		*03/21/2020 10:22*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	59.8		1	03/22/2020 03:01	WG1447722

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	1.72	J	1.67	4.94	29.5	03/21/2020 00:23	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*98.7*			*77.0-120*		*03/21/2020 00:23*	WG1447769

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0326	0.0594	1.42	03/21/2020 10:41	WG1447912
Acrylonitrile	U		0.00452	0.0298	1.42	03/21/2020 10:41	WG1447912
Benzene	0.00356		0.000951	0.00238	1.42	03/21/2020 10:41	WG1447912
Bromobenzene	U		0.00249	0.0298	1.42	03/21/2020 10:41	WG1447912
Bromodichloromethane	U		0.00187	0.00594	1.42	03/21/2020 10:41	WG1447912
Bromochloromethane	U		0.00268	0.0119	1.42	03/21/2020 10:41	WG1447912
Bromoform	U		0.0142	0.0594	1.42	03/21/2020 10:41	WG1447912
Bromomethane	U		0.00879	0.0298	1.42	03/21/2020 10:41	WG1447912
n-Butylbenzene	U		0.00912	0.0298	1.42	03/21/2020 10:41	WG1447912
sec-Butylbenzene	U		0.00601	0.0298	1.42	03/21/2020 10:41	WG1447912
tert-Butylbenzene	U		0.00368	0.0119	1.42	03/21/2020 10:41	WG1447912
Carbon disulfide	U		0.00966	0.0298	1.42	03/21/2020 10:41	WG1447912
Carbon tetrachloride	U		0.00256	0.0119	1.42	03/21/2020 10:41	WG1447912
Chlorobenzene	U		0.00136	0.00594	1.42	03/21/2020 10:41	WG1447912
Chlorodibromomethane	U		0.00107	0.00594	1.42	03/21/2020 10:41	WG1447912
Chloroethane	U		0.00256	0.0119	1.42	03/21/2020 10:41	WG1447912
Chloroform	0.0159	B	0.000986	0.00594	1.42	03/21/2020 10:41	WG1447912
Chloromethane	U	J0	0.00330	0.0298	1.42	03/21/2020 10:41	WG1447912
2-Chlorotoluene	U		0.00219	0.00594	1.42	03/21/2020 10:41	WG1447912
4-Chlorotoluene	U		0.00268	0.0119	1.42	03/21/2020 10:41	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.0121	0.0594	1.42	03/21/2020 10:41	WG1447912
1,2-Dibromoethane	U		0.00125	0.00594	1.42	03/21/2020 10:41	WG1447912
Dibromomethane	U		0.00238	0.0119	1.42	03/21/2020 10:41	WG1447912
1,2-Dichlorobenzene	U		0.00345	0.0119	1.42	03/21/2020 10:41	WG1447912
1,3-Dichlorobenzene	U		0.00403	0.0119	1.42	03/21/2020 10:41	WG1447912
1,4-Dichlorobenzene	U		0.00469	0.0119	1.42	03/21/2020 10:41	WG1447912
Dichlorodifluoromethane	U		0.00194	0.00594	1.42	03/21/2020 10:41	WG1447912
1,1-Dichloroethane	U		0.00137	0.00594	1.42	03/21/2020 10:41	WG1447912
1,2-Dichloroethane	U		0.00113	0.00594	1.42	03/21/2020 10:41	WG1447912
1,1-Dichloroethene	U		0.00119	0.00594	1.42	03/21/2020 10:41	WG1447912
cis-1,2-Dichloroethene	0.192		0.00164	0.00594	1.42	03/21/2020 10:41	WG1447912
trans-1,2-Dichloroethene	0.0162		0.00340	0.0119	1.42	03/21/2020 10:41	WG1447912
1,2-Dichloropropane	U		0.00301	0.0119	1.42	03/21/2020 10:41	WG1447912
1,1-Dichloropropene	U		0.00166	0.00594	1.42	03/21/2020 10:41	WG1447912
1,3-Dichloropropane	U		0.00417	0.0119	1.42	03/21/2020 10:41	WG1447912
cis-1,3-Dichloropropene	U		0.00161	0.00594	1.42	03/21/2020 10:41	WG1447912
trans-1,3-Dichloropropene	U		0.00363	0.0119	1.42	03/21/2020 10:41	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00333	0.0119	1.42	03/21/2020 10:41	WG1447912
2,2-Dichloropropane	U		0.00189	0.00594	1.42	03/21/2020 10:41	WG1447912
Di-isopropyl ether	U		0.000832	0.00238	1.42	03/21/2020 10:41	WG1447912
Ethylbenzene	0.00517	J	0.00126	0.00594	1.42	03/21/2020 10:41	WG1447912
Hexachloro-1,3-butadiene	U		0.0301	0.0594	1.42	03/21/2020 10:41	WG1447912
2-Hexanone	U		0.0238	0.0594	1.42	03/21/2020 10:41	WG1447912
n-Hexane	0.00760	J	0.00253	0.0119	1.42	03/21/2020 10:41	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.0144	0.0298	1.42	03/21/2020 10:41	WG1447912
Isopropylbenzene	U		0.00206	0.00594	1.42	03/21/2020 10:41	WG1447912
p-Isopropyltoluene	0.0331		0.00554	0.0119	1.42	03/21/2020 10:41	WG1447912
2-Butanone (MEK)	0.0656	B	0.0298	0.0594	1.42	03/21/2020 10:41	WG1447912
Methylene Chloride	U		0.0158	0.0594	1.42	03/21/2020 10:41	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0238	0.0594	1.42	03/21/2020 10:41	WG1447912
Methyl tert-butyl ether	U		0.000701	0.00238	1.42	03/21/2020 10:41	WG1447912
Naphthalene	0.0109	B J	0.00741	0.0298	1.42	03/21/2020 10:41	WG1447912
n-Propylbenzene	U		0.00281	0.0119	1.42	03/21/2020 10:41	WG1447912
Styrene	U		0.00649	0.0298	1.42	03/21/2020 10:41	WG1447912
1,1,1,2-Tetrachloroethane	U		0.00119	0.00594	1.42	03/21/2020 10:41	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000927	0.00594	1.42	03/21/2020 10:41	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.00160	0.00594	1.42	03/21/2020 10:41	WG1447912
Tetrachloroethene	2.44		0.00166	0.00594	1.42	03/21/2020 10:41	WG1447912
Toluene	0.0644		0.00298	0.0119	1.42	03/21/2020 10:41	WG1447912
1,2,3-Trichlorobenzene	U		0.00149	0.0298	1.42	03/21/2020 10:41	WG1447912
1,2,4-Trichlorobenzene	U		0.0114	0.0298	1.42	03/21/2020 10:41	WG1447912
1,1,1-Trichloroethane	U		0.000654	0.00594	1.42	03/21/2020 10:41	WG1447912
1,1,2-Trichloroethane	U		0.00209	0.00594	1.42	03/21/2020 10:41	WG1447912
Trichloroethene	0.969		0.000951	0.00238	1.42	03/21/2020 10:41	WG1447912
Trichlorofluoromethane	U		0.00119	0.00594	1.42	03/21/2020 10:41	WG1447912
1,2,3-Trichloropropane	U		0.0121	0.0298	1.42	03/21/2020 10:41	WG1447912
1,2,4-Trimethylbenzene	0.00790	J	0.00276	0.0119	1.42	03/21/2020 10:41	WG1447912
1,2,3-Trimethylbenzene	0.00874	J	0.00273	0.0119	1.42	03/21/2020 10:41	WG1447912
1,3,5-Trimethylbenzene	0.00291	J	0.00256	0.0119	1.42	03/21/2020 10:41	WG1447912
Vinyl acetate	U	J0	0.00837	0.0298	1.42	03/21/2020 10:41	WG1447912
Vinyl chloride	U		0.00162	0.00594	1.42	03/21/2020 10:41	WG1447912
Xylenes, Total	0.0251		0.0114	0.0154	1.42	03/21/2020 10:41	WG1447912
(S) Toluene-d8	*106*			*75.0-131*		*03/21/2020 10:41*	WG1447912
(S) 4-Bromofluorobenzene	*99.1*			*67.0-138*		*03/21/2020 10:41*	WG1447912
(S) 1,2-Dichloroethane-d4	*98.5*			*70.0-130*		*03/21/2020 10:41*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.7		1	03/22/2020 03:01	WG1447722

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	1.13	J	0.915	2.70	25	03/21/2020 00:47	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*77.0-120*		*03/21/2020 00:47*	WG1447769

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0148	0.0270	1	03/21/2020 11:00	WG1447912
Acrylonitrile	U		0.00205	0.0135	1	03/21/2020 11:00	WG1447912
Benzene	U		0.000432	0.00108	1	03/21/2020 11:00	WG1447912
Bromobenzene	U		0.00113	0.0135	1	03/21/2020 11:00	WG1447912
Bromodichloromethane	U		0.000850	0.00270	1	03/21/2020 11:00	WG1447912
Bromochloromethane	U		0.00122	0.00540	1	03/21/2020 11:00	WG1447912
Bromoform	U		0.00645	0.0270	1	03/21/2020 11:00	WG1447912
Bromomethane	U		0.00399	0.0135	1	03/21/2020 11:00	WG1447912
n-Butylbenzene	U		0.00414	0.0135	1	03/21/2020 11:00	WG1447912
sec-Butylbenzene	U		0.00273	0.0135	1	03/21/2020 11:00	WG1447912
tert-Butylbenzene	U		0.00167	0.00540	1	03/21/2020 11:00	WG1447912
Carbon disulfide	U		0.00438	0.0135	1	03/21/2020 11:00	WG1447912
Carbon tetrachloride	U		0.00117	0.00540	1	03/21/2020 11:00	WG1447912
Chlorobenzene	U		0.000618	0.00270	1	03/21/2020 11:00	WG1447912
Chlorodibromomethane	U		0.000486	0.00270	1	03/21/2020 11:00	WG1447912
Chloroethane	U		0.00117	0.00540	1	03/21/2020 11:00	WG1447912
Chloroform	0.000690	B J	0.000448	0.00270	1	03/21/2020 11:00	WG1447912
Chloromethane	U	J0	0.00150	0.0135	1	03/21/2020 11:00	WG1447912
2-Chlorotoluene	U		0.000993	0.00270	1	03/21/2020 11:00	WG1447912
4-Chlorotoluene	U		0.00122	0.00540	1	03/21/2020 11:00	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00550	0.0270	1	03/21/2020 11:00	WG1447912
1,2-Dibromoethane	U		0.000567	0.00270	1	03/21/2020 11:00	WG1447912
Dibromomethane	U		0.00108	0.00540	1	03/21/2020 11:00	WG1447912
1,2-Dichlorobenzene	U		0.00156	0.00540	1	03/21/2020 11:00	WG1447912
1,3-Dichlorobenzene	U		0.00183	0.00540	1	03/21/2020 11:00	WG1447912
1,4-Dichlorobenzene	U		0.00213	0.00540	1	03/21/2020 11:00	WG1447912
Dichlorodifluoromethane	U		0.000883	0.00270	1	03/21/2020 11:00	WG1447912
1,1-Dichloroethane	U		0.000620	0.00270	1	03/21/2020 11:00	WG1447912
1,2-Dichloroethane	U		0.000513	0.00270	1	03/21/2020 11:00	WG1447912
1,1-Dichloroethene	U		0.000540	0.00270	1	03/21/2020 11:00	WG1447912
cis-1,2-Dichloroethene	0.00615		0.000745	0.00270	1	03/21/2020 11:00	WG1447912
trans-1,2-Dichloroethene	U		0.00154	0.00540	1	03/21/2020 11:00	WG1447912
1,2-Dichloropropane	U		0.00137	0.00540	1	03/21/2020 11:00	WG1447912
1,1-Dichloropropene	U		0.000755	0.00270	1	03/21/2020 11:00	WG1447912
1,3-Dichloropropane	U		0.00189	0.00540	1	03/21/2020 11:00	WG1447912
cis-1,3-Dichloropropene	U		0.000732	0.00270	1	03/21/2020 11:00	WG1447912
trans-1,3-Dichloropropene	U		0.00165	0.00540	1	03/21/2020 11:00	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00151	0.00540	1	03/21/2020 11:00	WG1447912
2,2-Dichloropropane	U		0.000856	0.00270	1	03/21/2020 11:00	WG1447912
Di-isopropyl ether	U		0.000378	0.00108	1	03/21/2020 11:00	WG1447912
Ethylbenzene	U		0.000572	0.00270	1	03/21/2020 11:00	WG1447912
Hexachloro-1,3-butadiene	U		0.0137	0.0270	1	03/21/2020 11:00	WG1447912
2-Hexanone	U		0.0108	0.0270	1	03/21/2020 11:00	WG1447912
n-Hexane	U		0.00114	0.00540	1	03/21/2020 11:00	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00653	0.0135	1	03/21/2020 11:00	WG1447912
Isopropylbenzene	U		0.000931	0.00270	1	03/21/2020 11:00	WG1447912
p-Isopropyltoluene	U		0.00251	0.00540	1	03/21/2020 11:00	WG1447912
2-Butanone (MEK)	0.0259	B J	0.0135	0.0270	1	03/21/2020 11:00	WG1447912
Methylene Chloride	U		0.00717	0.0270	1	03/21/2020 11:00	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0108	0.0270	1	03/21/2020 11:00	WG1447912
Methyl tert-butyl ether	U		0.000318	0.00108	1	03/21/2020 11:00	WG1447912
Naphthalene	U		0.00337	0.0135	1	03/21/2020 11:00	WG1447912
n-Propylbenzene	U		0.00127	0.00540	1	03/21/2020 11:00	WG1447912
Styrene	U		0.00295	0.0135	1	03/21/2020 11:00	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000540	0.00270	1	03/21/2020 11:00	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000421	0.00270	1	03/21/2020 11:00	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000728	0.00270	1	03/21/2020 11:00	WG1447912
Tetrachloroethene	0.00190	J	0.000755	0.00270	1	03/21/2020 11:00	WG1447912
Toluene	U		0.00135	0.00540	1	03/21/2020 11:00	WG1447912
1,2,3-Trichlorobenzene	U		0.000674	0.0135	1	03/21/2020 11:00	WG1447912
1,2,4-Trichlorobenzene	U		0.00520	0.0135	1	03/21/2020 11:00	WG1447912
1,1,1-Trichloroethane	U		0.000297	0.00270	1	03/21/2020 11:00	WG1447912
1,1,2-Trichloroethane	U		0.000953	0.00270	1	03/21/2020 11:00	WG1447912
Trichloroethene	0.000747	J	0.000432	0.00108	1	03/21/2020 11:00	WG1447912
Trichlorofluoromethane	U		0.000540	0.00270	1	03/21/2020 11:00	WG1447912
1,2,3-Trichloropropane	U		0.00550	0.0135	1	03/21/2020 11:00	WG1447912
1,2,4-Trimethylbenzene	U		0.00125	0.00540	1	03/21/2020 11:00	WG1447912
1,2,3-Trimethylbenzene	U		0.00124	0.00540	1	03/21/2020 11:00	WG1447912
1,3,5-Trimethylbenzene	U		0.00117	0.00540	1	03/21/2020 11:00	WG1447912
Vinyl acetate	U	J0	0.00380	0.0135	1	03/21/2020 11:00	WG1447912
Vinyl chloride	U		0.000737	0.00270	1	03/21/2020 11:00	WG1447912
Xylenes, Total	U		0.00516	0.00701	1	03/21/2020 11:00	WG1447912
(S) Toluene-d8	*107*			*75.0-131*		*03/21/2020 11:00*	WG1447912
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*03/21/2020 11:00*	WG1447912
(S) 1,2-Dichloroethane-d4	*95.8*			*70.0-130*		*03/21/2020 11:00*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.6		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.946	2.79	25	03/21/2020 01:11	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*03/21/2020 01:11*	WG1447769

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0153	0.0279	1	03/21/2020 11:19	WG1447912
Acrylonitrile	U		0.00212	0.0140	1	03/21/2020 11:19	WG1447912
Benzene	U		0.000446	0.00112	1	03/21/2020 11:19	WG1447912
Bromobenzene	U		0.00117	0.0140	1	03/21/2020 11:19	WG1447912
Bromodichloromethane	U		0.000880	0.00279	1	03/21/2020 11:19	WG1447912
Bromochloromethane	U		0.00126	0.00558	1	03/21/2020 11:19	WG1447912
Bromoform	U		0.00667	0.0279	1	03/21/2020 11:19	WG1447912
Bromomethane	U		0.00413	0.0140	1	03/21/2020 11:19	WG1447912
n-Butylbenzene	U		0.00429	0.0140	1	03/21/2020 11:19	WG1447912
sec-Butylbenzene	U		0.00282	0.0140	1	03/21/2020 11:19	WG1447912
tert-Butylbenzene	U		0.00173	0.00558	1	03/21/2020 11:19	WG1447912
Carbon disulfide	U		0.00453	0.0140	1	03/21/2020 11:19	WG1447912
Carbon tetrachloride	U		0.00121	0.00558	1	03/21/2020 11:19	WG1447912
Chlorobenzene	U		0.000640	0.00279	1	03/21/2020 11:19	WG1447912
Chlorodibromomethane	U		0.000502	0.00279	1	03/21/2020 11:19	WG1447912
Chloroethane	U		0.00121	0.00558	1	03/21/2020 11:19	WG1447912
Chloroform	0.00107	B J	0.000463	0.00279	1	03/21/2020 11:19	WG1447912
Chloromethane	U	J0	0.00155	0.0140	1	03/21/2020 11:19	WG1447912
2-Chlorotoluene	U		0.00103	0.00279	1	03/21/2020 11:19	WG1447912
4-Chlorotoluene	U		0.00126	0.00558	1	03/21/2020 11:19	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00569	0.0279	1	03/21/2020 11:19	WG1447912
1,2-Dibromoethane	U		0.000586	0.00279	1	03/21/2020 11:19	WG1447912
Dibromomethane	U		0.00112	0.00558	1	03/21/2020 11:19	WG1447912
1,2-Dichlorobenzene	U		0.00162	0.00558	1	03/21/2020 11:19	WG1447912
1,3-Dichlorobenzene	U		0.00190	0.00558	1	03/21/2020 11:19	WG1447912
1,4-Dichlorobenzene	U		0.00220	0.00558	1	03/21/2020 11:19	WG1447912
Dichlorodifluoromethane	U		0.000913	0.00279	1	03/21/2020 11:19	WG1447912
1,1-Dichloroethane	U		0.000642	0.00279	1	03/21/2020 11:19	WG1447912
1,2-Dichloroethane	U		0.000530	0.00279	1	03/21/2020 11:19	WG1447912
1,1-Dichloroethene	U		0.000558	0.00279	1	03/21/2020 11:19	WG1447912
cis-1,2-Dichloroethene	U		0.000770	0.00279	1	03/21/2020 11:19	WG1447912
trans-1,2-Dichloroethene	U		0.00160	0.00558	1	03/21/2020 11:19	WG1447912
1,2-Dichloropropane	U		0.00142	0.00558	1	03/21/2020 11:19	WG1447912
1,1-Dichloropropene	U		0.000781	0.00279	1	03/21/2020 11:19	WG1447912
1,3-Dichloropropane	U		0.00195	0.00558	1	03/21/2020 11:19	WG1447912
cis-1,3-Dichloropropene	U		0.000757	0.00279	1	03/21/2020 11:19	WG1447912
trans-1,3-Dichloropropene	U		0.00171	0.00558	1	03/21/2020 11:19	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00156	0.00558	1	03/21/2020 11:19	WG1447912
2,2-Dichloropropane	U		0.000885	0.00279	1	03/21/2020 11:19	WG1447912
Di-isopropyl ether	U		0.000391	0.00112	1	03/21/2020 11:19	WG1447912
Ethylbenzene	U		0.000592	0.00279	1	03/21/2020 11:19	WG1447912
Hexachloro-1,3-butadiene	U		0.0142	0.0279	1	03/21/2020 11:19	WG1447912
2-Hexanone	U		0.0112	0.0279	1	03/21/2020 11:19	WG1447912
n-Hexane	U		0.00118	0.00558	1	03/21/2020 11:19	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00675	0.0140	1	03/21/2020 11:19	WG1447912
Isopropylbenzene	U		0.000963	0.00279	1	03/21/2020 11:19	WG1447912
p-Isopropyltoluene	U		0.00260	0.00558	1	03/21/2020 11:19	WG1447912
2-Butanone (MEK)	U		0.0140	0.0279	1	03/21/2020 11:19	WG1447912
Methylene Chloride	U		0.00741	0.0279	1	03/21/2020 11:19	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0112	0.0279	1	03/21/2020 11:19	WG1447912
Methyl tert-butyl ether	U		0.000329	0.00112	1	03/21/2020 11:19	WG1447912
Naphthalene	0.00358	B J	0.00348	0.0140	1	03/21/2020 11:19	WG1447912
n-Propylbenzene	U		0.00132	0.00558	1	03/21/2020 11:19	WG1447912
Styrene	U		0.00305	0.0140	1	03/21/2020 11:19	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000558	0.00279	1	03/21/2020 11:19	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000435	0.00279	1	03/21/2020 11:19	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000753	0.00279	1	03/21/2020 11:19	WG1447912
Tetrachloroethene	0.288		0.000781	0.00279	1	03/21/2020 11:19	WG1447912
Toluene	U		0.00140	0.00558	1	03/21/2020 11:19	WG1447912
1,2,3-Trichlorobenzene	U		0.000698	0.0140	1	03/21/2020 11:19	WG1447912
1,2,4-Trichlorobenzene	U		0.00538	0.0140	1	03/21/2020 11:19	WG1447912
1,1,1-Trichloroethane	U		0.000307	0.00279	1	03/21/2020 11:19	WG1447912
1,1,2-Trichloroethane	U		0.000986	0.00279	1	03/21/2020 11:19	WG1447912
Trichloroethene	0.00194		0.000446	0.00112	1	03/21/2020 11:19	WG1447912
Trichlorofluoromethane	U		0.000558	0.00279	1	03/21/2020 11:19	WG1447912
1,2,3-Trichloropropane	U		0.00569	0.0140	1	03/21/2020 11:19	WG1447912
1,2,4-Trimethylbenzene	U		0.00129	0.00558	1	03/21/2020 11:19	WG1447912
1,2,3-Trimethylbenzene	U		0.00128	0.00558	1	03/21/2020 11:19	WG1447912
1,3,5-Trimethylbenzene	U		0.00121	0.00558	1	03/21/2020 11:19	WG1447912
Vinyl acetate	U	J0	0.00393	0.0140	1	03/21/2020 11:19	WG1447912
Vinyl chloride	U		0.000762	0.00279	1	03/21/2020 11:19	WG1447912
Xylenes, Total	U		0.00534	0.00725	1	03/21/2020 11:19	WG1447912
(S) Toluene-d8	*105*			*75.0-131*		*03/21/2020 11:19*	WG1447912
(S) 4-Bromofluorobenzene	*99.1*			*67.0-138*		*03/21/2020 11:19*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.7*			*70.0-130*		*03/21/2020 11:19*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.2		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.940	2.77	25	03/21/2020 01:35	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*99.7*			*77.0-120*		*03/21/2020 01:35*	WG1447769

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0152	0.0277	1	03/21/2020 11:38	WG1447912
Acrylonitrile	U		0.00211	0.0139	1	03/21/2020 11:38	WG1447912
Benzene	U		0.000444	0.00111	1	03/21/2020 11:38	WG1447912
Bromobenzene	U		0.00116	0.0139	1	03/21/2020 11:38	WG1447912
Bromodichloromethane	U		0.000874	0.00277	1	03/21/2020 11:38	WG1447912
Bromochloromethane	U		0.00125	0.00554	1	03/21/2020 11:38	WG1447912
Bromoform	U		0.00663	0.0277	1	03/21/2020 11:38	WG1447912
Bromomethane	U		0.00410	0.0139	1	03/21/2020 11:38	WG1447912
n-Butylbenzene	U		0.00426	0.0139	1	03/21/2020 11:38	WG1447912
sec-Butylbenzene	U		0.00281	0.0139	1	03/21/2020 11:38	WG1447912
tert-Butylbenzene	U		0.00172	0.00554	1	03/21/2020 11:38	WG1447912
Carbon disulfide	U		0.00450	0.0139	1	03/21/2020 11:38	WG1447912
Carbon tetrachloride	U		0.00120	0.00554	1	03/21/2020 11:38	WG1447912
Chlorobenzene	U		0.000635	0.00277	1	03/21/2020 11:38	WG1447912
Chlorodibromomethane	U		0.000499	0.00277	1	03/21/2020 11:38	WG1447912
Chloroethane	U		0.00120	0.00554	1	03/21/2020 11:38	WG1447912
Chloroform	0.000823	B J	0.000460	0.00277	1	03/21/2020 11:38	WG1447912
Chloromethane	U	J0	0.00154	0.0139	1	03/21/2020 11:38	WG1447912
2-Chlorotoluene	U		0.00102	0.00277	1	03/21/2020 11:38	WG1447912
4-Chlorotoluene	U		0.00125	0.00554	1	03/21/2020 11:38	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00566	0.0277	1	03/21/2020 11:38	WG1447912
1,2-Dibromoethane	U		0.000582	0.00277	1	03/21/2020 11:38	WG1447912
Dibromomethane	U		0.00111	0.00554	1	03/21/2020 11:38	WG1447912
1,2-Dichlorobenzene	U		0.00161	0.00554	1	03/21/2020 11:38	WG1447912
1,3-Dichlorobenzene	U		0.00189	0.00554	1	03/21/2020 11:38	WG1447912
1,4-Dichlorobenzene	U		0.00218	0.00554	1	03/21/2020 11:38	WG1447912
Dichlorodifluoromethane	U		0.000907	0.00277	1	03/21/2020 11:38	WG1447912
1,1-Dichloroethane	U		0.000638	0.00277	1	03/21/2020 11:38	WG1447912
1,2-Dichloroethane	U		0.000527	0.00277	1	03/21/2020 11:38	WG1447912
1,1-Dichloroethene	U		0.000554	0.00277	1	03/21/2020 11:38	WG1447912
cis-1,2-Dichloroethene	U		0.000765	0.00277	1	03/21/2020 11:38	WG1447912
trans-1,2-Dichloroethene	U		0.00159	0.00554	1	03/21/2020 11:38	WG1447912
1,2-Dichloropropane	U		0.00141	0.00554	1	03/21/2020 11:38	WG1447912
1,1-Dichloropropene	U		0.000776	0.00277	1	03/21/2020 11:38	WG1447912
1,3-Dichloropropane	U		0.00194	0.00554	1	03/21/2020 11:38	WG1447912
cis-1,3-Dichloropropene	U		0.000752	0.00277	1	03/21/2020 11:38	WG1447912
trans-1,3-Dichloropropene	U		0.00170	0.00554	1	03/21/2020 11:38	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00155	0.00554	1	03/21/2020 11:38	WG1447912
2,2-Dichloropropane	U		0.000879	0.00277	1	03/21/2020 11:38	WG1447912
Di-isopropyl ether	U		0.000388	0.00111	1	03/21/2020 11:38	WG1447912
Ethylbenzene	U		0.000588	0.00277	1	03/21/2020 11:38	WG1447912
Hexachloro-1,3-butadiene	U		0.0141	0.0277	1	03/21/2020 11:38	WG1447912
2-Hexanone	U		0.0111	0.0277	1	03/21/2020 11:38	WG1447912
n-Hexane	U		0.00118	0.00554	1	03/21/2020 11:38	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00671	0.0139	1	03/21/2020 11:38	WG1447912
Isopropylbenzene	U		0.000957	0.00277	1	03/21/2020 11:38	WG1447912
p-Isopropyltoluene	U		0.00258	0.00554	1	03/21/2020 11:38	WG1447912
2-Butanone (MEK)	0.0225	B J	0.0139	0.0277	1	03/21/2020 11:38	WG1447912
Methylene Chloride	U		0.00736	0.0277	1	03/21/2020 11:38	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0277	1	03/21/2020 11:38	WG1447912
Methyl tert-butyl ether	U		0.000327	0.00111	1	03/21/2020 11:38	WG1447912
Naphthalene	U		0.00346	0.0139	1	03/21/2020 11:38	WG1447912
n-Propylbenzene	U		0.00131	0.00554	1	03/21/2020 11:38	WG1447912
Styrene	U		0.00303	0.0139	1	03/21/2020 11:38	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000554	0.00277	1	03/21/2020 11:38	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000432	0.00277	1	03/21/2020 11:38	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000749	0.00277	1	03/21/2020 11:38	WG1447912
Tetrachloroethene	0.00924		0.000776	0.00277	1	03/21/2020 11:38	WG1447912
Toluene	U		0.00139	0.00554	1	03/21/2020 11:38	WG1447912
1,2,3-Trichlorobenzene	U		0.000693	0.0139	1	03/21/2020 11:38	WG1447912
1,2,4-Trichlorobenzene	U		0.00534	0.0139	1	03/21/2020 11:38	WG1447912
1,1,1-Trichloroethane	U		0.000305	0.00277	1	03/21/2020 11:38	WG1447912
1,1,2-Trichloroethane	U		0.000979	0.00277	1	03/21/2020 11:38	WG1447912
Trichloroethene	U		0.000444	0.00111	1	03/21/2020 11:38	WG1447912
Trichlorofluoromethane	U		0.000554	0.00277	1	03/21/2020 11:38	WG1447912
1,2,3-Trichloropropane	U		0.00566	0.0139	1	03/21/2020 11:38	WG1447912
1,2,4-Trimethylbenzene	U		0.00129	0.00554	1	03/21/2020 11:38	WG1447912
1,2,3-Trimethylbenzene	U		0.00128	0.00554	1	03/21/2020 11:38	WG1447912
1,3,5-Trimethylbenzene	U		0.00120	0.00554	1	03/21/2020 11:38	WG1447912
Vinyl acetate	U	J0	0.00390	0.0139	1	03/21/2020 11:38	WG1447912
Vinyl chloride	U		0.000757	0.00277	1	03/21/2020 11:38	WG1447912
Xylenes, Total	U		0.00530	0.00721	1	03/21/2020 11:38	WG1447912
(S) Toluene-d8	*104*			*75.0-131*		*03/21/2020 11:38*	WG1447912
(S) 4-Bromofluorobenzene	*99.8*			*67.0-138*		*03/21/2020 11:38*	WG1447912
(S) 1,2-Dichloroethane-d4	*98.0*			*70.0-130*		*03/21/2020 11:38*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.2		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.962	2.84	25	03/21/2020 01:59	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*77.0-120*		*03/21/2020 01:59*	WG1447769

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0155	0.0284	1	03/21/2020 11:57	WG1447912
Acrylonitrile	U		0.00216	0.0142	1	03/21/2020 11:57	WG1447912
Benzene	U		0.000454	0.00113	1	03/21/2020 11:57	WG1447912
Bromobenzene	U		0.00119	0.0142	1	03/21/2020 11:57	WG1447912
Bromodichloromethane	U		0.000894	0.00284	1	03/21/2020 11:57	WG1447912
Bromochloromethane	U		0.00128	0.00567	1	03/21/2020 11:57	WG1447912
Bromoform	U		0.00678	0.0284	1	03/21/2020 11:57	WG1447912
Bromomethane	U		0.00420	0.0142	1	03/21/2020 11:57	WG1447912
n-Butylbenzene	U		0.00436	0.0142	1	03/21/2020 11:57	WG1447912
sec-Butylbenzene	U		0.00287	0.0142	1	03/21/2020 11:57	WG1447912
tert-Butylbenzene	U		0.00176	0.00567	1	03/21/2020 11:57	WG1447912
Carbon disulfide	U		0.00460	0.0142	1	03/21/2020 11:57	WG1447912
Carbon tetrachloride	U		0.00122	0.00567	1	03/21/2020 11:57	WG1447912
Chlorobenzene	U		0.000650	0.00284	1	03/21/2020 11:57	WG1447912
Chlorodibromomethane	U		0.000510	0.00284	1	03/21/2020 11:57	WG1447912
Chloroethane	U		0.00122	0.00567	1	03/21/2020 11:57	WG1447912
Chloroform	0.000845	B J	0.000471	0.00284	1	03/21/2020 11:57	WG1447912
Chloromethane	U	J0	0.00158	0.0142	1	03/21/2020 11:57	WG1447912
2-Chlorotoluene	U		0.00104	0.00284	1	03/21/2020 11:57	WG1447912
4-Chlorotoluene	U		0.00128	0.00567	1	03/21/2020 11:57	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00578	0.0284	1	03/21/2020 11:57	WG1447912
1,2-Dibromoethane	U		0.000595	0.00284	1	03/21/2020 11:57	WG1447912
Dibromomethane	U		0.00113	0.00567	1	03/21/2020 11:57	WG1447912
1,2-Dichlorobenzene	U		0.00164	0.00567	1	03/21/2020 11:57	WG1447912
1,3-Dichlorobenzene	U		0.00193	0.00567	1	03/21/2020 11:57	WG1447912
1,4-Dichlorobenzene	U		0.00223	0.00567	1	03/21/2020 11:57	WG1447912
Dichlorodifluoromethane	U		0.000928	0.00284	1	03/21/2020 11:57	WG1447912
1,1-Dichloroethane	U		0.000652	0.00284	1	03/21/2020 11:57	WG1447912
1,2-Dichloroethane	U		0.000539	0.00284	1	03/21/2020 11:57	WG1447912
1,1-Dichloroethene	U		0.000567	0.00284	1	03/21/2020 11:57	WG1447912
cis-1,2-Dichloroethene	0.00101	J	0.000783	0.00284	1	03/21/2020 11:57	WG1447912
trans-1,2-Dichloroethene	U		0.00162	0.00567	1	03/21/2020 11:57	WG1447912
1,2-Dichloropropane	U		0.00144	0.00567	1	03/21/2020 11:57	WG1447912
1,1-Dichloropropene	U		0.000794	0.00284	1	03/21/2020 11:57	WG1447912
1,3-Dichloropropane	U		0.00198	0.00567	1	03/21/2020 11:57	WG1447912
cis-1,3-Dichloropropene	U		0.000769	0.00284	1	03/21/2020 11:57	WG1447912
trans-1,3-Dichloropropene	U		0.00174	0.00567	1	03/21/2020 11:57	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00159	0.00567	1	03/21/2020 11:57	WG1447912
2,2-Dichloropropane	U		0.000899	0.00284	1	03/21/2020 11:57	WG1447912
Di-isopropyl ether	U		0.000397	0.00113	1	03/21/2020 11:57	WG1447912
Ethylbenzene	U		0.000601	0.00284	1	03/21/2020 11:57	WG1447912
Hexachloro-1,3-butadiene	U		0.0144	0.0284	1	03/21/2020 11:57	WG1447912
2-Hexanone	U		0.0113	0.0284	1	03/21/2020 11:57	WG1447912
n-Hexane	U		0.00120	0.00567	1	03/21/2020 11:57	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00686	0.0142	1	03/21/2020 11:57	WG1447912
Isopropylbenzene	U		0.000979	0.00284	1	03/21/2020 11:57	WG1447912
p-Isopropyltoluene	U		0.00264	0.00567	1	03/21/2020 11:57	WG1447912
2-Butanone (MEK)	0.0202	B J	0.0142	0.0284	1	03/21/2020 11:57	WG1447912
Methylene Chloride	U		0.00753	0.0284	1	03/21/2020 11:57	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0113	0.0284	1	03/21/2020 11:57	WG1447912
Methyl tert-butyl ether	U		0.000335	0.00113	1	03/21/2020 11:57	WG1447912
Naphthalene	0.00366	B J	0.00354	0.0142	1	03/21/2020 11:57	WG1447912
n-Propylbenzene	U		0.00134	0.00567	1	03/21/2020 11:57	WG1447912
Styrene	U		0.00310	0.0142	1	03/21/2020 11:57	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000567	0.00284	1	03/21/2020 11:57	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000442	0.00284	1	03/21/2020 11:57	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000766	0.00284	1	03/21/2020 11:57	WG1447912
Tetrachloroethene	0.235		0.000794	0.00284	1	03/21/2020 11:57	WG1447912
Toluene	U		0.00142	0.00567	1	03/21/2020 11:57	WG1447912
1,2,3-Trichlorobenzene	U		0.000709	0.0142	1	03/21/2020 11:57	WG1447912
1,2,4-Trichlorobenzene	U		0.00547	0.0142	1	03/21/2020 11:57	WG1447912
1,1,1-Trichloroethane	U		0.000312	0.00284	1	03/21/2020 11:57	WG1447912
1,1,2-Trichloroethane	U		0.00100	0.00284	1	03/21/2020 11:57	WG1447912
Trichloroethene	0.0119		0.000454	0.00113	1	03/21/2020 11:57	WG1447912
Trichlorofluoromethane	U		0.000567	0.00284	1	03/21/2020 11:57	WG1447912
1,2,3-Trichloropropane	U		0.00578	0.0142	1	03/21/2020 11:57	WG1447912
1,2,4-Trimethylbenzene	U		0.00132	0.00567	1	03/21/2020 11:57	WG1447912
1,2,3-Trimethylbenzene	U		0.00130	0.00567	1	03/21/2020 11:57	WG1447912
1,3,5-Trimethylbenzene	U		0.00122	0.00567	1	03/21/2020 11:57	WG1447912
Vinyl acetate	U	J0	0.00399	0.0142	1	03/21/2020 11:57	WG1447912
Vinyl chloride	U		0.000775	0.00284	1	03/21/2020 11:57	WG1447912
Xylenes, Total	U		0.00542	0.00737	1	03/21/2020 11:57	WG1447912
(S) Toluene-d8	*107*			*75.0-131*		*03/21/2020 11:57*	WG1447912
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*03/21/2020 11:57*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.6*			*70.0-130*		*03/21/2020 11:57*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.4		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.948	2.80	25	03/21/2020 11:37	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*98.3*			*77.0-120*		*03/21/2020 11:37*	WG1447775

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0153	0.0280	1	03/21/2020 12:16	WG1447912
Acrylonitrile	U		0.00212	0.0140	1	03/21/2020 12:16	WG1447912
Benzene	U		0.000447	0.00112	1	03/21/2020 12:16	WG1447912
Bromobenzene	U		0.00117	0.0140	1	03/21/2020 12:16	WG1447912
Bromodichloromethane	U		0.000881	0.00280	1	03/21/2020 12:16	WG1447912
Bromochloromethane	U		0.00126	0.00559	1	03/21/2020 12:16	WG1447912
Bromoform	U		0.00669	0.0280	1	03/21/2020 12:16	WG1447912
Bromomethane	U		0.00414	0.0140	1	03/21/2020 12:16	WG1447912
n-Butylbenzene	U		0.00429	0.0140	1	03/21/2020 12:16	WG1447912
sec-Butylbenzene	U		0.00283	0.0140	1	03/21/2020 12:16	WG1447912
tert-Butylbenzene	U		0.00173	0.00559	1	03/21/2020 12:16	WG1447912
Carbon disulfide	U		0.00454	0.0140	1	03/21/2020 12:16	WG1447912
Carbon tetrachloride	U		0.00121	0.00559	1	03/21/2020 12:16	WG1447912
Chlorobenzene	U		0.000641	0.00280	1	03/21/2020 12:16	WG1447912
Chlorodibromomethane	U		0.000503	0.00280	1	03/21/2020 12:16	WG1447912
Chloroethane	U		0.00121	0.00559	1	03/21/2020 12:16	WG1447912
Chloroform	0.000819	B J	0.000464	0.00280	1	03/21/2020 12:16	WG1447912
Chloromethane	U	J0	0.00155	0.0140	1	03/21/2020 12:16	WG1447912
2-Chlorotoluene	U		0.00103	0.00280	1	03/21/2020 12:16	WG1447912
4-Chlorotoluene	U		0.00126	0.00559	1	03/21/2020 12:16	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00570	0.0280	1	03/21/2020 12:16	WG1447912
1,2-Dibromoethane	U		0.000587	0.00280	1	03/21/2020 12:16	WG1447912
Dibromomethane	U		0.00112	0.00559	1	03/21/2020 12:16	WG1447912
1,2-Dichlorobenzene	U		0.00162	0.00559	1	03/21/2020 12:16	WG1447912
1,3-Dichlorobenzene	U		0.00190	0.00559	1	03/21/2020 12:16	WG1447912
1,4-Dichlorobenzene	U		0.00220	0.00559	1	03/21/2020 12:16	WG1447912
Dichlorodifluoromethane	U		0.000915	0.00280	1	03/21/2020 12:16	WG1447912
1,1-Dichloroethane	U		0.000643	0.00280	1	03/21/2020 12:16	WG1447912
1,2-Dichloroethane	U		0.000531	0.00280	1	03/21/2020 12:16	WG1447912
1,1-Dichloroethene	U		0.000559	0.00280	1	03/21/2020 12:16	WG1447912
cis-1,2-Dichloroethene	U		0.000772	0.00280	1	03/21/2020 12:16	WG1447912
trans-1,2-Dichloroethene	U		0.00160	0.00559	1	03/21/2020 12:16	WG1447912
1,2-Dichloropropane	U		0.00142	0.00559	1	03/21/2020 12:16	WG1447912
1,1-Dichloropropene	U		0.000783	0.00280	1	03/21/2020 12:16	WG1447912
1,3-Dichloropropane	U		0.00196	0.00559	1	03/21/2020 12:16	WG1447912
cis-1,3-Dichloropropene	U		0.000758	0.00280	1	03/21/2020 12:16	WG1447912
trans-1,3-Dichloropropene	U		0.00171	0.00559	1	03/21/2020 12:16	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00157	0.00559	1	03/21/2020 12:16	WG1447912
2,2-Dichloropropane	U		0.000887	0.00280	1	03/21/2020 12:16	WG1447912
Di-isopropyl ether	U		0.000391	0.00112	1	03/21/2020 12:16	WG1447912
Ethylbenzene	U		0.000593	0.00280	1	03/21/2020 12:16	WG1447912
Hexachloro-1,3-butadiene	U		0.0142	0.0280	1	03/21/2020 12:16	WG1447912
2-Hexanone	U		0.0112	0.0280	1	03/21/2020 12:16	WG1447912
n-Hexane	U		0.00119	0.00559	1	03/21/2020 12:16	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00677	0.0140	1	03/21/2020 12:16	WG1447912
Isopropylbenzene	U		0.000965	0.00280	1	03/21/2020 12:16	WG1447912
p-Isopropyltoluene	U		0.00261	0.00559	1	03/21/2020 12:16	WG1447912
2-Butanone (MEK)	0.0161	B J	0.0140	0.0280	1	03/21/2020 12:16	WG1447912
Methylene Chloride	U		0.00742	0.0280	1	03/21/2020 12:16	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0112	0.0280	1	03/21/2020 12:16	WG1447912
Methyl tert-butyl ether	U		0.000330	0.00112	1	03/21/2020 12:16	WG1447912
Naphthalene	U		0.00349	0.0140	1	03/21/2020 12:16	WG1447912
n-Propylbenzene	U		0.00132	0.00559	1	03/21/2020 12:16	WG1447912
Styrene	U		0.00305	0.0140	1	03/21/2020 12:16	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000559	0.00280	1	03/21/2020 12:16	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000436	0.00280	1	03/21/2020 12:16	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000755	0.00280	1	03/21/2020 12:16	WG1447912
Tetrachloroethene	0.277		0.000783	0.00280	1	03/21/2020 12:16	WG1447912
Toluene	U		0.00140	0.00559	1	03/21/2020 12:16	WG1447912
1,2,3-Trichlorobenzene	U		0.000699	0.0140	1	03/21/2020 12:16	WG1447912
1,2,4-Trichlorobenzene	U		0.00539	0.0140	1	03/21/2020 12:16	WG1447912
1,1,1-Trichloroethane	U		0.000308	0.00280	1	03/21/2020 12:16	WG1447912
1,1,2-Trichloroethane	U		0.000987	0.00280	1	03/21/2020 12:16	WG1447912
Trichloroethene	0.00906		0.000447	0.00112	1	03/21/2020 12:16	WG1447912
Trichlorofluoromethane	U		0.000559	0.00280	1	03/21/2020 12:16	WG1447912
1,2,3-Trichloropropane	U		0.00570	0.0140	1	03/21/2020 12:16	WG1447912
1,2,4-Trimethylbenzene	U		0.00130	0.00559	1	03/21/2020 12:16	WG1447912
1,2,3-Trimethylbenzene	U		0.00129	0.00559	1	03/21/2020 12:16	WG1447912
1,3,5-Trimethylbenzene	U		0.00121	0.00559	1	03/21/2020 12:16	WG1447912
Vinyl acetate	U	J0	0.00394	0.0140	1	03/21/2020 12:16	WG1447912
Vinyl chloride	U		0.000764	0.00280	1	03/21/2020 12:16	WG1447912
Xylenes, Total	U		0.00534	0.00727	1	03/21/2020 12:16	WG1447912
(S) Toluene-d8	*105*			*75.0-131*		*03/21/2020 12:16*	WG1447912
(S) 4-Bromofluorobenzene	*96.8*			*67.0-138*		*03/21/2020 12:16*	WG1447912
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*03/21/2020 12:16*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.0		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.921	2.72	25	03/21/2020 12:06	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*03/21/2020 12:06*	WG1447775

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0149	0.0272	1	03/21/2020 12:35	WG1447912
Acrylonitrile	U		0.00206	0.0136	1	03/21/2020 12:35	WG1447912
Benzene	U		0.000435	0.00109	1	03/21/2020 12:35	WG1447912
Bromobenzene	U		0.00114	0.0136	1	03/21/2020 12:35	WG1447912
Bromodichloromethane	U		0.000856	0.00272	1	03/21/2020 12:35	WG1447912
Bromochloromethane	U		0.00123	0.00543	1	03/21/2020 12:35	WG1447912
Bromoform	U		0.00650	0.0272	1	03/21/2020 12:35	WG1447912
Bromomethane	U		0.00402	0.0136	1	03/21/2020 12:35	WG1447912
n-Butylbenzene	U		0.00417	0.0136	1	03/21/2020 12:35	WG1447912
sec-Butylbenzene	U		0.00275	0.0136	1	03/21/2020 12:35	WG1447912
tert-Butylbenzene	U		0.00168	0.00543	1	03/21/2020 12:35	WG1447912
Carbon disulfide	U		0.00441	0.0136	1	03/21/2020 12:35	WG1447912
Carbon tetrachloride	U		0.00117	0.00543	1	03/21/2020 12:35	WG1447912
Chlorobenzene	U		0.000623	0.00272	1	03/21/2020 12:35	WG1447912
Chlorodibromomethane	U		0.000489	0.00272	1	03/21/2020 12:35	WG1447912
Chloroethane	U		0.00117	0.00543	1	03/21/2020 12:35	WG1447912
Chloroform	U		0.000451	0.00272	1	03/21/2020 12:35	WG1447912
Chloromethane	U	J0	0.00151	0.0136	1	03/21/2020 12:35	WG1447912
2-Chlorotoluene	U		0.00100	0.00272	1	03/21/2020 12:35	WG1447912
4-Chlorotoluene	U		0.00123	0.00543	1	03/21/2020 12:35	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00554	0.0272	1	03/21/2020 12:35	WG1447912
1,2-Dibromoethane	U		0.000570	0.00272	1	03/21/2020 12:35	WG1447912
Dibromomethane	U		0.00109	0.00543	1	03/21/2020 12:35	WG1447912
1,2-Dichlorobenzene	U		0.00158	0.00543	1	03/21/2020 12:35	WG1447912
1,3-Dichlorobenzene	U		0.00185	0.00543	1	03/21/2020 12:35	WG1447912
1,4-Dichlorobenzene	U		0.00214	0.00543	1	03/21/2020 12:35	WG1447912
Dichlorodifluoromethane	U		0.000889	0.00272	1	03/21/2020 12:35	WG1447912
1,1-Dichloroethane	U		0.000625	0.00272	1	03/21/2020 12:35	WG1447912
1,2-Dichloroethane	U		0.000516	0.00272	1	03/21/2020 12:35	WG1447912
1,1-Dichloroethene	U		0.000543	0.00272	1	03/21/2020 12:35	WG1447912
cis-1,2-Dichloroethene	U		0.000750	0.00272	1	03/21/2020 12:35	WG1447912
trans-1,2-Dichloroethene	U		0.00155	0.00543	1	03/21/2020 12:35	WG1447912
1,2-Dichloropropane	U		0.00138	0.00543	1	03/21/2020 12:35	WG1447912
1,1-Dichloropropene	U		0.000761	0.00272	1	03/21/2020 12:35	WG1447912
1,3-Dichloropropane	U		0.00190	0.00543	1	03/21/2020 12:35	WG1447912
cis-1,3-Dichloropropene	U		0.000737	0.00272	1	03/21/2020 12:35	WG1447912
trans-1,3-Dichloropropene	U		0.00166	0.00543	1	03/21/2020 12:35	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00152	0.00543	1	03/21/2020 12:35	WG1447912
2,2-Dichloropropane	U		0.000862	0.00272	1	03/21/2020 12:35	WG1447912
Di-isopropyl ether	U		0.000380	0.00109	1	03/21/2020 12:35	WG1447912
Ethylbenzene	U		0.000576	0.00272	1	03/21/2020 12:35	WG1447912
Hexachloro-1,3-butadiene	U		0.0138	0.0272	1	03/21/2020 12:35	WG1447912
2-Hexanone	U		0.0109	0.0272	1	03/21/2020 12:35	WG1447912
n-Hexane	U		0.00115	0.00543	1	03/21/2020 12:35	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00657	0.0136	1	03/21/2020 12:35	WG1447912
Isopropylbenzene	U		0.000938	0.00272	1	03/21/2020 12:35	WG1447912
p-Isopropyltoluene	U		0.00253	0.00543	1	03/21/2020 12:35	WG1447912
2-Butanone (MEK)	0.0185	B J	0.0136	0.0272	1	03/21/2020 12:35	WG1447912
Methylene Chloride	U		0.00721	0.0272	1	03/21/2020 12:35	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0272	1	03/21/2020 12:35	WG1447912
Methyl tert-butyl ether	U		0.000321	0.00109	1	03/21/2020 12:35	WG1447912
Naphthalene	U		0.00339	0.0136	1	03/21/2020 12:35	WG1447912
n-Propylbenzene	U		0.00128	0.00543	1	03/21/2020 12:35	WG1447912
Styrene	U		0.00297	0.0136	1	03/21/2020 12:35	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000543	0.00272	1	03/21/2020 12:35	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000424	0.00272	1	03/21/2020 12:35	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000733	0.00272	1	03/21/2020 12:35	WG1447912
Tetrachloroethene	0.0349		0.000761	0.00272	1	03/21/2020 12:35	WG1447912
Toluene	U		0.00136	0.00543	1	03/21/2020 12:35	WG1447912
1,2,3-Trichlorobenzene	U		0.000679	0.0136	1	03/21/2020 12:35	WG1447912
1,2,4-Trichlorobenzene	U		0.00524	0.0136	1	03/21/2020 12:35	WG1447912
1,1,1-Trichloroethane	U		0.000299	0.00272	1	03/21/2020 12:35	WG1447912
1,1,2-Trichloroethane	U		0.000959	0.00272	1	03/21/2020 12:35	WG1447912
Trichloroethene	U		0.000435	0.00109	1	03/21/2020 12:35	WG1447912
Trichlorofluoromethane	U		0.000543	0.00272	1	03/21/2020 12:35	WG1447912
1,2,3-Trichloropropane	U		0.00554	0.0136	1	03/21/2020 12:35	WG1447912
1,2,4-Trimethylbenzene	U		0.00126	0.00543	1	03/21/2020 12:35	WG1447912
1,2,3-Trimethylbenzene	U		0.00125	0.00543	1	03/21/2020 12:35	WG1447912
1,3,5-Trimethylbenzene	U		0.00117	0.00543	1	03/21/2020 12:35	WG1447912
Vinyl acetate	U	J0	0.00382	0.0136	1	03/21/2020 12:35	WG1447912
Vinyl chloride	U		0.000742	0.00272	1	03/21/2020 12:35	WG1447912
Xylenes, Total	U		0.00519	0.00706	1	03/21/2020 12:35	WG1447912
(S) Toluene-d8	*103*			*75.0-131*		*03/21/2020 12:35*	WG1447912
(S) 4-Bromofluorobenzene	*99.5*			*67.0-138*		*03/21/2020 12:35*	WG1447912
(S) 1,2-Dichloroethane-d4	*99.6*			*70.0-130*		*03/21/2020 12:35*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.878	2.59	25	03/21/2020 12:30	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*77.0-120*		*03/21/2020 12:30*	WG1447775

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0142	0.0259	1	03/21/2020 12:54	WG1447912
Acrylonitrile	U		0.00197	0.0129	1	03/21/2020 12:54	WG1447912
Benzene	U		0.000414	0.00104	1	03/21/2020 12:54	WG1447912
Bromobenzene	U		0.00109	0.0129	1	03/21/2020 12:54	WG1447912
Bromodichloromethane	U		0.000816	0.00259	1	03/21/2020 12:54	WG1447912
Bromochloromethane	U		0.00117	0.00518	1	03/21/2020 12:54	WG1447912
Bromoform	U		0.00619	0.0259	1	03/21/2020 12:54	WG1447912
Bromomethane	U		0.00383	0.0129	1	03/21/2020 12:54	WG1447912
n-Butylbenzene	U		0.00398	0.0129	1	03/21/2020 12:54	WG1447912
sec-Butylbenzene	U		0.00262	0.0129	1	03/21/2020 12:54	WG1447912
tert-Butylbenzene	U		0.00161	0.00518	1	03/21/2020 12:54	WG1447912
Carbon disulfide	U		0.00421	0.0129	1	03/21/2020 12:54	WG1447912
Carbon tetrachloride	U		0.00112	0.00518	1	03/21/2020 12:54	WG1447912
Chlorobenzene	U		0.000593	0.00259	1	03/21/2020 12:54	WG1447912
Chlorodibromomethane	U		0.000466	0.00259	1	03/21/2020 12:54	WG1447912
Chloroethane	U		0.00112	0.00518	1	03/21/2020 12:54	WG1447912
Chloroform	U		0.000430	0.00259	1	03/21/2020 12:54	WG1447912
Chloromethane	U	J0	0.00144	0.0129	1	03/21/2020 12:54	WG1447912
2-Chlorotoluene	U		0.000953	0.00259	1	03/21/2020 12:54	WG1447912
4-Chlorotoluene	U		0.00117	0.00518	1	03/21/2020 12:54	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00528	0.0259	1	03/21/2020 12:54	WG1447912
1,2-Dibromoethane	U		0.000544	0.00259	1	03/21/2020 12:54	WG1447912
Dibromomethane	U		0.00104	0.00518	1	03/21/2020 12:54	WG1447912
1,2-Dichlorobenzene	U		0.00150	0.00518	1	03/21/2020 12:54	WG1447912
1,3-Dichlorobenzene	U		0.00176	0.00518	1	03/21/2020 12:54	WG1447912
1,4-Dichlorobenzene	U		0.00204	0.00518	1	03/21/2020 12:54	WG1447912
Dichlorodifluoromethane	U		0.000847	0.00259	1	03/21/2020 12:54	WG1447912
1,1-Dichloroethane	U		0.000596	0.00259	1	03/21/2020 12:54	WG1447912
1,2-Dichloroethane	U		0.000492	0.00259	1	03/21/2020 12:54	WG1447912
1,1-Dichloroethene	U		0.000518	0.00259	1	03/21/2020 12:54	WG1447912
cis-1,2-Dichloroethene	U		0.000715	0.00259	1	03/21/2020 12:54	WG1447912
trans-1,2-Dichloroethene	U		0.00148	0.00518	1	03/21/2020 12:54	WG1447912
1,2-Dichloropropane	U		0.00132	0.00518	1	03/21/2020 12:54	WG1447912
1,1-Dichloropropene	U		0.000725	0.00259	1	03/21/2020 12:54	WG1447912
1,3-Dichloropropane	U		0.00181	0.00518	1	03/21/2020 12:54	WG1447912
cis-1,3-Dichloropropene	U		0.000702	0.00259	1	03/21/2020 12:54	WG1447912
trans-1,3-Dichloropropene	U		0.00158	0.00518	1	03/21/2020 12:54	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00145	0.00518	1	03/21/2020 12:54	WG1447912
2,2-Dichloropropane	U		0.000821	0.00259	1	03/21/2020 12:54	WG1447912
Di-isopropyl ether	U		0.000363	0.00104	1	03/21/2020 12:54	WG1447912
Ethylbenzene	U		0.000549	0.00259	1	03/21/2020 12:54	WG1447912
Hexachloro-1,3-butadiene	U		0.0132	0.0259	1	03/21/2020 12:54	WG1447912
2-Hexanone	U		0.0104	0.0259	1	03/21/2020 12:54	WG1447912
n-Hexane	U		0.00110	0.00518	1	03/21/2020 12:54	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00627	0.0129	1	03/21/2020 12:54	WG1447912
Isopropylbenzene	U		0.000894	0.00259	1	03/21/2020 12:54	WG1447912
p-Isopropyltoluene	U		0.00241	0.00518	1	03/21/2020 12:54	WG1447912
2-Butanone (MEK)	0.0308	B	0.0129	0.0259	1	03/21/2020 12:54	WG1447912
Methylene Chloride	U		0.00688	0.0259	1	03/21/2020 12:54	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0104	0.0259	1	03/21/2020 12:54	WG1447912
Methyl tert-butyl ether	U		0.000306	0.00104	1	03/21/2020 12:54	WG1447912
Naphthalene	U		0.00323	0.0129	1	03/21/2020 12:54	WG1447912
n-Propylbenzene	U		0.00122	0.00518	1	03/21/2020 12:54	WG1447912
Styrene	U		0.00283	0.0129	1	03/21/2020 12:54	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000518	0.00259	1	03/21/2020 12:54	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000404	0.00259	1	03/21/2020 12:54	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000699	0.00259	1	03/21/2020 12:54	WG1447912
Tetrachloroethene	0.00185	J	0.000725	0.00259	1	03/21/2020 12:54	WG1447912
Toluene	U		0.00129	0.00518	1	03/21/2020 12:54	WG1447912
1,2,3-Trichlorobenzene	U		0.000647	0.0129	1	03/21/2020 12:54	WG1447912
1,2,4-Trichlorobenzene	U		0.00499	0.0129	1	03/21/2020 12:54	WG1447912
1,1,1-Trichloroethane	U		0.000285	0.00259	1	03/21/2020 12:54	WG1447912
1,1,2-Trichloroethane	U		0.000915	0.00259	1	03/21/2020 12:54	WG1447912
Trichloroethene	U		0.000414	0.00104	1	03/21/2020 12:54	WG1447912
Trichlorofluoromethane	U		0.000518	0.00259	1	03/21/2020 12:54	WG1447912
1,2,3-Trichloropropane	U		0.00528	0.0129	1	03/21/2020 12:54	WG1447912
1,2,4-Trimethylbenzene	U		0.00120	0.00518	1	03/21/2020 12:54	WG1447912
1,2,3-Trimethylbenzene	U		0.00119	0.00518	1	03/21/2020 12:54	WG1447912
1,3,5-Trimethylbenzene	U		0.00112	0.00518	1	03/21/2020 12:54	WG1447912
Vinyl acetate	U	J0	0.00365	0.0129	1	03/21/2020 12:54	WG1447912
Vinyl chloride	U		0.000707	0.00259	1	03/21/2020 12:54	WG1447912
Xylenes, Total	U		0.00495	0.00673	1	03/21/2020 12:54	WG1447912
(S) Toluene-d8	*107*			*75.0-131*		*03/21/2020 12:54*	WG1447912
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*03/21/2020 12:54*	WG1447912
(S) 1,2-Dichloroethane-d4	*99.6*			*70.0-130*		*03/21/2020 12:54*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.9		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.923	2.72	25	03/21/2020 12:54	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*99.6*			*77.0-120*		*03/21/2020 12:54*	WG1447775

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0149	0.0272	1	03/21/2020 13:13	WG1447912
Acrylonitrile	U		0.00207	0.0136	1	03/21/2020 13:13	WG1447912
Benzene	U		0.000435	0.00109	1	03/21/2020 13:13	WG1447912
Bromobenzene	U		0.00114	0.0136	1	03/21/2020 13:13	WG1447912
Bromodichloromethane	U		0.000857	0.00272	1	03/21/2020 13:13	WG1447912
Bromochloromethane	U		0.00123	0.00544	1	03/21/2020 13:13	WG1447912
Bromoform	U		0.00651	0.0272	1	03/21/2020 13:13	WG1447912
Bromomethane	U		0.00403	0.0136	1	03/21/2020 13:13	WG1447912
n-Butylbenzene	U		0.00418	0.0136	1	03/21/2020 13:13	WG1447912
sec-Butylbenzene	U		0.00275	0.0136	1	03/21/2020 13:13	WG1447912
tert-Butylbenzene	U		0.00169	0.00544	1	03/21/2020 13:13	WG1447912
Carbon disulfide	U		0.00442	0.0136	1	03/21/2020 13:13	WG1447912
Carbon tetrachloride	U		0.00118	0.00544	1	03/21/2020 13:13	WG1447912
Chlorobenzene	U		0.000623	0.00272	1	03/21/2020 13:13	WG1447912
Chlorodibromomethane	U		0.000490	0.00272	1	03/21/2020 13:13	WG1447912
Chloroethane	U		0.00118	0.00544	1	03/21/2020 13:13	WG1447912
Chloroform	U		0.000452	0.00272	1	03/21/2020 13:13	WG1447912
Chloromethane	U	J0	0.00151	0.0136	1	03/21/2020 13:13	WG1447912
2-Chlorotoluene	U		0.00100	0.00272	1	03/21/2020 13:13	WG1447912
4-Chlorotoluene	U		0.00123	0.00544	1	03/21/2020 13:13	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00555	0.0272	1	03/21/2020 13:13	WG1447912
1,2-Dibromoethane	U		0.000571	0.00272	1	03/21/2020 13:13	WG1447912
Dibromomethane	U		0.00109	0.00544	1	03/21/2020 13:13	WG1447912
1,2-Dichlorobenzene	U		0.00158	0.00544	1	03/21/2020 13:13	WG1447912
1,3-Dichlorobenzene	U		0.00185	0.00544	1	03/21/2020 13:13	WG1447912
1,4-Dichlorobenzene	U		0.00214	0.00544	1	03/21/2020 13:13	WG1447912
Dichlorodifluoromethane	U		0.000890	0.00272	1	03/21/2020 13:13	WG1447912
1,1-Dichloroethane	U		0.000626	0.00272	1	03/21/2020 13:13	WG1447912
1,2-Dichloroethane	U		0.000517	0.00272	1	03/21/2020 13:13	WG1447912
1,1-Dichloroethene	U		0.000544	0.00272	1	03/21/2020 13:13	WG1447912
cis-1,2-Dichloroethene	U		0.000751	0.00272	1	03/21/2020 13:13	WG1447912
trans-1,2-Dichloroethene	U		0.00156	0.00544	1	03/21/2020 13:13	WG1447912
1,2-Dichloropropane	U		0.00138	0.00544	1	03/21/2020 13:13	WG1447912
1,1-Dichloropropene	U		0.000762	0.00272	1	03/21/2020 13:13	WG1447912
1,3-Dichloropropane	U		0.00190	0.00544	1	03/21/2020 13:13	WG1447912
cis-1,3-Dichloropropene	U		0.000738	0.00272	1	03/21/2020 13:13	WG1447912
trans-1,3-Dichloropropene	U		0.00166	0.00544	1	03/21/2020 13:13	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00152	0.00544	1	03/21/2020 13:13	WG1447912
2,2-Dichloropropane	U		0.000863	0.00272	1	03/21/2020 13:13	WG1447912
Di-isopropyl ether	U		0.000381	0.00109	1	03/21/2020 13:13	WG1447912
Ethylbenzene	U		0.000577	0.00272	1	03/21/2020 13:13	WG1447912
Hexachloro-1,3-butadiene	U		0.0138	0.0272	1	03/21/2020 13:13	WG1447912
2-Hexanone	U		0.0109	0.0272	1	03/21/2020 13:13	WG1447912
n-Hexane	U		0.00115	0.00544	1	03/21/2020 13:13	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00658	0.0136	1	03/21/2020 13:13	WG1447912
Isopropylbenzene	U		0.000939	0.00272	1	03/21/2020 13:13	WG1447912
p-Isopropyltoluene	U		0.00254	0.00544	1	03/21/2020 13:13	WG1447912
2-Butanone (MEK)	0.0211	B J	0.0136	0.0272	1	03/21/2020 13:13	WG1447912
Methylene Chloride	U		0.00722	0.0272	1	03/21/2020 13:13	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0272	1	03/21/2020 13:13	WG1447912
Methyl tert-butyl ether	U		0.000321	0.00109	1	03/21/2020 13:13	WG1447912
Naphthalene	U		0.00339	0.0136	1	03/21/2020 13:13	WG1447912
n-Propylbenzene	U		0.00128	0.00544	1	03/21/2020 13:13	WG1447912
Styrene	U		0.00297	0.0136	1	03/21/2020 13:13	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000544	0.00272	1	03/21/2020 13:13	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000424	0.00272	1	03/21/2020 13:13	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000734	0.00272	1	03/21/2020 13:13	WG1447912
Tetrachloroethene	0.00510		0.000762	0.00272	1	03/21/2020 13:13	WG1447912
Toluene	U		0.00136	0.00544	1	03/21/2020 13:13	WG1447912
1,2,3-Trichlorobenzene	U		0.000680	0.0136	1	03/21/2020 13:13	WG1447912
1,2,4-Trichlorobenzene	U		0.00524	0.0136	1	03/21/2020 13:13	WG1447912
1,1,1-Trichloroethane	U		0.000299	0.00272	1	03/21/2020 13:13	WG1447912
1,1,2-Trichloroethane	U		0.000961	0.00272	1	03/21/2020 13:13	WG1447912
Trichloroethene	U		0.000435	0.00109	1	03/21/2020 13:13	WG1447912
Trichlorofluoromethane	U		0.000544	0.00272	1	03/21/2020 13:13	WG1447912
1,2,3-Trichloropropane	U		0.00555	0.0136	1	03/21/2020 13:13	WG1447912
1,2,4-Trimethylbenzene	U		0.00126	0.00544	1	03/21/2020 13:13	WG1447912
1,2,3-Trimethylbenzene	U		0.00125	0.00544	1	03/21/2020 13:13	WG1447912
1,3,5-Trimethylbenzene	U		0.00118	0.00544	1	03/21/2020 13:13	WG1447912
Vinyl acetate	U	J0	0.00383	0.0136	1	03/21/2020 13:13	WG1447912
Vinyl chloride	U		0.000743	0.00272	1	03/21/2020 13:13	WG1447912
Xylenes, Total	U		0.00520	0.00707	1	03/21/2020 13:13	WG1447912
(S) Toluene-d8	*109*			*75.0-131*		*03/21/2020 13:13*	WG1447912
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*03/21/2020 13:13*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*03/21/2020 13:13*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.7		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.887	2.61	25	03/21/2020 13:18	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*99.2*			*77.0-120*		*03/21/2020 13:18*	WG1447775

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0143	0.0261	1	03/21/2020 13:32	WG1447912
Acrylonitrile	U		0.00199	0.0131	1	03/21/2020 13:32	WG1447912
Benzene	U		0.000418	0.00105	1	03/21/2020 13:32	WG1447912
Bromobenzene	U		0.00110	0.0131	1	03/21/2020 13:32	WG1447912
Bromodichloromethane	U		0.000824	0.00261	1	03/21/2020 13:32	WG1447912
Bromochloromethane	U		0.00118	0.00523	1	03/21/2020 13:32	WG1447912
Bromoform	U		0.00625	0.0261	1	03/21/2020 13:32	WG1447912
Bromomethane	U		0.00387	0.0131	1	03/21/2020 13:32	WG1447912
n-Butylbenzene	U		0.00401	0.0131	1	03/21/2020 13:32	WG1447912
sec-Butylbenzene	U		0.00264	0.0131	1	03/21/2020 13:32	WG1447912
tert-Butylbenzene	U		0.00162	0.00523	1	03/21/2020 13:32	WG1447912
Carbon disulfide	U		0.00424	0.0131	1	03/21/2020 13:32	WG1447912
Carbon tetrachloride	U		0.00113	0.00523	1	03/21/2020 13:32	WG1447912
Chlorobenzene	U		0.000599	0.00261	1	03/21/2020 13:32	WG1447912
Chlorodibromomethane	U		0.000470	0.00261	1	03/21/2020 13:32	WG1447912
Chloroethane	U		0.00113	0.00523	1	03/21/2020 13:32	WG1447912
Chloroform	0.000784	B J	0.000434	0.00261	1	03/21/2020 13:32	WG1447912
Chloromethane	U	J0	0.00145	0.0131	1	03/21/2020 13:32	WG1447912
2-Chlorotoluene	U		0.000962	0.00261	1	03/21/2020 13:32	WG1447912
4-Chlorotoluene	U		0.00118	0.00523	1	03/21/2020 13:32	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00533	0.0261	1	03/21/2020 13:32	WG1447912
1,2-Dibromoethane	U		0.000549	0.00261	1	03/21/2020 13:32	WG1447912
Dibromomethane	U		0.00105	0.00523	1	03/21/2020 13:32	WG1447912
1,2-Dichlorobenzene	U		0.00152	0.00523	1	03/21/2020 13:32	WG1447912
1,3-Dichlorobenzene	U		0.00178	0.00523	1	03/21/2020 13:32	WG1447912
1,4-Dichlorobenzene	U		0.00206	0.00523	1	03/21/2020 13:32	WG1447912
Dichlorodifluoromethane	U		0.000855	0.00261	1	03/21/2020 13:32	WG1447912
1,1-Dichloroethane	U		0.000601	0.00261	1	03/21/2020 13:32	WG1447912
1,2-Dichloroethane	U		0.000497	0.00261	1	03/21/2020 13:32	WG1447912
1,1-Dichloroethene	U		0.000523	0.00261	1	03/21/2020 13:32	WG1447912
cis-1,2-Dichloroethene	U		0.000721	0.00261	1	03/21/2020 13:32	WG1447912
trans-1,2-Dichloroethene	U		0.00149	0.00523	1	03/21/2020 13:32	WG1447912
1,2-Dichloropropane	U		0.00133	0.00523	1	03/21/2020 13:32	WG1447912
1,1-Dichloropropene	U		0.000732	0.00261	1	03/21/2020 13:32	WG1447912
1,3-Dichloropropane	U		0.00183	0.00523	1	03/21/2020 13:32	WG1447912
cis-1,3-Dichloropropene	U		0.000709	0.00261	1	03/21/2020 13:32	WG1447912
trans-1,3-Dichloropropene	U		0.00160	0.00523	1	03/21/2020 13:32	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00146	0.00523	1	03/21/2020 13:32	WG1447912
2,2-Dichloropropane	U		0.000829	0.00261	1	03/21/2020 13:32	WG1447912
Di-isopropyl ether	U		0.000366	0.00105	1	03/21/2020 13:32	WG1447912
Ethylbenzene	U		0.000554	0.00261	1	03/21/2020 13:32	WG1447912
Hexachloro-1,3-butadiene	U		0.0133	0.0261	1	03/21/2020 13:32	WG1447912
2-Hexanone	U		0.0105	0.0261	1	03/21/2020 13:32	WG1447912
n-Hexane	U		0.00111	0.00523	1	03/21/2020 13:32	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00632	0.0131	1	03/21/2020 13:32	WG1447912
Isopropylbenzene	U		0.000902	0.00261	1	03/21/2020 13:32	WG1447912
p-Isopropyltoluene	U		0.00244	0.00523	1	03/21/2020 13:32	WG1447912
2-Butanone (MEK)	0.0132	B J	0.0131	0.0261	1	03/21/2020 13:32	WG1447912
Methylene Chloride	U		0.00694	0.0261	1	03/21/2020 13:32	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0105	0.0261	1	03/21/2020 13:32	WG1447912
Methyl tert-butyl ether	U		0.000308	0.00105	1	03/21/2020 13:32	WG1447912
Naphthalene	0.00433	B J	0.00326	0.0131	1	03/21/2020 13:32	WG1447912
n-Propylbenzene	U		0.00123	0.00523	1	03/21/2020 13:32	WG1447912
Styrene	U		0.00285	0.0131	1	03/21/2020 13:32	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000523	0.00261	1	03/21/2020 13:32	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000408	0.00261	1	03/21/2020 13:32	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000706	0.00261	1	03/21/2020 13:32	WG1447912
Tetrachloroethene	0.0103		0.000732	0.00261	1	03/21/2020 13:32	WG1447912
Toluene	U		0.00131	0.00523	1	03/21/2020 13:32	WG1447912
1,2,3-Trichlorobenzene	U		0.000653	0.0131	1	03/21/2020 13:32	WG1447912
1,2,4-Trichlorobenzene	U		0.00504	0.0131	1	03/21/2020 13:32	WG1447912
1,1,1-Trichloroethane	U		0.000287	0.00261	1	03/21/2020 13:32	WG1447912
1,1,2-Trichloroethane	U		0.000923	0.00261	1	03/21/2020 13:32	WG1447912
Trichloroethene	U		0.000418	0.00105	1	03/21/2020 13:32	WG1447912
Trichlorofluoromethane	U		0.000523	0.00261	1	03/21/2020 13:32	WG1447912
1,2,3-Trichloropropane	U		0.00533	0.0131	1	03/21/2020 13:32	WG1447912
1,2,4-Trimethylbenzene	U		0.00121	0.00523	1	03/21/2020 13:32	WG1447912
1,2,3-Trimethylbenzene	0.00170	J	0.00120	0.00523	1	03/21/2020 13:32	WG1447912
1,3,5-Trimethylbenzene	U		0.00113	0.00523	1	03/21/2020 13:32	WG1447912
Vinyl acetate	U	J0	0.00368	0.0131	1	03/21/2020 13:32	WG1447912
Vinyl chloride	U		0.000714	0.00261	1	03/21/2020 13:32	WG1447912
Xylenes, Total	U		0.00500	0.00680	1	03/21/2020 13:32	WG1447912
(S) Toluene-d8	*107*			*75.0-131*		*03/21/2020 13:32*	WG1447912
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*03/21/2020 13:32*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.0*			*70.0-130*		*03/21/2020 13:32*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.2		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.961	2.83	25	03/21/2020 13:42	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*03/21/2020 13:42*	WG1447775

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0155	0.0283	1	03/21/2020 13:51	WG1447912
Acrylonitrile	U		0.00215	0.0142	1	03/21/2020 13:51	WG1447912
Benzene	U		0.000453	0.00113	1	03/21/2020 13:51	WG1447912
Bromobenzene	U		0.00119	0.0142	1	03/21/2020 13:51	WG1447912
Bromodichloromethane	U		0.000893	0.00283	1	03/21/2020 13:51	WG1447912
Bromochloromethane	U		0.00128	0.00567	1	03/21/2020 13:51	WG1447912
Bromoform	U		0.00678	0.0283	1	03/21/2020 13:51	WG1447912
Bromomethane	U		0.00419	0.0142	1	03/21/2020 13:51	WG1447912
n-Butylbenzene	U		0.00435	0.0142	1	03/21/2020 13:51	WG1447912
sec-Butylbenzene	U		0.00287	0.0142	1	03/21/2020 13:51	WG1447912
tert-Butylbenzene	U		0.00176	0.00567	1	03/21/2020 13:51	WG1447912
Carbon disulfide	U		0.00460	0.0142	1	03/21/2020 13:51	WG1447912
Carbon tetrachloride	U		0.00122	0.00567	1	03/21/2020 13:51	WG1447912
Chlorobenzene	U		0.000649	0.00283	1	03/21/2020 13:51	WG1447912
Chlorodibromomethane	U		0.000510	0.00283	1	03/21/2020 13:51	WG1447912
Chloroethane	U		0.00122	0.00567	1	03/21/2020 13:51	WG1447912
Chloroform	U		0.000470	0.00283	1	03/21/2020 13:51	WG1447912
Chloromethane	U	J0	0.00158	0.0142	1	03/21/2020 13:51	WG1447912
2-Chlorotoluene	U		0.00104	0.00283	1	03/21/2020 13:51	WG1447912
4-Chlorotoluene	U		0.00128	0.00567	1	03/21/2020 13:51	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00578	0.0283	1	03/21/2020 13:51	WG1447912
1,2-Dibromoethane	U		0.000595	0.00283	1	03/21/2020 13:51	WG1447912
Dibromomethane	U		0.00113	0.00567	1	03/21/2020 13:51	WG1447912
1,2-Dichlorobenzene	U		0.00164	0.00567	1	03/21/2020 13:51	WG1447912
1,3-Dichlorobenzene	U		0.00193	0.00567	1	03/21/2020 13:51	WG1447912
1,4-Dichlorobenzene	U		0.00223	0.00567	1	03/21/2020 13:51	WG1447912
Dichlorodifluoromethane	U		0.000927	0.00283	1	03/21/2020 13:51	WG1447912
1,1-Dichloroethane	U		0.000652	0.00283	1	03/21/2020 13:51	WG1447912
1,2-Dichloroethane	U		0.000538	0.00283	1	03/21/2020 13:51	WG1447912
1,1-Dichloroethene	U		0.000567	0.00283	1	03/21/2020 13:51	WG1447912
cis-1,2-Dichloroethene	U		0.000782	0.00283	1	03/21/2020 13:51	WG1447912
trans-1,2-Dichloroethene	U		0.00162	0.00567	1	03/21/2020 13:51	WG1447912
1,2-Dichloropropane	U		0.00144	0.00567	1	03/21/2020 13:51	WG1447912
1,1-Dichloropropene	U		0.000793	0.00283	1	03/21/2020 13:51	WG1447912
1,3-Dichloropropane	U		0.00198	0.00567	1	03/21/2020 13:51	WG1447912
cis-1,3-Dichloropropene	U		0.000768	0.00283	1	03/21/2020 13:51	WG1447912
trans-1,3-Dichloropropene	U		0.00173	0.00567	1	03/21/2020 13:51	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00159	0.00567	1	03/21/2020 13:51	WG1447912
2,2-Dichloropropane	U		0.000899	0.00283	1	03/21/2020 13:51	WG1447912
Di-isopropyl ether	U		0.000397	0.00113	1	03/21/2020 13:51	WG1447912
Ethylbenzene	U		0.000601	0.00283	1	03/21/2020 13:51	WG1447912
Hexachloro-1,3-butadiene	U		0.0144	0.0283	1	03/21/2020 13:51	WG1447912
2-Hexanone	U		0.0113	0.0283	1	03/21/2020 13:51	WG1447912
n-Hexane	U		0.00120	0.00567	1	03/21/2020 13:51	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00686	0.0142	1	03/21/2020 13:51	WG1447912
Isopropylbenzene	U		0.000978	0.00283	1	03/21/2020 13:51	WG1447912
p-Isopropyltoluene	U		0.00264	0.00567	1	03/21/2020 13:51	WG1447912
2-Butanone (MEK)	0.0228	B J	0.0142	0.0283	1	03/21/2020 13:51	WG1447912
Methylene Chloride	U		0.00753	0.0283	1	03/21/2020 13:51	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0113	0.0283	1	03/21/2020 13:51	WG1447912
Methyl tert-butyl ether	U		0.000334	0.00113	1	03/21/2020 13:51	WG1447912
Naphthalene	0.00373	B J	0.00354	0.0142	1	03/21/2020 13:51	WG1447912
n-Propylbenzene	U		0.00134	0.00567	1	03/21/2020 13:51	WG1447912
Styrene	U		0.00309	0.0142	1	03/21/2020 13:51	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000567	0.00283	1	03/21/2020 13:51	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000442	0.00283	1	03/21/2020 13:51	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000765	0.00283	1	03/21/2020 13:51	WG1447912
Tetrachloroethene	0.0143		0.000793	0.00283	1	03/21/2020 13:51	WG1447912
Toluene	U		0.00142	0.00567	1	03/21/2020 13:51	WG1447912
1,2,3-Trichlorobenzene	U		0.000708	0.0142	1	03/21/2020 13:51	WG1447912
1,2,4-Trichlorobenzene	U		0.00546	0.0142	1	03/21/2020 13:51	WG1447912
1,1,1-Trichloroethane	U		0.000312	0.00283	1	03/21/2020 13:51	WG1447912
1,1,2-Trichloroethane	U		0.00100	0.00283	1	03/21/2020 13:51	WG1447912
Trichloroethene	U		0.000453	0.00113	1	03/21/2020 13:51	WG1447912
Trichlorofluoromethane	U		0.000567	0.00283	1	03/21/2020 13:51	WG1447912
1,2,3-Trichloropropane	U		0.00578	0.0142	1	03/21/2020 13:51	WG1447912
1,2,4-Trimethylbenzene	U		0.00131	0.00567	1	03/21/2020 13:51	WG1447912
1,2,3-Trimethylbenzene	U		0.00130	0.00567	1	03/21/2020 13:51	WG1447912
1,3,5-Trimethylbenzene	U		0.00122	0.00567	1	03/21/2020 13:51	WG1447912
Vinyl acetate	U	J0	0.00399	0.0142	1	03/21/2020 13:51	WG1447912
Vinyl chloride	U		0.000774	0.00283	1	03/21/2020 13:51	WG1447912
Xylenes, Total	U		0.00542	0.00737	1	03/21/2020 13:51	WG1447912
(S) Toluene-d8	*106*			*75.0-131*		*03/21/2020 13:51*	WG1447912
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*03/21/2020 13:51*	WG1447912
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*03/21/2020 13:51*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.7		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.967	2.85	25	03/21/2020 14:06	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*99.1*			*77.0-120*		*03/21/2020 14:06*	WG1447775

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0156	0.0285	1	03/21/2020 14:10	WG1447912
Acrylonitrile	U		0.00217	0.0143	1	03/21/2020 14:10	WG1447912
Benzene	U		0.000456	0.00114	1	03/21/2020 14:10	WG1447912
Bromobenzene	U		0.00120	0.0143	1	03/21/2020 14:10	WG1447912
Bromodichloromethane	U		0.000898	0.00285	1	03/21/2020 14:10	WG1447912
Bromochloromethane	U		0.00129	0.00570	1	03/21/2020 14:10	WG1447912
Bromoform	U		0.00682	0.0285	1	03/21/2020 14:10	WG1447912
Bromomethane	U		0.00422	0.0143	1	03/21/2020 14:10	WG1447912
n-Butylbenzene	U		0.00438	0.0143	1	03/21/2020 14:10	WG1447912
sec-Butylbenzene	U		0.00288	0.0143	1	03/21/2020 14:10	WG1447912
tert-Butylbenzene	U		0.00177	0.00570	1	03/21/2020 14:10	WG1447912
Carbon disulfide	U		0.00463	0.0143	1	03/21/2020 14:10	WG1447912
Carbon tetrachloride	U		0.00123	0.00570	1	03/21/2020 14:10	WG1447912
Chlorobenzene	U		0.000653	0.00285	1	03/21/2020 14:10	WG1447912
Chlorodibromomethane	U		0.000513	0.00285	1	03/21/2020 14:10	WG1447912
Chloroethane	U		0.00123	0.00570	1	03/21/2020 14:10	WG1447912
Chloroform	U		0.000473	0.00285	1	03/21/2020 14:10	WG1447912
Chloromethane	U	J0	0.00158	0.0143	1	03/21/2020 14:10	WG1447912
2-Chlorotoluene	U		0.00105	0.00285	1	03/21/2020 14:10	WG1447912
4-Chlorotoluene	U		0.00129	0.00570	1	03/21/2020 14:10	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00581	0.0285	1	03/21/2020 14:10	WG1447912
1,2-Dibromoethane	U		0.000599	0.00285	1	03/21/2020 14:10	WG1447912
Dibromomethane	U		0.00114	0.00570	1	03/21/2020 14:10	WG1447912
1,2-Dichlorobenzene	U		0.00165	0.00570	1	03/21/2020 14:10	WG1447912
1,3-Dichlorobenzene	U		0.00194	0.00570	1	03/21/2020 14:10	WG1447912
1,4-Dichlorobenzene	U		0.00225	0.00570	1	03/21/2020 14:10	WG1447912
Dichlorodifluoromethane	U		0.000933	0.00285	1	03/21/2020 14:10	WG1447912
1,1-Dichloroethane	U		0.000656	0.00285	1	03/21/2020 14:10	WG1447912
1,2-Dichloroethane	U		0.000542	0.00285	1	03/21/2020 14:10	WG1447912
1,1-Dichloroethene	U		0.000570	0.00285	1	03/21/2020 14:10	WG1447912
cis-1,2-Dichloroethene	U		0.000787	0.00285	1	03/21/2020 14:10	WG1447912
trans-1,2-Dichloroethene	U		0.00163	0.00570	1	03/21/2020 14:10	WG1447912
1,2-Dichloropropane	U		0.00145	0.00570	1	03/21/2020 14:10	WG1447912
1,1-Dichloropropene	U		0.000798	0.00285	1	03/21/2020 14:10	WG1447912
1,3-Dichloropropane	U		0.00200	0.00570	1	03/21/2020 14:10	WG1447912
cis-1,3-Dichloropropene	U		0.000773	0.00285	1	03/21/2020 14:10	WG1447912
trans-1,3-Dichloropropene	U		0.00174	0.00570	1	03/21/2020 14:10	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00160	0.00570	1	03/21/2020 14:10	WG1447912
2,2-Dichloropropane	U		0.000904	0.00285	1	03/21/2020 14:10	WG1447912
Di-isopropyl ether	U		0.000399	0.00114	1	03/21/2020 14:10	WG1447912
Ethylbenzene	U		0.000604	0.00285	1	03/21/2020 14:10	WG1447912
Hexachloro-1,3-butadiene	U		0.0145	0.0285	1	03/21/2020 14:10	WG1447912
2-Hexanone	U		0.0114	0.0285	1	03/21/2020 14:10	WG1447912
n-Hexane	U		0.00121	0.00570	1	03/21/2020 14:10	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00690	0.0143	1	03/21/2020 14:10	WG1447912
Isopropylbenzene	U		0.000984	0.00285	1	03/21/2020 14:10	WG1447912
p-Isopropyltoluene	U		0.00266	0.00570	1	03/21/2020 14:10	WG1447912
2-Butanone (MEK)	0.0154	B J	0.0143	0.0285	1	03/21/2020 14:10	WG1447912
Methylene Chloride	U		0.00757	0.0285	1	03/21/2020 14:10	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0114	0.0285	1	03/21/2020 14:10	WG1447912
Methyl tert-butyl ether	U		0.000336	0.00114	1	03/21/2020 14:10	WG1447912
Naphthalene	0.00367	B J	0.00356	0.0143	1	03/21/2020 14:10	WG1447912
n-Propylbenzene	U		0.00135	0.00570	1	03/21/2020 14:10	WG1447912
Styrene	U		0.00311	0.0143	1	03/21/2020 14:10	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000570	0.00285	1	03/21/2020 14:10	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000445	0.00285	1	03/21/2020 14:10	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000770	0.00285	1	03/21/2020 14:10	WG1447912
Tetrachloroethene	0.00386		0.000798	0.00285	1	03/21/2020 14:10	WG1447912
Toluene	U		0.00143	0.00570	1	03/21/2020 14:10	WG1447912
1,2,3-Trichlorobenzene	U		0.000713	0.0143	1	03/21/2020 14:10	WG1447912
1,2,4-Trichlorobenzene	U		0.00550	0.0143	1	03/21/2020 14:10	WG1447912
1,1,1-Trichloroethane	U		0.000314	0.00285	1	03/21/2020 14:10	WG1447912
1,1,2-Trichloroethane	U		0.00101	0.00285	1	03/21/2020 14:10	WG1447912
Trichloroethene	U		0.000456	0.00114	1	03/21/2020 14:10	WG1447912
Trichlorofluoromethane	U		0.000570	0.00285	1	03/21/2020 14:10	WG1447912
1,2,3-Trichloropropane	U		0.00581	0.0143	1	03/21/2020 14:10	WG1447912
1,2,4-Trimethylbenzene	U		0.00132	0.00570	1	03/21/2020 14:10	WG1447912
1,2,3-Trimethylbenzene	U		0.00131	0.00570	1	03/21/2020 14:10	WG1447912
1,3,5-Trimethylbenzene	U		0.00123	0.00570	1	03/21/2020 14:10	WG1447912
Vinyl acetate	U	J0	0.00401	0.0143	1	03/21/2020 14:10	WG1447912
Vinyl chloride	U		0.000779	0.00285	1	03/21/2020 14:10	WG1447912
Xylenes, Total	U		0.00545	0.00741	1	03/21/2020 14:10	WG1447912
(S) Toluene-d8	*105*			*75.0-131*		*03/21/2020 14:10*	WG1447912
(S) 4-Bromofluorobenzene	*96.9*			*67.0-138*		*03/21/2020 14:10*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*03/21/2020 14:10*	WG1447912

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.5		1	03/21/2020 19:16	WG1447729

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.937	2.76	25	03/21/2020 14:29	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*77.0-120*		*03/21/2020 14:29*	WG1447775

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0151	0.0276	1	03/21/2020 14:37	WG1447922
Acrylonitrile	U		0.00210	0.0138	1	03/21/2020 14:37	WG1447922
Benzene	U		0.000442	0.00110	1	03/21/2020 14:37	WG1447922
Bromobenzene	U		0.00116	0.0138	1	03/21/2020 14:37	WG1447922
Bromodichloromethane	U		0.000870	0.00276	1	03/21/2020 14:37	WG1447922
Bromochloromethane	U	J4	0.00125	0.00552	1	03/21/2020 14:37	WG1447922
Bromoform	U		0.00661	0.0276	1	03/21/2020 14:37	WG1447922
Bromomethane	U		0.00409	0.0138	1	03/21/2020 14:37	WG1447922
n-Butylbenzene	U		0.00424	0.0138	1	03/21/2020 14:37	WG1447922
sec-Butylbenzene	U		0.00279	0.0138	1	03/21/2020 14:37	WG1447922
tert-Butylbenzene	U		0.00171	0.00552	1	03/21/2020 14:37	WG1447922
Carbon disulfide	U		0.00448	0.0138	1	03/21/2020 14:37	WG1447922
Carbon tetrachloride	U		0.00119	0.00552	1	03/21/2020 14:37	WG1447922
Chlorobenzene	U		0.000633	0.00276	1	03/21/2020 14:37	WG1447922
Chlorodibromomethane	U		0.000497	0.00276	1	03/21/2020 14:37	WG1447922
Chloroethane	U		0.00119	0.00552	1	03/21/2020 14:37	WG1447922
Chloroform	U		0.000458	0.00276	1	03/21/2020 14:37	WG1447922
Chloromethane	U		0.00154	0.0138	1	03/21/2020 14:37	WG1447922
2-Chlorotoluene	U		0.00102	0.00276	1	03/21/2020 14:37	WG1447922
4-Chlorotoluene	U		0.00125	0.00552	1	03/21/2020 14:37	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00563	0.0276	1	03/21/2020 14:37	WG1447922
1,2-Dibromoethane	U		0.000580	0.00276	1	03/21/2020 14:37	WG1447922
Dibromomethane	U		0.00110	0.00552	1	03/21/2020 14:37	WG1447922
1,2-Dichlorobenzene	U		0.00160	0.00552	1	03/21/2020 14:37	WG1447922
1,3-Dichlorobenzene	U		0.00188	0.00552	1	03/21/2020 14:37	WG1447922
1,4-Dichlorobenzene	U		0.00218	0.00552	1	03/21/2020 14:37	WG1447922
Dichlorodifluoromethane	U		0.000904	0.00276	1	03/21/2020 14:37	WG1447922
1,1-Dichloroethane	U		0.000635	0.00276	1	03/21/2020 14:37	WG1447922
1,2-Dichloroethane	U		0.000525	0.00276	1	03/21/2020 14:37	WG1447922
1,1-Dichloroethene	U		0.000552	0.00276	1	03/21/2020 14:37	WG1447922
cis-1,2-Dichloroethene	U		0.000762	0.00276	1	03/21/2020 14:37	WG1447922
trans-1,2-Dichloroethene	U		0.00158	0.00552	1	03/21/2020 14:37	WG1447922
1,2-Dichloropropane	U		0.00140	0.00552	1	03/21/2020 14:37	WG1447922
1,1-Dichloropropene	U		0.000773	0.00276	1	03/21/2020 14:37	WG1447922
1,3-Dichloropropane	U		0.00193	0.00552	1	03/21/2020 14:37	WG1447922
cis-1,3-Dichloropropene	U		0.000749	0.00276	1	03/21/2020 14:37	WG1447922
trans-1,3-Dichloropropene	U		0.00169	0.00552	1	03/21/2020 14:37	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00155	0.00552	1	03/21/2020 14:37	WG1447922
2,2-Dichloropropane	U		0.000876	0.00276	1	03/21/2020 14:37	WG1447922
Di-isopropyl ether	U		0.000387	0.00110	1	03/21/2020 14:37	WG1447922
Ethylbenzene	U		0.000585	0.00276	1	03/21/2020 14:37	WG1447922
Hexachloro-1,3-butadiene	U		0.0140	0.0276	1	03/21/2020 14:37	WG1447922
2-Hexanone	U		0.0110	0.0276	1	03/21/2020 14:37	WG1447922
n-Hexane	U		0.00117	0.00552	1	03/21/2020 14:37	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00668	0.0138	1	03/21/2020 14:37	WG1447922
Isopropylbenzene	U		0.000953	0.00276	1	03/21/2020 14:37	WG1447922
p-Isopropyltoluene	U		0.00257	0.00552	1	03/21/2020 14:37	WG1447922
2-Butanone (MEK)	0.0154	B J	0.0138	0.0276	1	03/21/2020 14:37	WG1447922
Methylene Chloride	U		0.00733	0.0276	1	03/21/2020 14:37	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0276	1	03/21/2020 14:37	WG1447922
Methyl tert-butyl ether	U		0.000326	0.00110	1	03/21/2020 14:37	WG1447922
Naphthalene	U		0.00345	0.0138	1	03/21/2020 14:37	WG1447922
n-Propylbenzene	U		0.00130	0.00552	1	03/21/2020 14:37	WG1447922
Styrene	U		0.00302	0.0138	1	03/21/2020 14:37	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000552	0.00276	1	03/21/2020 14:37	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000431	0.00276	1	03/21/2020 14:37	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000746	0.00276	1	03/21/2020 14:37	WG1447922
Tetrachloroethene	0.00214	J	0.000773	0.00276	1	03/21/2020 14:37	WG1447922
Toluene	U		0.00138	0.00552	1	03/21/2020 14:37	WG1447922
1,2,3-Trichlorobenzene	U		0.000690	0.0138	1	03/21/2020 14:37	WG1447922
1,2,4-Trichlorobenzene	U		0.00532	0.0138	1	03/21/2020 14:37	WG1447922
1,1,1-Trichloroethane	U		0.000304	0.00276	1	03/21/2020 14:37	WG1447922
1,1,2-Trichloroethane	U		0.000975	0.00276	1	03/21/2020 14:37	WG1447922
Trichloroethene	U		0.000442	0.00110	1	03/21/2020 14:37	WG1447922
Trichlorofluoromethane	U		0.000552	0.00276	1	03/21/2020 14:37	WG1447922
1,2,3-Trichloropropane	U		0.00563	0.0138	1	03/21/2020 14:37	WG1447922
1,2,4-Trimethylbenzene	U		0.00128	0.00552	1	03/21/2020 14:37	WG1447922
1,2,3-Trimethylbenzene	U		0.00127	0.00552	1	03/21/2020 14:37	WG1447922
1,3,5-Trimethylbenzene	U		0.00119	0.00552	1	03/21/2020 14:37	WG1447922
Vinyl acetate	U	J0	0.00389	0.0138	1	03/21/2020 14:37	WG1447922
Vinyl chloride	U		0.000754	0.00276	1	03/21/2020 14:37	WG1447922
Xylenes, Total	U		0.00528	0.00718	1	03/21/2020 14:37	WG1447922
(S) Toluene-d8	*114*			*75.0-131*		*03/21/2020 14:37*	WG1447922
(S) 4-Bromofluorobenzene	*94.2*			*67.0-138*		*03/21/2020 14:37*	WG1447922
(S) 1,2-Dichloroethane-d4	*92.1*			*70.0-130*		*03/21/2020 14:37*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.0		1	03/21/2020 19:16	WG1447729

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.903	2.66	25	03/21/2020 15:18	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*		*03/21/2020 15:18*	WG1447775

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0146	0.0266	1	03/21/2020 14:56	WG1447922
Acrylonitrile	U		0.00202	0.0133	1	03/21/2020 14:56	WG1447922
Benzene	U		0.000426	0.00106	1	03/21/2020 14:56	WG1447922
Bromobenzene	U		0.00112	0.0133	1	03/21/2020 14:56	WG1447922
Bromodichloromethane	U		0.000839	0.00266	1	03/21/2020 14:56	WG1447922
Bromochloromethane	U	J4	0.00120	0.00532	1	03/21/2020 14:56	WG1447922
Bromoform	U		0.00636	0.0266	1	03/21/2020 14:56	WG1447922
Bromomethane	U		0.00394	0.0133	1	03/21/2020 14:56	WG1447922
n-Butylbenzene	U		0.00409	0.0133	1	03/21/2020 14:56	WG1447922
sec-Butylbenzene	U		0.00269	0.0133	1	03/21/2020 14:56	WG1447922
tert-Butylbenzene	U		0.00165	0.00532	1	03/21/2020 14:56	WG1447922
Carbon disulfide	U		0.00432	0.0133	1	03/21/2020 14:56	WG1447922
Carbon tetrachloride	U		0.00115	0.00532	1	03/21/2020 14:56	WG1447922
Chlorobenzene	U		0.000610	0.00266	1	03/21/2020 14:56	WG1447922
Chlorodibromomethane	U		0.000479	0.00266	1	03/21/2020 14:56	WG1447922
Chloroethane	U		0.00115	0.00532	1	03/21/2020 14:56	WG1447922
Chloroform	U		0.000442	0.00266	1	03/21/2020 14:56	WG1447922
Chloromethane	U		0.00148	0.0133	1	03/21/2020 14:56	WG1447922
2-Chlorotoluene	U		0.000979	0.00266	1	03/21/2020 14:56	WG1447922
4-Chlorotoluene	U		0.00120	0.00532	1	03/21/2020 14:56	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00543	0.0266	1	03/21/2020 14:56	WG1447922
1,2-Dibromoethane	U		0.000559	0.00266	1	03/21/2020 14:56	WG1447922
Dibromomethane	U		0.00106	0.00532	1	03/21/2020 14:56	WG1447922
1,2-Dichlorobenzene	U		0.00154	0.00532	1	03/21/2020 14:56	WG1447922
1,3-Dichlorobenzene	U		0.00181	0.00532	1	03/21/2020 14:56	WG1447922
1,4-Dichlorobenzene	U		0.00210	0.00532	1	03/21/2020 14:56	WG1447922
Dichlorodifluoromethane	U		0.000871	0.00266	1	03/21/2020 14:56	WG1447922
1,1-Dichloroethane	U		0.000612	0.00266	1	03/21/2020 14:56	WG1447922
1,2-Dichloroethane	U		0.000506	0.00266	1	03/21/2020 14:56	WG1447922
1,1-Dichloroethene	U		0.000532	0.00266	1	03/21/2020 14:56	WG1447922
cis-1,2-Dichloroethene	U		0.000734	0.00266	1	03/21/2020 14:56	WG1447922
trans-1,2-Dichloroethene	U		0.00152	0.00532	1	03/21/2020 14:56	WG1447922
1,2-Dichloropropane	U		0.00135	0.00532	1	03/21/2020 14:56	WG1447922
1,1-Dichloropropene	U		0.000745	0.00266	1	03/21/2020 14:56	WG1447922
1,3-Dichloropropane	U		0.00186	0.00532	1	03/21/2020 14:56	WG1447922
cis-1,3-Dichloropropene	U		0.000722	0.00266	1	03/21/2020 14:56	WG1447922
trans-1,3-Dichloropropene	U		0.00163	0.00532	1	03/21/2020 14:56	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00149	0.00532	1	03/21/2020 14:56	WG1447922
2,2-Dichloropropane	U		0.000844	0.00266	1	03/21/2020 14:56	WG1447922
Di-isopropyl ether	U		0.000372	0.00106	1	03/21/2020 14:56	WG1447922
Ethylbenzene	U		0.000564	0.00266	1	03/21/2020 14:56	WG1447922
Hexachloro-1,3-butadiene	U		0.0135	0.0266	1	03/21/2020 14:56	WG1447922
2-Hexanone	U		0.0106	0.0266	1	03/21/2020 14:56	WG1447922
n-Hexane	U		0.00113	0.00532	1	03/21/2020 14:56	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00644	0.0133	1	03/21/2020 14:56	WG1447922
Isopropylbenzene	U		0.000918	0.00266	1	03/21/2020 14:56	WG1447922
p-Isopropyltoluene	U		0.00248	0.00532	1	03/21/2020 14:56	WG1447922
2-Butanone (MEK)	U		0.0133	0.0266	1	03/21/2020 14:56	WG1447922
Methylene Chloride	U		0.00707	0.0266	1	03/21/2020 14:56	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0106	0.0266	1	03/21/2020 14:56	WG1447922
Methyl tert-butyl ether	U		0.000314	0.00106	1	03/21/2020 14:56	WG1447922
Naphthalene	U		0.00332	0.0133	1	03/21/2020 14:56	WG1447922
n-Propylbenzene	U		0.00126	0.00532	1	03/21/2020 14:56	WG1447922
Styrene	U		0.00291	0.0133	1	03/21/2020 14:56	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000532	0.00266	1	03/21/2020 14:56	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000415	0.00266	1	03/21/2020 14:56	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000718	0.00266	1	03/21/2020 14:56	WG1447922
Tetrachloroethene	0.00200	J	0.000745	0.00266	1	03/21/2020 14:56	WG1447922
Toluene	U		0.00133	0.00532	1	03/21/2020 14:56	WG1447922
1,2,3-Trichlorobenzene	U		0.000665	0.0133	1	03/21/2020 14:56	WG1447922
1,2,4-Trichlorobenzene	U		0.00513	0.0133	1	03/21/2020 14:56	WG1447922
1,1,1-Trichloroethane	U		0.000293	0.00266	1	03/21/2020 14:56	WG1447922
1,1,2-Trichloroethane	U		0.000940	0.00266	1	03/21/2020 14:56	WG1447922
Trichloroethene	U		0.000426	0.00106	1	03/21/2020 14:56	WG1447922
Trichlorofluoromethane	U		0.000532	0.00266	1	03/21/2020 14:56	WG1447922
1,2,3-Trichloropropane	U		0.00543	0.0133	1	03/21/2020 14:56	WG1447922
1,2,4-Trimethylbenzene	U		0.00123	0.00532	1	03/21/2020 14:56	WG1447922
1,2,3-Trimethylbenzene	U		0.00122	0.00532	1	03/21/2020 14:56	WG1447922
1,3,5-Trimethylbenzene	U		0.00115	0.00532	1	03/21/2020 14:56	WG1447922
Vinyl acetate	U	J0	0.00375	0.0133	1	03/21/2020 14:56	WG1447922
Vinyl chloride	U		0.000727	0.00266	1	03/21/2020 14:56	WG1447922
Xylenes, Total	U		0.00509	0.00692	1	03/21/2020 14:56	WG1447922
(S) Toluene-d8	*112*			*75.0-131*		*03/21/2020 14:56*	WG1447922
(S) 4-Bromofluorobenzene	*92.9*			*67.0-138*		*03/21/2020 14:56*	WG1447922
(S) 1,2-Dichloroethane-d4	*94.0*			*70.0-130*		*03/21/2020 14:56*	WG1447922

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	50.2	B J	31.6	100	1	03/24/2020 13:41	WG1449272
(S) a,a,a-Trifluorotoluene(FID)	*96.4*			*78.0-120*		*03/24/2020 13:41*	WG1449272

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	7.55	J J0	1.05	25.0	1	03/26/2020 11:35	WG1450695
Acrylonitrile	U		0.873	5.00	1	03/26/2020 11:35	WG1450695
Benzene	U		0.0896	0.500	1	03/26/2020 11:35	WG1450695
Bromobenzene	U	J4	0.133	0.500	1	03/26/2020 11:35	WG1450695
Bromodichloromethane	U		0.0800	0.500	1	03/26/2020 11:35	WG1450695
Bromochloromethane	U		0.145	0.500	1	03/26/2020 11:35	WG1450695
Bromoform	U		0.186	0.500	1	03/26/2020 11:35	WG1450695
Bromomethane	U	J0	0.157	2.50	1	03/26/2020 11:35	WG1450695
n-Butylbenzene	U		0.143	0.500	1	03/26/2020 11:35	WG1450695
sec-Butylbenzene	U		0.134	0.500	1	03/26/2020 11:35	WG1450695
tert-Butylbenzene	U		0.183	0.500	1	03/26/2020 11:35	WG1450695
Carbon disulfide	U		0.101	0.500	1	03/26/2020 11:35	WG1450695
Carbon tetrachloride	U		0.159	0.500	1	03/26/2020 11:35	WG1450695
Chlorobenzene	U		0.140	0.500	1	03/26/2020 11:35	WG1450695
Chlorodibromomethane	U		0.128	0.500	1	03/26/2020 11:35	WG1450695
Chloroethane	U		0.141	2.50	1	03/26/2020 11:35	WG1450695
Chloroform	U		0.0860	0.500	1	03/26/2020 11:35	WG1450695
Chloromethane	U		0.153	1.25	1	03/26/2020 11:35	WG1450695
2-Chlorotoluene	U	J4	0.111	0.500	1	03/26/2020 11:35	WG1450695
4-Chlorotoluene	U		0.0972	0.500	1	03/26/2020 11:35	WG1450695
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	03/26/2020 11:35	WG1450695
1,2-Dibromoethane	U		0.193	0.500	1	03/26/2020 11:35	WG1450695
Dibromomethane	U		0.117	0.500	1	03/26/2020 11:35	WG1450695
1,2-Dichlorobenzene	U		0.101	0.500	1	03/26/2020 11:35	WG1450695
1,3-Dichlorobenzene	U		0.130	0.500	1	03/26/2020 11:35	WG1450695
1,4-Dichlorobenzene	U		0.121	0.500	1	03/26/2020 11:35	WG1450695
Dichlorodifluoromethane	U	J4	0.127	2.50	1	03/26/2020 11:35	WG1450695
1,1-Dichloroethane	U		0.114	0.500	1	03/26/2020 11:35	WG1450695
1,2-Dichloroethane	U		0.108	0.500	1	03/26/2020 11:35	WG1450695
1,1-Dichloroethene	U		0.188	0.500	1	03/26/2020 11:35	WG1450695
cis-1,2-Dichloroethene	U		0.0933	0.500	1	03/26/2020 11:35	WG1450695
trans-1,2-Dichloroethene	U		0.152	0.500	1	03/26/2020 11:35	WG1450695
1,2-Dichloropropane	U		0.190	0.500	1	03/26/2020 11:35	WG1450695
1,1-Dichloropropene	U		0.128	0.500	1	03/26/2020 11:35	WG1450695
1,3-Dichloropropane	U		0.147	1.00	1	03/26/2020 11:35	WG1450695
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/26/2020 11:35	WG1450695
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/26/2020 11:35	WG1450695
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	03/26/2020 11:35	WG1450695
2,2-Dichloropropane	U	J4	0.0929	0.500	1	03/26/2020 11:35	WG1450695
Di-isopropyl ether	U	J4	0.0924	0.500	1	03/26/2020 11:35	WG1450695
Ethylbenzene	U		0.158	0.500	1	03/26/2020 11:35	WG1450695
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/26/2020 11:35	WG1450695
2-Hexanone	U		0.757	5.00	1	03/26/2020 11:35	WG1450695
n-Hexane	U	J4	0.305	5.00	1	03/26/2020 11:35	WG1450695
Iodomethane	U		0.377	10.0	1	03/26/2020 11:35	WG1450695
Isopropylbenzene	U		0.126	0.500	1	03/26/2020 11:35	WG1450695
p-Isopropyltoluene	U		0.138	0.500	1	03/26/2020 11:35	WG1450695
2-Butanone (MEK)	U		1.28	5.00	1	03/26/2020 11:35	WG1450695

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	03/26/2020 11:35	WG1450695
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	03/26/2020 11:35	WG1450695
Methyl tert-butyl ether	U		0.102	0.500	1	03/26/2020 11:35	WG1450695
Naphthalene	U		0.174	2.50	1	03/26/2020 11:35	WG1450695
n-Propylbenzene	U	J4	0.162	0.500	1	03/26/2020 11:35	WG1450695
Styrene	U		0.117	0.500	1	03/26/2020 11:35	WG1450695
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/26/2020 11:35	WG1450695
1,1,2,2-Tetrachloroethane	U	J4	0.130	0.500	1	03/26/2020 11:35	WG1450695
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/26/2020 11:35	WG1450695
Tetrachloroethene	U		0.199	0.500	1	03/26/2020 11:35	WG1450695
Toluene	U		0.412	0.500	1	03/26/2020 11:35	WG1450695
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/26/2020 11:35	WG1450695
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/26/2020 11:35	WG1450695
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/26/2020 11:35	WG1450695
1,1,2-Trichloroethane	U		0.186	0.500	1	03/26/2020 11:35	WG1450695
Trichloroethene	U		0.153	0.500	1	03/26/2020 11:35	WG1450695
Trichlorofluoromethane	U		0.130	2.50	1	03/26/2020 11:35	WG1450695
1,2,3-Trichloropropane	U		0.247	2.50	1	03/26/2020 11:35	WG1450695
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/26/2020 11:35	WG1450695
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/26/2020 11:35	WG1450695
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/26/2020 11:35	WG1450695
Vinyl acetate	U	J4	0.645	5.00	1	03/26/2020 11:35	WG1450695
Vinyl chloride	U		0.118	0.500	1	03/26/2020 11:35	WG1450695
Xylenes, Total	U		0.316	1.50	1	03/26/2020 11:35	WG1450695
(S) Toluene-d8	*97.6*			*80.0-120*		*03/26/2020 11:35*	WG1450695
(S) 4-Bromofluorobenzene	*91.6*			*77.0-126*		*03/26/2020 11:35*	WG1450695
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*03/26/2020 11:35*	WG1450695

Method Blank (MB)

(MB) R3511558-1 03/22/20 03:01

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00600			

L1200802-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1200802-01 03/22/20 03:01 • (DUP) R3511558-3 03/22/20 03:01

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	90.3	89.2	1	1.22		10

Laboratory Control Sample (LCS)

(LCS) R3511558-2 03/22/20 03:01

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.1	100	85.0-115	

Method Blank (MB)

(MB) R3511496-1 03/21/20 19:42

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00400			

L1200814-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1200814-07 03/21/20 19:42 • (DUP) R3511496-3 03/21/20 19:42

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	90.2	93.1	1	3.21		10

Laboratory Control Sample (LCS)

(LCS) R3511496-2 03/21/20 19:42

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3511493-1 03/21/20 19:16

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1200814-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1200814-17 03/21/20 19:16 • (DUP) R3511493-3 03/21/20 19:16

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.0	92.4	1	1.68		10

Laboratory Control Sample (LCS)

(LCS) R3511493-2 03/21/20 19:16

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3512347-2 03/20/20 16:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*99.6*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3512347-1 03/20/20 15:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	4.41	80.2	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*105*	*77.0-120*	

Method Blank (MB)

(MB) R3512829-2 03/21/20 10:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3512829-1 03/21/20 09:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	4.86	88.4	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*105*	*77.0-120*	

L1200814-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1200814-09 03/21/20 11:37 • (MS) R3512829-3 03/21/20 18:44 • (MSD) R3512829-4 03/21/20 19:11

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	113	U	78.0	66.1	69.1	58.5	25	10.0-149			16.6	27
(S) a,a,a-Trifluorotoluene(FID)					*104*	*107*		*77.0-120*				

Method Blank (MB)

(MB) R3511941-2 03/24/20 10:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	31.9	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*96.2*			*78.0-120*

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

(LCS) R3511941-1 03/24/20 10:06 • (LCSD) R3511941-3 03/24/20 14:02

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5500	4880	5130	88.7	93.3	70.0-124			5.00	20
(S) a,a,a-Trifluorotoluene(FID)				*103*	*103*	*78.0-120*				

Method Blank (MB)

(MB) R3512932-3 03/21/20 07:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.00100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
Bromochloromethane	U		0.00113	0.00500
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
n-Butylbenzene	U		0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tert-Butylbenzene	U		0.00155	0.00500
Carbon disulfide	U		0.00406	0.0125
Carbon tetrachloride	U		0.00108	0.00500
Chlorobenzene	U		0.000573	0.00250
Chlorodibromomethane	U		0.000450	0.00250
Chloroethane	U		0.00108	0.00500
Chloroform	0.000950	J	0.000415	0.00250
Chloromethane	U		0.00139	0.0125
2-Chlorotoluene	U		0.000920	0.00250
4-Chlorotoluene	U		0.00113	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0250
1,2-Dibromoethane	U		0.000525	0.00250
Dibromomethane	U		0.00100	0.00500
1,2-Dichlorobenzene	U		0.00145	0.00500
1,3-Dichlorobenzene	U		0.00170	0.00500
1,4-Dichlorobenzene	U		0.00197	0.00500
trans-1,4-Dichloro-2-butene	U		0.00140	0.00500
Dichlorodifluoromethane	U		0.000818	0.00250
1,1-Dichloroethane	U		0.000575	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
1,1-Dichloroethene	U		0.000500	0.00250
cis-1,2-Dichloroethene	U		0.000690	0.00250
trans-1,2-Dichloroethene	U		0.00143	0.00500
1,2-Dichloropropane	U		0.00127	0.00500
1,1-Dichloropropene	U		0.000700	0.00250
1,3-Dichloropropane	U		0.00175	0.00500
cis-1,3-Dichloropropene	U		0.000678	0.00250
trans-1,3-Dichloropropene	U		0.00153	0.00500
2,2-Dichloropropane	U		0.000793	0.00250
Di-isopropyl ether	U		0.000350	0.00100

Method Blank (MB)

(MB) R3512932-3 03/21/20 07:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
n-Hexane	U		0.00106	0.00500
2-Hexanone	U		0.0100	0.0250
Iodomethane	U		0.00605	0.0125
Isopropylbenzene	U		0.000863	0.00250
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0237	J	0.0125	0.0250
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.0100	0.0250
Methyl tert-butyl ether	U		0.000295	0.00100
Naphthalene	0.00423	J	0.00312	0.0125
n-Propylbenzene	U		0.00118	0.00500
Styrene	U		0.00273	0.0125
1,1,1,2-Tetrachloroethane	U		0.000500	0.00250
1,1,2,2-Tetrachloroethane	U		0.000390	0.00250
Tetrachloroethene	U		0.000700	0.00250
Toluene	U		0.00125	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000675	0.00250
1,2,3-Trichlorobenzene	U		0.000625	0.0125
1,2,4-Trichlorobenzene	U		0.00482	0.0125
1,1,1-Trichloroethane	U		0.000275	0.00250
1,1,2-Trichloroethane	U		0.000883	0.00250
Trichloroethene	U		0.000400	0.00100
Trichlorofluoromethane	U		0.000500	0.00250
1,2,3-Trichloropropane	U		0.00510	0.0125
1,2,3-Trimethylbenzene	U		0.00115	0.00500
1,2,4-Trimethylbenzene	U		0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl acetate	U		0.00352	0.0125
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*107*			*75.0-131*
(S) 4-Bromofluorobenzene	*100*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*95.2*			*70.0-130*

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

(LCS) R3512932-1 03/21/20 05:37 • (LCSD) R3512932-2 03/21/20 06:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.972	0.840	156	134	10.0-160			14.6	31
Acrylonitrile	0.625	0.812	0.776	130	124	45.0-153			4.53	22
Benzene	0.125	0.106	0.101	84.8	80.8	70.0-123			4.83	20
Bromobenzene	0.125	0.124	0.128	99.2	102	73.0-121			3.17	20
Bromodichloromethane	0.125	0.113	0.112	90.4	89.6	73.0-121			0.889	20
Bromochloromethane	0.125	0.148	0.144	118	115	77.0-128			2.74	20
Bromoform	0.125	0.143	0.144	114	115	64.0-132			0.697	20
Bromomethane	0.125	0.118	0.112	94.4	89.6	56.0-147			5.22	20
n-Butylbenzene	0.125	0.126	0.125	101	100	68.0-135			0.797	20
sec-Butylbenzene	0.125	0.123	0.121	98.4	96.8	74.0-130			1.64	20
tert-Butylbenzene	0.125	0.114	0.110	91.2	88.0	75.0-127			3.57	20
Carbon disulfide	0.125	0.105	0.0947	84.0	75.8	56.0-133			10.3	20
Carbon tetrachloride	0.125	0.111	0.106	88.8	84.8	66.0-128			4.61	20
Chlorobenzene	0.125	0.133	0.126	106	101	76.0-128			5.41	20
Chlorodibromomethane	0.125	0.122	0.122	97.6	97.6	74.0-127			0.000	20
Chloroethane	0.125	0.113	0.107	90.4	85.6	61.0-134			5.45	20
Chloroform	0.125	0.0992	0.0965	79.4	77.2	72.0-123			2.76	20
Chloromethane	0.125	0.0868	0.0813	69.4	65.0	51.0-138	J0		6.54	20
2-Chlorotoluene	0.125	0.131	0.127	105	102	75.0-124			3.10	20
4-Chlorotoluene	0.125	0.128	0.125	102	100	75.0-124			2.37	20
1,2-Dibromo-3-Chloropropane	0.125	0.120	0.116	96.0	92.8	59.0-130			3.39	20
1,2-Dibromoethane	0.125	0.121	0.129	96.8	103	74.0-128			6.40	20
Dibromomethane	0.125	0.146	0.143	117	114	75.0-122			2.08	20
1,2-Dichlorobenzene	0.125	0.132	0.130	106	104	76.0-124			1.53	20
1,3-Dichlorobenzene	0.125	0.128	0.121	102	96.8	76.0-125			5.62	20
1,4-Dichlorobenzene	0.125	0.116	0.113	92.8	90.4	77.0-121			2.62	20
trans-1,4-Dichloro-2-butene	0.125	0.110	0.113	88.0	90.4	45.0-143			2.69	20
Dichlorodifluoromethane	0.125	0.124	0.113	99.2	90.4	43.0-156			9.28	20
1,1-Dichloroethane	0.125	0.102	0.0982	81.6	78.6	70.0-127			3.80	20
1,2-Dichloroethane	0.125	0.0963	0.0944	77.0	75.5	65.0-131			1.99	20
1,1-Dichloroethene	0.125	0.116	0.109	92.8	87.2	65.0-131			6.22	20
cis-1,2-Dichloroethene	0.125	0.110	0.103	88.0	82.4	73.0-125			6.57	20
trans-1,2-Dichloroethene	0.125	0.120	0.110	96.0	88.0	71.0-125			8.70	20
1,2-Dichloropropane	0.125	0.153	0.153	122	122	74.0-125			0.000	20
1,1-Dichloropropene	0.125	0.114	0.104	91.2	83.2	73.0-125			9.17	20
1,3-Dichloropropane	0.125	0.116	0.113	92.8	90.4	80.0-125			2.62	20
cis-1,3-Dichloropropene	0.125	0.141	0.141	113	113	76.0-127			0.000	20
trans-1,3-Dichloropropene	0.125	0.129	0.131	103	105	73.0-127			1.54	20
2,2-Dichloropropane	0.125	0.111	0.107	88.8	85.6	59.0-135			3.67	20
Di-isopropyl ether	0.125	0.124	0.122	99.2	97.6	60.0-136			1.63	20

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

(LCS) R3512932-1 03/21/20 05:37 • (LCSD) R3512932-2 03/21/20 06:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.125	0.130	0.124	104	99.2	74.0-126			4.72	20
Hexachloro-1,3-butadiene	0.125	0.122	0.115	97.6	92.0	57.0-150			5.91	20
2-Hexanone	0.625	0.785	0.802	126	128	54.0-147			2.14	20
n-Hexane	0.125	0.100	0.0920	80.0	73.6	55.0-137			8.33	20
Iodomethane	0.625	0.645	0.623	103	99.7	74.0-134			3.47	20
Isopropylbenzene	0.125	0.135	0.129	108	103	72.0-127			4.55	20
p-Isopropyltoluene	0.125	0.127	0.123	102	98.4	72.0-133			3.20	20
2-Butanone (MEK)	0.625	0.711	0.682	114	109	30.0-160			4.16	24
Methylene Chloride	0.125	0.107	0.103	85.6	82.4	68.0-123			3.81	20
4-Methyl-2-pentanone (MIBK)	0.625	0.732	0.726	117	116	56.0-143			0.823	20
Methyl tert-butyl ether	0.125	0.125	0.127	100	102	66.0-132			1.59	20
Naphthalene	0.125	0.103	0.0913	82.4	73.0	59.0-130			12.0	20
n-Propylbenzene	0.125	0.123	0.122	98.4	97.6	74.0-126			0.816	20
Styrene	0.125	0.151	0.146	121	117	72.0-127			3.37	20
1,1,1,2-Tetrachloroethane	0.125	0.124	0.123	99.2	98.4	74.0-129			0.810	20
1,1,2,2-Tetrachloroethane	0.125	0.110	0.111	88.0	88.8	68.0-128			0.905	20
Tetrachloroethene	0.125	0.126	0.123	101	98.4	70.0-136			2.41	20
Toluene	0.125	0.107	0.103	85.6	82.4	75.0-121			3.81	20
1,1,2-Trichlorotrifluoroethane	0.125	0.123	0.117	98.4	93.6	61.0-139			5.00	20
1,2,3-Trichlorobenzene	0.125	0.121	0.113	96.8	90.4	59.0-139			6.84	20
1,2,4-Trichlorobenzene	0.125	0.127	0.113	102	90.4	62.0-137			11.7	20
1,1,1-Trichloroethane	0.125	0.119	0.118	95.2	94.4	69.0-126			0.844	20
1,1,2-Trichloroethane	0.125	0.106	0.106	84.8	84.8	78.0-123			0.000	20
Trichloroethene	0.125	0.139	0.135	111	108	76.0-126			2.92	20
Trichlorofluoromethane	0.125	0.112	0.103	89.6	82.4	61.0-142			8.37	20
1,2,3-Trichloropropane	0.125	0.124	0.125	99.2	100	67.0-129			0.803	20
1,2,3-Trimethylbenzene	0.125	0.110	0.108	88.0	86.4	74.0-124			1.83	20
1,2,4-Trimethylbenzene	0.125	0.112	0.109	89.6	87.2	70.0-126			2.71	20
1,3,5-Trimethylbenzene	0.125	0.105	0.105	84.0	84.0	73.0-127			0.000	20
Vinyl acetate	0.625	0.512	0.549	81.9	87.8	43.0-159	J0		6.97	20
Vinyl chloride	0.125	0.124	0.116	99.2	92.8	63.0-134			6.67	20
Xylenes, Total	0.375	0.400	0.376	107	100	72.0-127			6.19	20
(S) Toluene-d8				*102*	*105*	*75.0-131*				
(S) 4-Bromofluorobenzene				*105*	*105*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*102*	*103*	*70.0-130*				

L1200706-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1200706-07 03/21/20 09:06 • (MS) R3512932-4 03/21/20 14:29 • (MSD) R3512932-5 03/21/20 14:48

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	1.24	U	1.48	1.31	119	106	2	10.0-160			12.0	40
Acrylonitrile	1.24	U	1.64	1.47	132	118	2	10.0-160			10.8	40
Benzene	0.248	U	0.266	0.254	107	102	2	10.0-149			4.59	37
Bromobenzene	0.248	U	0.336	0.331	135	133	2	10.0-156			1.43	38
Bromodichloromethane	0.248	U	0.283	0.275	114	111	2	10.0-143			3.00	37
Bromochloromethane	0.248	U	0.354	0.337	142	136	2	10.0-155			4.84	33
Bromoform	0.248	U	0.322	0.319	130	128	2	10.0-146			1.12	36
Bromomethane	0.248	U	0.252	0.239	101	96.2	2	10.0-149			5.35	38
n-Butylbenzene	0.248	U	0.361	0.342	145	138	2	10.0-160			5.44	40
sec-Butylbenzene	0.248	U	0.343	0.328	138	132	2	10.0-159			4.27	39
tert-Butylbenzene	0.248	U	0.311	0.309	125	125	2	10.0-156			0.385	39
Carbon disulfide	0.248	U	0.260	0.241	105	97.1	2	10.0-145			7.62	39
Carbon tetrachloride	0.248	U	0.281	0.256	113	103	2	10.0-145			9.35	37
Chlorobenzene	0.248	U	0.328	0.316	132	127	2	10.0-152			3.70	39
Chlorodibromomethane	0.248	U	0.281	0.287	113	115	2	10.0-146			2.11	37
Chloroethane	0.248	U	0.211	0.198	85.1	79.8	2	10.0-146			6.41	40
Chloroform	0.248	U	0.248	0.236	100	95.2	2	10.0-146			4.93	37
Chloromethane	0.248	U	0.235	0.214	94.7	86.1	2	10.0-159			9.57	37
2-Chlorotoluene	0.248	U	0.343	0.349	138	140	2	10.0-159			1.73	38
4-Chlorotoluene	0.248	U	0.349	0.342	140	138	2	10.0-155			2.08	39
1,2-Dibromo-3-Chloropropane	0.248	U	0.247	0.268	99.5	108	2	10.0-151			7.89	39
1,2-Dibromoethane	0.248	U	0.305	0.300	123	121	2	10.0-148			1.58	34
Dibromomethane	0.248	U	0.355	0.332	143	134	2	10.0-147			6.61	35
1,2-Dichlorobenzene	0.248	U	0.338	0.321	136	129	2	10.0-155			5.07	37
1,3-Dichlorobenzene	0.248	U	0.338	0.324	136	130	2	10.0-153			4.33	38
1,4-Dichlorobenzene	0.248	U	0.300	0.296	121	119	2	10.0-151			1.20	38
trans-1,4-Dichloro-2-butene	0.248	U	0.296	0.307	119	124	2	10.0-152			3.56	36
Dichlorodifluoromethane	0.248	U	0.338	0.297	136	120	2	10.0-160			12.8	35
1,1-Dichloroethane	0.248	U	0.264	0.251	106	101	2	10.0-147			5.10	37
1,2-Dichloroethane	0.248	U	0.246	0.232	99.0	93.3	2	10.0-148			6.00	35
1,1-Dichloroethene	0.248	U	0.303	0.281	122	113	2	10.0-155			7.77	37
cis-1,2-Dichloroethene	0.248	U	0.271	0.260	109	105	2	10.0-149			4.04	37
trans-1,2-Dichloroethene	0.248	U	0.307	0.283	124	114	2	10.0-150			8.10	37
1,2-Dichloropropane	0.248	U	0.391	0.374	157	150	2	10.0-148	J5	J5	4.37	37
1,1-Dichloropropene	0.248	U	0.295	0.277	119	112	2	10.0-153			6.26	35
1,3-Dichloropropane	0.248	U	0.289	0.287	116	115	2	10.0-154			0.830	35
cis-1,3-Dichloropropene	0.248	U	0.351	0.328	141	132	2	10.0-151			6.68	37
trans-1,3-Dichloropropene	0.248	U	0.322	0.291	130	117	2	10.0-148			10.1	37
2,2-Dichloropropane	0.248	U	0.245	0.245	98.6	98.6	2	10.0-138			0.000	36

L1200706-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1200706-07 03/21/20 09:06 • (MS) R3512932-4 03/21/20 14:29 • (MSD) R3512932-5 03/21/20 14:48

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	0.248	U	0.320	0.306	129	123	2	10.0-147			4.58	36
Ethylbenzene	0.248	U	0.322	0.306	130	123	2	10.0-160			5.32	38
Hexachloro-1,3-butadiene	0.248	U	0.308	0.314	124	126	2	10.0-160			1.92	40
2-Hexanone	1.24	U	1.80	1.73	145	139	2	10.0-160			4.05	36
n-Hexane	0.248	U	0.284	0.244	114	98.1	2	10.0-157			15.4	37
Iodomethane	1.24	U	1.62	1.53	131	123	2	10.0-160			6.06	38
Isopropylbenzene	0.248	U	0.334	0.321	135	129	2	10.0-155			4.01	38
p-Isopropyltoluene	0.248	U	0.344	0.338	138	136	2	10.0-160			1.75	40
2-Butanone (MEK)	1.24	U	1.65	1.52	133	122	2	10.0-160			8.30	40
Methylene Chloride	0.248	U	0.277	0.268	112	108	2	10.0-141			3.51	37
4-Methyl-2-pentanone (MIBK)	1.24	U	1.70	1.65	137	133	2	10.0-160			2.86	35
Methyl tert-butyl ether	0.248	U	0.285	0.270	115	109	2	11.0-147			5.59	35
Naphthalene	0.248	U	0.217	0.239	87.5	96.2	2	10.0-160			9.42	36
n-Propylbenzene	0.248	U	0.343	0.336	138	135	2	10.0-158			2.11	38
Styrene	0.248	U	0.379	0.376	152	151	2	10.0-160			0.633	40
1,1,1,2-Tetrachloroethane	0.248	U	0.305	0.294	123	118	2	10.0-149			3.59	39
1,1,2,2-Tetrachloroethane	0.248	U	0.277	0.284	112	114	2	10.0-160			2.55	35
Tetrachloroethene	0.248	U	0.320	0.305	129	123	2	10.0-156			4.97	39
Toluene	0.248	U	0.270	0.262	109	105	2	10.0-156			3.15	38
1,1,2-Trichlorotrifluoroethane	0.248	U	0.338	0.300	136	121	2	10.0-160			12.0	36
1,2,3-Trichlorobenzene	0.248	U	0.281	0.302	113	122	2	10.0-160			7.38	40
1,2,4-Trichlorobenzene	0.248	U	0.285	0.289	115	116	2	10.0-160			1.25	40
1,1,1-Trichloroethane	0.248	U	0.311	0.283	125	114	2	10.0-144			9.26	35
1,1,2-Trichloroethane	0.248	U	0.266	0.254	107	102	2	10.0-160			4.59	35
Trichloroethene	0.248	U	0.356	0.321	143	129	2	10.0-156			10.2	38
Trichlorofluoromethane	0.248	U	0.234	0.207	94.2	83.2	2	10.0-160			12.5	40
1,2,3-Trichloropropane	0.248	U	0.331	0.333	133	134	2	10.0-156			0.719	35
1,2,3-Trimethylbenzene	0.248	U	0.293	0.285	118	115	2	10.0-160			2.48	36
1,2,4-Trimethylbenzene	0.248	U	0.300	0.293	121	118	2	10.0-160			2.42	36
1,3,5-Trimethylbenzene	0.248	U	0.297	0.284	120	114	2	10.0-160			4.52	38
Vinyl acetate	1.24	U	0.504	0.523	40.6	42.1	2	10.0-128			3.72	40
Vinyl chloride	0.248	U	0.311	0.289	125	116	2	10.0-160			7.17	37
Xylenes, Total	0.744	U	0.969	0.930	130	125	2	10.0-160			4.03	38
(S) Toluene-d8					*104*	*104*		*75.0-131*				
(S) 4-Bromofluorobenzene					*101*	*97.6*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*108*	*103*		*70.0-130*				

Sample Narrative:

OS: 1. J0 for 6

Method Blank (MB)

(MB) R3512913-3 03/21/20 11:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.00100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
Bromochloromethane	U		0.00113	0.00500
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
n-Butylbenzene	U		0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tert-Butylbenzene	U		0.00155	0.00500
Carbon disulfide	U		0.00406	0.0125
Carbon tetrachloride	U		0.00108	0.00500
Chlorobenzene	U		0.000573	0.00250
Chlorodibromomethane	U		0.000450	0.00250
Chloroethane	U		0.00108	0.00500
Chloroform	U		0.000415	0.00250
Chloromethane	U		0.00139	0.0125
2-Chlorotoluene	U		0.000920	0.00250
4-Chlorotoluene	U		0.00113	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0250
1,2-Dibromoethane	U		0.000525	0.00250
Dibromomethane	U		0.00100	0.00500
1,2-Dichlorobenzene	U		0.00145	0.00500
1,3-Dichlorobenzene	U		0.00170	0.00500
1,4-Dichlorobenzene	U		0.00197	0.00500
trans-1,4-Dichloro-2-butene	U		0.00140	0.00500
Dichlorodifluoromethane	U		0.000818	0.00250
1,1-Dichloroethane	U		0.000575	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
1,1-Dichloroethene	U		0.000500	0.00250
cis-1,2-Dichloroethene	U		0.000690	0.00250
trans-1,2-Dichloroethene	U		0.00143	0.00500
1,2-Dichloropropane	U		0.00127	0.00500
1,1-Dichloropropene	U		0.000700	0.00250
1,3-Dichloropropane	U		0.00175	0.00500
cis-1,3-Dichloropropene	U		0.000678	0.00250
trans-1,3-Dichloropropene	U		0.00153	0.00500
2,2-Dichloropropane	U		0.000793	0.00250
Di-isopropyl ether	U		0.000350	0.00100

Method Blank (MB)

(MB) R3512913-3 03/21/20 11:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
n-Hexane	U		0.00106	0.00500
2-Hexanone	U		0.0100	0.0250
Iodomethane	U		0.00605	0.0125
Isopropylbenzene	U		0.000863	0.00250
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0193	J	0.0125	0.0250
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.0100	0.0250
Methyl tert-butyl ether	U		0.000295	0.00100
Naphthalene	U		0.00312	0.0125
n-Propylbenzene	U		0.00118	0.00500
Styrene	U		0.00273	0.0125
1,1,1,2-Tetrachloroethane	U		0.000500	0.00250
1,1,2,2-Tetrachloroethane	U		0.000390	0.00250
Tetrachloroethene	U		0.000700	0.00250
Toluene	U		0.00125	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000675	0.00250
1,2,3-Trichlorobenzene	U		0.000625	0.0125
1,2,4-Trichlorobenzene	U		0.00482	0.0125
1,1,1-Trichloroethane	U		0.000275	0.00250
1,1,2-Trichloroethane	U		0.000883	0.00250
Trichloroethene	U		0.000400	0.00100
Trichlorofluoromethane	U		0.000500	0.00250
1,2,3-Trichloropropane	U		0.00510	0.0125
1,2,3-Trimethylbenzene	U		0.00115	0.00500
1,2,4-Trimethylbenzene	U		0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl acetate	U		0.00352	0.0125
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*113*			*75.0-131*
(S) 4-Bromofluorobenzene	*91.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*90.3*			*70.0-130*

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

(LCS) R3512913-1 03/21/20 09:16 • (LCSD) R3512913-2 03/21/20 09:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.419	0.635	67.0	102	10.0-160		J3	41.0	31
Acrylonitrile	0.625	0.596	0.597	95.4	95.5	45.0-153			0.168	22
Benzene	0.125	0.105	0.104	84.0	83.2	70.0-123			0.957	20
Bromobenzene	0.125	0.127	0.128	102	102	73.0-121			0.784	20
Bromodichloromethane	0.125	0.107	0.110	85.6	88.0	73.0-121			2.76	20
Bromochloromethane	0.125	0.0989	0.0956	79.1	76.5	77.0-128		J4	3.39	20
Bromoform	0.125	0.111	0.111	88.8	88.8	64.0-132			0.000	20
Bromomethane	0.125	0.0939	0.0894	75.1	71.5	56.0-147			4.91	20
n-Butylbenzene	0.125	0.101	0.101	80.8	80.8	68.0-135			0.000	20
sec-Butylbenzene	0.125	0.115	0.116	92.0	92.8	74.0-130			0.866	20
tert-Butylbenzene	0.125	0.113	0.113	90.4	90.4	75.0-127			0.000	20
Carbon disulfide	0.125	0.0862	0.0874	69.0	69.9	56.0-133			1.38	20
Carbon tetrachloride	0.125	0.0932	0.0932	74.6	74.6	66.0-128			0.000	20
Chlorobenzene	0.125	0.109	0.110	87.2	88.0	76.0-128			0.913	20
Chlorodibromomethane	0.125	0.102	0.101	81.6	80.8	74.0-127			0.985	20
Chloroethane	0.125	0.0933	0.0922	74.6	73.8	61.0-134			1.19	20
Chloroform	0.125	0.111	0.109	88.8	87.2	72.0-123			1.82	20
Chloromethane	0.125	0.0920	0.0916	73.6	73.3	51.0-138			0.436	20
2-Chlorotoluene	0.125	0.112	0.110	89.6	88.0	75.0-124			1.80	20
4-Chlorotoluene	0.125	0.117	0.119	93.6	95.2	75.0-124			1.69	20
1,2-Dibromo-3-Chloropropane	0.125	0.111	0.107	88.8	85.6	59.0-130			3.67	20
1,2-Dibromoethane	0.125	0.110	0.109	88.0	87.2	74.0-128			0.913	20
Dibromomethane	0.125	0.105	0.106	84.0	84.8	75.0-122			0.948	20
1,2-Dichlorobenzene	0.125	0.110	0.109	88.0	87.2	76.0-124			0.913	20
1,3-Dichlorobenzene	0.125	0.119	0.119	95.2	95.2	76.0-125			0.000	20
1,4-Dichlorobenzene	0.125	0.113	0.115	90.4	92.0	77.0-121			1.75	20
trans-1,4-Dichloro-2-butene	0.125	0.115	0.114	92.0	91.2	45.0-143			0.873	20
Dichlorodifluoromethane	0.125	0.102	0.102	81.6	81.6	43.0-156			0.000	20
1,1-Dichloroethane	0.125	0.102	0.102	81.6	81.6	70.0-127			0.000	20
1,2-Dichloroethane	0.125	0.126	0.127	101	102	65.0-131			0.791	20
1,1-Dichloroethene	0.125	0.0974	0.0977	77.9	78.2	65.0-131			0.308	20
cis-1,2-Dichloroethene	0.125	0.103	0.103	82.4	82.4	73.0-125			0.000	20
trans-1,2-Dichloroethene	0.125	0.106	0.103	84.8	82.4	71.0-125			2.87	20
1,2-Dichloropropane	0.125	0.115	0.111	92.0	88.8	74.0-125			3.54	20
1,1-Dichloropropene	0.125	0.0960	0.0968	76.8	77.4	73.0-125			0.830	20
1,3-Dichloropropane	0.125	0.116	0.116	92.8	92.8	80.0-125			0.000	20
cis-1,3-Dichloropropene	0.125	0.106	0.108	84.8	86.4	76.0-127			1.87	20
trans-1,3-Dichloropropene	0.125	0.112	0.111	89.6	88.8	73.0-127			0.897	20
2,2-Dichloropropane	0.125	0.0815	0.0813	65.2	65.0	59.0-135			0.246	20
Di-isopropyl ether	0.125	0.108	0.108	86.4	86.4	60.0-136			0.000	20

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

(LCS) R3512913-1 03/21/20 09:16 • (LCSD) R3512913-2 03/21/20 09:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.125	0.112	0.112	89.6	89.6	74.0-126			0.000	20
Hexachloro-1,3-butadiene	0.125	0.103	0.101	82.4	80.8	57.0-150			1.96	20
2-Hexanone	0.625	0.624	0.623	99.8	99.7	54.0-147			0.160	20
n-Hexane	0.125	0.117	0.116	93.6	92.8	55.0-137			0.858	20
Iodomethane	0.625	0.539	0.537	86.2	85.9	74.0-134			0.372	20
Isopropylbenzene	0.125	0.104	0.103	83.2	82.4	72.0-127			0.966	20
p-Isopropyltoluene	0.125	0.108	0.109	86.4	87.2	72.0-133			0.922	20
2-Butanone (MEK)	0.625	0.632	0.605	101	96.8	30.0-160			4.37	24
Methylene Chloride	0.125	0.0974	0.0971	77.9	77.7	68.0-123			0.308	20
4-Methyl-2-pentanone (MIBK)	0.625	0.593	0.580	94.9	92.8	56.0-143			2.22	20
Methyl tert-butyl ether	0.125	0.106	0.106	84.8	84.8	66.0-132			0.000	20
Naphthalene	0.125	0.110	0.106	88.0	84.8	59.0-130			3.70	20
n-Propylbenzene	0.125	0.115	0.116	92.0	92.8	74.0-126			0.866	20
Styrene	0.125	0.109	0.111	87.2	88.8	72.0-127			1.82	20
1,1,1,2-Tetrachloroethane	0.125	0.104	0.104	83.2	83.2	74.0-129			0.000	20
1,1,2,2-Tetrachloroethane	0.125	0.126	0.125	101	100	68.0-128			0.797	20
Tetrachloroethene	0.125	0.118	0.112	94.4	89.6	70.0-136			5.22	20
Toluene	0.125	0.110	0.111	88.0	88.8	75.0-121			0.905	20
1,1,2-Trichlorotrifluoroethane	0.125	0.102	0.102	81.6	81.6	61.0-139			0.000	20
1,2,3-Trichlorobenzene	0.125	0.119	0.119	95.2	95.2	59.0-139			0.000	20
1,2,4-Trichlorobenzene	0.125	0.121	0.118	96.8	94.4	62.0-137			2.51	20
1,1,1-Trichloroethane	0.125	0.107	0.105	85.6	84.0	69.0-126			1.89	20
1,1,2-Trichloroethane	0.125	0.114	0.114	91.2	91.2	78.0-123			0.000	20
Trichloroethene	0.125	0.105	0.102	84.0	81.6	76.0-126			2.90	20
Trichlorofluoromethane	0.125	0.102	0.102	81.6	81.6	61.0-142			0.000	20
1,2,3-Trichloropropane	0.125	0.116	0.114	92.8	91.2	67.0-129			1.74	20
1,2,3-Trimethylbenzene	0.125	0.101	0.101	80.8	80.8	74.0-124			0.000	20
1,2,4-Trimethylbenzene	0.125	0.107	0.108	85.6	86.4	70.0-126			0.930	20
1,3,5-Trimethylbenzene	0.125	0.121	0.121	96.8	96.8	73.0-127			0.000	20
Vinyl acetate	0.625	0.466	0.462	74.6	73.9	43.0-159			0.862	20
Vinyl chloride	0.125	0.101	0.103	80.8	82.4	63.0-134			1.96	20
Xylenes, Total	0.375	0.321	0.302	85.6	80.5	72.0-127			6.10	20
(S) Toluene-d8				*108*	*108*	*75.0-131*				
(S) 4-Bromofluorobenzene				*97.7*	*97.2*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*103*	*103*	*70.0-130*				

Method Blank (MB)

(MB) R3512947-2 03/26/20 10:27

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3512947-2 03/26/20 10:27

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*97.9*			*80.0-120*
(S) 4-Bromofluorobenzene	*89.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3512947-1 03/26/20 09:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	34.0	136	19.0-160	
Acrylonitrile	25.0	28.0	112	55.0-149	
Benzene	5.00	5.41	108	70.0-123	
Bromobenzene	5.00	6.51	130	73.0-121	J4
Bromodichloromethane	5.00	5.15	103	75.0-120	
Bromochloromethane	5.00	5.30	106	76.0-122	
Bromoform	5.00	4.82	96.4	68.0-132	
Bromomethane	5.00	3.60	72.0	10.0-160	
n-Butylbenzene	5.00	5.36	107	73.0-125	
sec-Butylbenzene	5.00	5.09	102	75.0-125	
tert-Butylbenzene	5.00	4.43	88.6	76.0-124	
Carbon disulfide	5.00	6.19	124	61.0-128	
Carbon tetrachloride	5.00	5.53	111	68.0-126	
Chlorobenzene	5.00	5.12	102	80.0-121	
Chlorodibromomethane	5.00	4.81	96.2	77.0-125	
Chloroethane	5.00	4.22	84.4	47.0-150	
Chloroform	5.00	5.20	104	73.0-120	
Chloromethane	5.00	4.88	97.6	41.0-142	
2-Chlorotoluene	5.00	6.29	126	76.0-123	J4
4-Chlorotoluene	5.00	5.64	113	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	4.11	82.2	58.0-134	
1,2-Dibromoethane	5.00	4.85	97.0	80.0-122	
Dibromomethane	5.00	5.00	100	80.0-120	
1,2-Dichlorobenzene	5.00	5.22	104	79.0-121	
1,3-Dichlorobenzene	5.00	5.65	113	79.0-120	
1,4-Dichlorobenzene	5.00	5.36	107	79.0-120	
Dichlorodifluoromethane	5.00	7.55	151	51.0-149	J4
1,1-Dichloroethane	5.00	5.59	112	70.0-126	
1,2-Dichloroethane	5.00	5.15	103	70.0-128	
1,1-Dichloroethene	5.00	5.75	115	71.0-124	
cis-1,2-Dichloroethene	5.00	5.43	109	73.0-120	
trans-1,2-Dichloroethene	5.00	5.47	109	73.0-120	
1,2-Dichloropropane	5.00	5.97	119	77.0-125	
1,1-Dichloropropene	5.00	5.59	112	74.0-126	
1,3-Dichloropropane	5.00	5.34	107	80.0-120	
cis-1,3-Dichloropropene	5.00	5.51	110	80.0-123	
trans-1,3-Dichloropropene	5.00	5.04	101	78.0-124	
trans-1,4-Dichloro-2-butene	5.00	1.97	39.4	33.0-144	
2,2-Dichloropropane	5.00	6.57	131	58.0-130	J4
Di-isopropyl ether	5.00	7.23	145	58.0-138	J4

Laboratory Control Sample (LCS)

(LCS) R3512947-1 03/26/20 09:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	5.00	5.40	108	79.0-123	
Hexachloro-1,3-butadiene	5.00	5.60	112	54.0-138	
2-Hexanone	25.0	30.9	124	67.0-149	
n-Hexane	5.00	7.05	141	57.0-133	J4
Iodomethane	25.0	27.3	109	33.0-147	
Isopropylbenzene	5.00	5.26	105	76.0-127	
p-Isopropyltoluene	5.00	5.59	112	76.0-125	
2-Butanone (MEK)	25.0	33.3	133	44.0-160	
Methylene Chloride	5.00	5.70	114	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	32.2	129	68.0-142	
Methyl tert-butyl ether	5.00	5.70	114	68.0-125	
Naphthalene	5.00	4.59	91.8	54.0-135	
n-Propylbenzene	5.00	8.93	179	77.0-124	J4
Styrene	5.00	5.34	107	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	4.61	92.2	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	7.23	145	65.0-130	J4
1,1,2-Trichlorotrifluoroethane	5.00	6.23	125	69.0-132	
Tetrachloroethene	5.00	5.18	104	72.0-132	
Toluene	5.00	4.99	99.8	79.0-120	
1,2,3-Trichlorobenzene	5.00	5.18	104	50.0-138	
1,2,4-Trichlorobenzene	5.00	5.35	107	57.0-137	
1,1,1-Trichloroethane	5.00	5.62	112	73.0-124	
1,1,2-Trichloroethane	5.00	4.95	99.0	80.0-120	
Trichloroethene	5.00	4.56	91.2	78.0-124	
Trichlorofluoromethane	5.00	5.08	102	59.0-147	
1,2,3-Trichloropropane	5.00	5.91	118	73.0-130	
1,2,4-Trimethylbenzene	5.00	5.51	110	76.0-121	
1,2,3-Trimethylbenzene	5.00	5.00	100	77.0-120	
1,3,5-Trimethylbenzene	5.00	4.99	99.8	76.0-122	
Vinyl acetate	25.0	53.9	216	11.0-160	J4
Vinyl chloride	5.00	4.67	93.4	67.0-131	
Xylenes, Total	15.0	15.8	105	79.0-123	
(S) Toluene-d8			*97.6*	*80.0-120*	
(S) 4-Bromofluorobenzene			*92.6*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*101*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

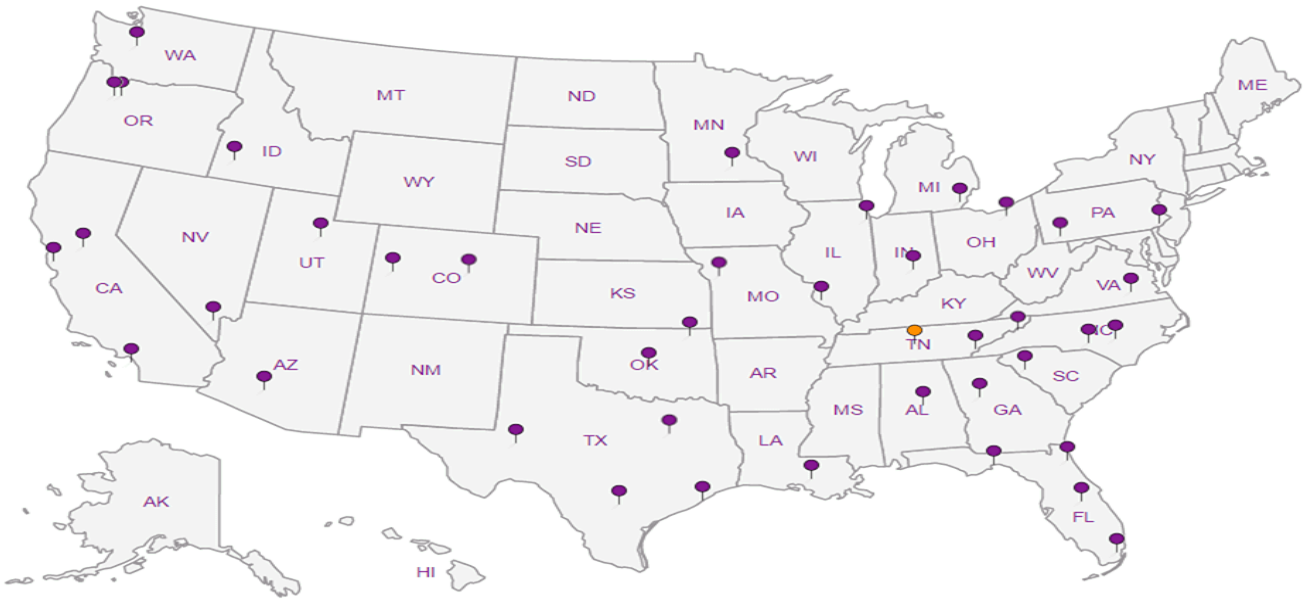
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



PES Environmental, Inc.- WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

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

Pres Chk

Report to: Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;bhaldeman@pesenv.com;sm

Project Description: American Linen

City/State Collected: SEATTLE WA

Please Circle: PT MT CT ET

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

Client Project # 1413. 001.05.202

Lab Project # PESENVSWA-ALP

Collected by (print): R. McLaughlin

Site/Facility ID # American Linen

P.O. #

Collected by (signature): R T M Laughlin

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace Analytical® National Center for Testing & Innovation

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

SDG # L1200814

Ta B031

Acctnum: PESENVSWA

Template: T164084

Prelogin: P758809

PM: 110 - Brian Ford

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPHGX 40mlAmb/MeOH5ml/Syr	VOCs 8260C 40mlAmb/MeOH5ml/Syr	dry weight 2ozClr-NoPres	trip NWTPHGX 40mlAmb-HCl-Blk	trip VOCs V8260LLC 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
B-277-1	Grab	SS	1	3/18/20	0815	3	X	X	X				-01
B-277-3		SS	3		0818	3	X						02
B-277-5		SS	5		0825	3							03
B-277-9.5		SS	9.5		0832	1							04
B-277-11		SS	11		0835	1							05
B-278-3		SS	3		0940	1							06
B-278-6		SS	6		0950	1							07
B-279-3		SS	3		1020	1							08
B-279-5		SS	5		1035	1							09
B-279-10	X	SS	10	X	1040	3	X	X	X				10

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

Remarks: 1/2 COOLERS
STANDARD TAT

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __UPS X FedEx __Courier _____

Tracking # 1663 5748 2601

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

Relinquished by : (Signature) R T M Laughlin	Date: 3/18/20	Time: 1335	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR (1)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.1 A7 °C 2.1-.1=2.0 Bottles Received: 50
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/19/20 Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

PES Environmental, Inc.- WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

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

Pres Chk

Report to: Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;bhaldeman@pesenv.com;sm

Project Description: American Linen

City/State Collected: SEATTLE, WA

Please Circle: PT MT CT ET

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

Client Project # 1413. 001.05.202

Lab Project # PESENVSWA-ALP

Collected by (print): R. MCLAUGHLIN

Site/Facility ID # American Linen

P.O. #

Collected by (signature): RT Mclaughl

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPHGX 40mlAmb/MeOH5ml/Syr	VOCs 8260C 40mlAmb/MeOH5ml/Syr	dry weight 2ozClr-NoPres	trip NWTPHGX 40mlAmb-HCl-Blk	trip VOCs V8260LLC 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
B-280-4.5	GRAB	SS	4.5	3/18/20	1120	3	X	X	X				-11
B-280-6		SS	6		1123								12
B-281-2		SS	2		1148								13
B-281-5		SS	5		1152								14
B-282-2		SS	2		1228								15
B-282-4		SS	4		1230								16
B-971-5	X	SS	5		1330	3	X	X	X				17
TB-031820	—	SS	—	X	1335	1				X	X		18
		SS											
		SS											

Chain of Custody Page 2 of 2

Pace Analytical® National Center for Testing & Innovation

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

SDG # L1206814

Table #

Acctnum: PESENVSWA

Template: T164084

Prelogin: P758809

PM: 110 - Brian Ford

PB:

Shipped Via:

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

Remarks: 1/2 coolers
STANDARD TAT

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking # 1663 5748 2601

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

	Date:	Time:		
Relinquished by : (Signature) RT Mclaughl	3/18/20	1338	Received by: (Signature)	Trip Blank Received: Yes (No) HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AM °C 2.1-.1=2.0 Bottles Received: 50
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/19/20 Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

March 27, 2020

PES Environmental, Inc.- WA

Sample Delivery Group:	L1200909
Samples Received:	03/19/2020
Project Number:	1413. 001.05.202
Description:	American Linen

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

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B-268-1 L1200909-01 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 07:55 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447739	1	03/22/20 02:23	03/22/20 02:30	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 07:55	03/21/20 23:52	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 07:55	03/21/20 15:14	BMB	Mt. Juliet, TN

B-269-1.5 L1200909-02 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 08:55 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447739	1	03/22/20 02:23	03/22/20 02:30	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 08:55	03/22/20 00:16	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 08:55	03/21/20 15:33	BMB	Mt. Juliet, TN

B-270-2 L1200909-03 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 09:15 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447739	1	03/22/20 02:23	03/22/20 02:30	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 09:15	03/22/20 00:40	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 09:15	03/21/20 15:52	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1448873	1	03/24/20 06:34	03/25/20 13:05	FM	Mt. Juliet, TN

B-271-1 L1200909-04 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 09:55 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447739	1	03/22/20 02:23	03/22/20 02:30	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 09:55	03/22/20 01:04	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 09:55	03/21/20 16:11	BMB	Mt. Juliet, TN

B-272-1 L1200909-05 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 10:40 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447739	1	03/22/20 02:23	03/22/20 02:30	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 10:40	03/22/20 01:28	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 10:40	03/21/20 16:30	BMB	Mt. Juliet, TN

B-272-6 L1200909-06 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 10:55 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447739	1	03/22/20 02:23	03/22/20 02:30	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 10:55	03/22/20 01:52	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 10:55	03/21/20 16:49	BMB	Mt. Juliet, TN

B-273-1 L1200909-07 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 11:30 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447739	1	03/22/20 02:23	03/22/20 02:30	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 11:30	03/22/20 02:16	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 11:30	03/21/20 17:08	BMB	Mt. Juliet, TN

B-273-3 L1200909-08 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 11:40 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447739	1	03/22/20 02:23	03/22/20 02:30	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 11:40	03/22/20 03:03	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 11:40	03/21/20 17:27	BMB	Mt. Juliet, TN

B-273-6 L1200909-09 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 11:42 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448016	1	03/21/20 18:35	03/21/20 18:54	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	43.8	03/17/20 11:42	03/22/20 03:27	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1.47	03/17/20 11:42	03/21/20 11:28	BMB	Mt. Juliet, TN

B-274-1 L1200909-10 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 12:45 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448016	1	03/21/20 18:35	03/21/20 18:54	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 12:45	03/22/20 03:50	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 12:45	03/21/20 11:47	BMB	Mt. Juliet, TN

B-274-3 L1200909-11 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 12:50 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448016	1	03/21/20 18:35	03/21/20 18:54	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 12:50	03/22/20 04:14	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 12:50	03/21/20 12:06	BMB	Mt. Juliet, TN

B-274-6 L1200909-12 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 12:53 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448016	1	03/21/20 18:35	03/21/20 18:54	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	33	03/17/20 12:53	03/22/20 04:38	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1.14	03/17/20 12:53	03/21/20 12:25	BMB	Mt. Juliet, TN

B-275-1 L1200909-13 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 13:20 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448016	1	03/21/20 18:35	03/21/20 18:54	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 13:20	03/22/20 05:02	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 13:20	03/21/20 12:43	BMB	Mt. Juliet, TN

B-275-6 L1200909-14 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 13:30 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448016	1	03/21/20 18:35	03/21/20 18:54	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	28.7	03/17/20 13:30	03/22/20 05:27	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1.35	03/17/20 13:30	03/21/20 13:02	BMB	Mt. Juliet, TN

B-275-9 L1200909-15 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 13:40 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448016	1	03/21/20 18:35	03/21/20 18:54	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 13:40	03/22/20 05:51	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 13:40	03/21/20 13:21	BMB	Mt. Juliet, TN

B-275-10 L1200909-16 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 13:42 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448017	1	03/22/20 00:48	03/22/20 00:56	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 13:42	03/22/20 06:15	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 13:42	03/21/20 13:40	BMB	Mt. Juliet, TN

B-276-1 L1200909-17 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 14:22 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448017	1	03/22/20 00:48	03/22/20 00:56	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 14:22	03/22/20 06:39	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1.52	03/17/20 14:22	03/21/20 13:59	BMB	Mt. Juliet, TN

B-276-7 L1200909-18 Solid

Collected by: R McLaughlin | Collected date/time: 03/17/20 14:35 | Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448017	1	03/22/20 00:48	03/22/20 00:56	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1447924	25	03/17/20 14:35	03/22/20 07:03	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1447922	1	03/17/20 14:35	03/21/20 14:18	BMB	Mt. Juliet, TN

B-276-11 L1200909-19 Solid

Collected by: R McLaughlin
Collected date/time: 03/17/20 14:42
Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448017	1	03/22/20 00:48	03/22/20 00:56	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1448464	25	03/17/20 14:42	03/22/20 15:32	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1448125	1	03/17/20 14:42	03/21/20 22:30	ACG	Mt. Juliet, TN

B-970-6 L1200909-20 Solid

Collected by: R McLaughlin
Collected date/time: 03/17/20 15:30
Received date/time: 03/19/20 08:30

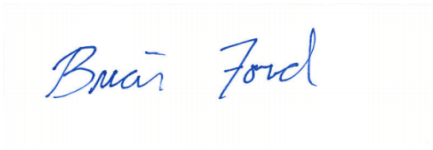
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448017	1	03/22/20 00:48	03/22/20 00:56	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1448464	25	03/17/20 15:30	03/22/20 15:56	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1448125	1	03/17/20 15:30	03/21/20 22:49	ACG	Mt. Juliet, TN

TB-031720 L1200909-21 GW

Collected by: R McLaughlin
Collected date/time: 03/17/20 15:00
Received date/time: 03/19/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1448006	1	03/21/20 13:23	03/21/20 13:23	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449115	1	03/24/20 01:18	03/24/20 01:18	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1449669	1	03/24/20 22:37	03/24/20 22:37	ADM	Mt. Juliet, TN

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



Brian Ford
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.6		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.05	3.10	25	03/21/2020 23:52	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*77.0-120*		*03/21/2020 23:52*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0170	0.0310	1	03/21/2020 15:14	WG1447922
Acrylonitrile	U		0.00236	0.0155	1	03/21/2020 15:14	WG1447922
Benzene	U		0.000496	0.00124	1	03/21/2020 15:14	WG1447922
Bromobenzene	U		0.00130	0.0155	1	03/21/2020 15:14	WG1447922
Bromodichloromethane	U		0.000977	0.00310	1	03/21/2020 15:14	WG1447922
Bromochloromethane	U	J4	0.00140	0.00620	1	03/21/2020 15:14	WG1447922
Bromoform	U		0.00742	0.0310	1	03/21/2020 15:14	WG1447922
Bromomethane	U		0.00459	0.0155	1	03/21/2020 15:14	WG1447922
n-Butylbenzene	U		0.00476	0.0155	1	03/21/2020 15:14	WG1447922
sec-Butylbenzene	U		0.00314	0.0155	1	03/21/2020 15:14	WG1447922
tert-Butylbenzene	U		0.00192	0.00620	1	03/21/2020 15:14	WG1447922
Carbon disulfide	U		0.00504	0.0155	1	03/21/2020 15:14	WG1447922
Carbon tetrachloride	U		0.00134	0.00620	1	03/21/2020 15:14	WG1447922
Chlorobenzene	U		0.000711	0.00310	1	03/21/2020 15:14	WG1447922
Chlorodibromomethane	U		0.000558	0.00310	1	03/21/2020 15:14	WG1447922
Chloroethane	U		0.00134	0.00620	1	03/21/2020 15:14	WG1447922
Chloroform	U		0.000515	0.00310	1	03/21/2020 15:14	WG1447922
Chloromethane	U		0.00172	0.0155	1	03/21/2020 15:14	WG1447922
2-Chlorotoluene	U		0.00114	0.00310	1	03/21/2020 15:14	WG1447922
4-Chlorotoluene	U		0.00140	0.00620	1	03/21/2020 15:14	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00633	0.0310	1	03/21/2020 15:14	WG1447922
1,2-Dibromoethane	U		0.000651	0.00310	1	03/21/2020 15:14	WG1447922
Dibromomethane	U		0.00124	0.00620	1	03/21/2020 15:14	WG1447922
1,2-Dichlorobenzene	U		0.00180	0.00620	1	03/21/2020 15:14	WG1447922
1,3-Dichlorobenzene	U		0.00211	0.00620	1	03/21/2020 15:14	WG1447922
1,4-Dichlorobenzene	U		0.00244	0.00620	1	03/21/2020 15:14	WG1447922
Dichlorodifluoromethane	U		0.00101	0.00310	1	03/21/2020 15:14	WG1447922
1,1-Dichloroethane	U		0.000713	0.00310	1	03/21/2020 15:14	WG1447922
1,2-Dichloroethane	U		0.000589	0.00310	1	03/21/2020 15:14	WG1447922
1,1-Dichloroethene	U		0.000620	0.00310	1	03/21/2020 15:14	WG1447922
cis-1,2-Dichloroethene	U		0.000856	0.00310	1	03/21/2020 15:14	WG1447922
trans-1,2-Dichloroethene	U		0.00177	0.00620	1	03/21/2020 15:14	WG1447922
1,2-Dichloropropane	U		0.00158	0.00620	1	03/21/2020 15:14	WG1447922
1,1-Dichloropropene	U		0.000868	0.00310	1	03/21/2020 15:14	WG1447922
1,3-Dichloropropane	U		0.00217	0.00620	1	03/21/2020 15:14	WG1447922
cis-1,3-Dichloropropene	U		0.000841	0.00310	1	03/21/2020 15:14	WG1447922
trans-1,3-Dichloropropene	U		0.00190	0.00620	1	03/21/2020 15:14	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00174	0.00620	1	03/21/2020 15:14	WG1447922
2,2-Dichloropropane	U		0.000984	0.00310	1	03/21/2020 15:14	WG1447922
Di-isopropyl ether	U		0.000434	0.00124	1	03/21/2020 15:14	WG1447922
Ethylbenzene	U		0.000657	0.00310	1	03/21/2020 15:14	WG1447922
Hexachloro-1,3-butadiene	U		0.0158	0.0310	1	03/21/2020 15:14	WG1447922
2-Hexanone	U		0.0124	0.0310	1	03/21/2020 15:14	WG1447922
n-Hexane	U		0.00131	0.00620	1	03/21/2020 15:14	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00750	0.0155	1	03/21/2020 15:14	WG1447922
Isopropylbenzene	U		0.00107	0.00310	1	03/21/2020 15:14	WG1447922
p-Isopropyltoluene	U		0.00289	0.00620	1	03/21/2020 15:14	WG1447922
2-Butanone (MEK)	U		0.0155	0.0310	1	03/21/2020 15:14	WG1447922
Methylene Chloride	U		0.00824	0.0310	1	03/21/2020 15:14	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0124	0.0310	1	03/21/2020 15:14	WG1447922
Methyl tert-butyl ether	U		0.000366	0.00124	1	03/21/2020 15:14	WG1447922
Naphthalene	U		0.00387	0.0155	1	03/21/2020 15:14	WG1447922
n-Propylbenzene	U		0.00146	0.00620	1	03/21/2020 15:14	WG1447922
Styrene	U		0.00339	0.0155	1	03/21/2020 15:14	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000620	0.00310	1	03/21/2020 15:14	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000484	0.00310	1	03/21/2020 15:14	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000837	0.00310	1	03/21/2020 15:14	WG1447922
Tetrachloroethene	0.00381		0.000868	0.00310	1	03/21/2020 15:14	WG1447922
Toluene	U		0.00155	0.00620	1	03/21/2020 15:14	WG1447922
1,2,3-Trichlorobenzene	U		0.000775	0.0155	1	03/21/2020 15:14	WG1447922
1,2,4-Trichlorobenzene	U		0.00598	0.0155	1	03/21/2020 15:14	WG1447922
1,1,1-Trichloroethane	U		0.000341	0.00310	1	03/21/2020 15:14	WG1447922
1,1,2-Trichloroethane	U		0.00110	0.00310	1	03/21/2020 15:14	WG1447922
Trichloroethene	U		0.000496	0.00124	1	03/21/2020 15:14	WG1447922
Trichlorofluoromethane	U		0.000620	0.00310	1	03/21/2020 15:14	WG1447922
1,2,3-Trichloropropane	U		0.00633	0.0155	1	03/21/2020 15:14	WG1447922
1,2,4-Trimethylbenzene	U		0.00144	0.00620	1	03/21/2020 15:14	WG1447922
1,2,3-Trimethylbenzene	U		0.00143	0.00620	1	03/21/2020 15:14	WG1447922
1,3,5-Trimethylbenzene	U		0.00134	0.00620	1	03/21/2020 15:14	WG1447922
Vinyl acetate	U	J0	0.00437	0.0155	1	03/21/2020 15:14	WG1447922
Vinyl chloride	U		0.000847	0.00310	1	03/21/2020 15:14	WG1447922
Xylenes, Total	U		0.00593	0.00806	1	03/21/2020 15:14	WG1447922
(S) Toluene-d8	*113*			*75.0-131*		*03/21/2020 15:14*	WG1447922
(S) 4-Bromofluorobenzene	*91.0*			*67.0-138*		*03/21/2020 15:14*	WG1447922
(S) 1,2-Dichloroethane-d4	*90.0*			*70.0-130*		*03/21/2020 15:14*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.6		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.926	2.73	25	03/22/2020 00:16	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*03/22/2020 00:16*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0150	0.0273	1	03/21/2020 15:33	WG1447922
Acrylonitrile	U		0.00207	0.0137	1	03/21/2020 15:33	WG1447922
Benzene	0.000755	J	0.000437	0.00109	1	03/21/2020 15:33	WG1447922
Bromobenzene	U		0.00115	0.0137	1	03/21/2020 15:33	WG1447922
Bromodichloromethane	U		0.000861	0.00273	1	03/21/2020 15:33	WG1447922
Bromochloromethane	U	J4	0.00123	0.00546	1	03/21/2020 15:33	WG1447922
Bromoform	U		0.00653	0.0273	1	03/21/2020 15:33	WG1447922
Bromomethane	U		0.00404	0.0137	1	03/21/2020 15:33	WG1447922
n-Butylbenzene	U		0.00419	0.0137	1	03/21/2020 15:33	WG1447922
sec-Butylbenzene	U		0.00276	0.0137	1	03/21/2020 15:33	WG1447922
tert-Butylbenzene	U		0.00169	0.00546	1	03/21/2020 15:33	WG1447922
Carbon disulfide	U		0.00443	0.0137	1	03/21/2020 15:33	WG1447922
Carbon tetrachloride	U		0.00118	0.00546	1	03/21/2020 15:33	WG1447922
Chlorobenzene	U		0.000626	0.00273	1	03/21/2020 15:33	WG1447922
Chlorodibromomethane	U		0.000491	0.00273	1	03/21/2020 15:33	WG1447922
Chloroethane	U		0.00118	0.00546	1	03/21/2020 15:33	WG1447922
Chloroform	U		0.000453	0.00273	1	03/21/2020 15:33	WG1447922
Chloromethane	U		0.00152	0.0137	1	03/21/2020 15:33	WG1447922
2-Chlorotoluene	U		0.00100	0.00273	1	03/21/2020 15:33	WG1447922
4-Chlorotoluene	U		0.00123	0.00546	1	03/21/2020 15:33	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00557	0.0273	1	03/21/2020 15:33	WG1447922
1,2-Dibromoethane	U		0.000573	0.00273	1	03/21/2020 15:33	WG1447922
Dibromomethane	U		0.00109	0.00546	1	03/21/2020 15:33	WG1447922
1,2-Dichlorobenzene	U		0.00158	0.00546	1	03/21/2020 15:33	WG1447922
1,3-Dichlorobenzene	U		0.00186	0.00546	1	03/21/2020 15:33	WG1447922
1,4-Dichlorobenzene	U		0.00215	0.00546	1	03/21/2020 15:33	WG1447922
Dichlorodifluoromethane	U		0.000893	0.00273	1	03/21/2020 15:33	WG1447922
1,1-Dichloroethane	U		0.000628	0.00273	1	03/21/2020 15:33	WG1447922
1,2-Dichloroethane	U		0.000519	0.00273	1	03/21/2020 15:33	WG1447922
1,1-Dichloroethene	U		0.000546	0.00273	1	03/21/2020 15:33	WG1447922
cis-1,2-Dichloroethene	U		0.000754	0.00273	1	03/21/2020 15:33	WG1447922
trans-1,2-Dichloroethene	U		0.00156	0.00546	1	03/21/2020 15:33	WG1447922
1,2-Dichloropropane	U		0.00139	0.00546	1	03/21/2020 15:33	WG1447922
1,1-Dichloropropene	U		0.000764	0.00273	1	03/21/2020 15:33	WG1447922
1,3-Dichloropropane	U		0.00191	0.00546	1	03/21/2020 15:33	WG1447922
cis-1,3-Dichloropropene	U		0.000740	0.00273	1	03/21/2020 15:33	WG1447922
trans-1,3-Dichloropropene	U		0.00167	0.00546	1	03/21/2020 15:33	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00153	0.00546	1	03/21/2020 15:33	WG1447922
2,2-Dichloropropane	U		0.000866	0.00273	1	03/21/2020 15:33	WG1447922
Di-isopropyl ether	U		0.000382	0.00109	1	03/21/2020 15:33	WG1447922
Ethylbenzene	0.00356		0.000579	0.00273	1	03/21/2020 15:33	WG1447922
Hexachloro-1,3-butadiene	U		0.0139	0.0273	1	03/21/2020 15:33	WG1447922
2-Hexanone	U		0.0109	0.0273	1	03/21/2020 15:33	WG1447922
n-Hexane	0.00615		0.00116	0.00546	1	03/21/2020 15:33	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00661	0.0137	1	03/21/2020 15:33	WG1447922
Isopropylbenzene	0.00112	J	0.000942	0.00273	1	03/21/2020 15:33	WG1447922
p-Isopropyltoluene	U		0.00254	0.00546	1	03/21/2020 15:33	WG1447922
2-Butanone (MEK)	U		0.0137	0.0273	1	03/21/2020 15:33	WG1447922
Methylene Chloride	U		0.00725	0.0273	1	03/21/2020 15:33	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0273	1	03/21/2020 15:33	WG1447922
Methyl tert-butyl ether	U		0.000322	0.00109	1	03/21/2020 15:33	WG1447922
Naphthalene	0.00867	J	0.00341	0.0137	1	03/21/2020 15:33	WG1447922
n-Propylbenzene	0.00159	J	0.00129	0.00546	1	03/21/2020 15:33	WG1447922
Styrene	U		0.00298	0.0137	1	03/21/2020 15:33	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000546	0.00273	1	03/21/2020 15:33	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000426	0.00273	1	03/21/2020 15:33	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000737	0.00273	1	03/21/2020 15:33	WG1447922
Tetrachloroethene	U		0.000764	0.00273	1	03/21/2020 15:33	WG1447922
Toluene	0.0161		0.00137	0.00546	1	03/21/2020 15:33	WG1447922
1,2,3-Trichlorobenzene	U		0.000683	0.0137	1	03/21/2020 15:33	WG1447922
1,2,4-Trichlorobenzene	U		0.00526	0.0137	1	03/21/2020 15:33	WG1447922
1,1,1-Trichloroethane	U		0.000300	0.00273	1	03/21/2020 15:33	WG1447922
1,1,2-Trichloroethane	U		0.000964	0.00273	1	03/21/2020 15:33	WG1447922
Trichloroethene	U		0.000437	0.00109	1	03/21/2020 15:33	WG1447922
Trichlorofluoromethane	U		0.000546	0.00273	1	03/21/2020 15:33	WG1447922
1,2,3-Trichloropropane	U		0.00557	0.0137	1	03/21/2020 15:33	WG1447922
1,2,4-Trimethylbenzene	0.0187		0.00127	0.00546	1	03/21/2020 15:33	WG1447922
1,2,3-Trimethylbenzene	0.0140		0.00126	0.00546	1	03/21/2020 15:33	WG1447922
1,3,5-Trimethylbenzene	0.00742		0.00118	0.00546	1	03/21/2020 15:33	WG1447922
Vinyl acetate	U	J0	0.00384	0.0137	1	03/21/2020 15:33	WG1447922
Vinyl chloride	U		0.000746	0.00273	1	03/21/2020 15:33	WG1447922
Xylenes, Total	0.0659		0.00522	0.00710	1	03/21/2020 15:33	WG1447922
(S) Toluene-d8	*114*			*75.0-131*		*03/21/2020 15:33*	WG1447922
(S) 4-Bromofluorobenzene	*92.9*			*67.0-138*		*03/21/2020 15:33*	WG1447922
(S) 1,2-Dichloroethane-d4	*85.9*			*70.0-130*		*03/21/2020 15:33*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.7		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	82.5		1.03	3.02	25	03/22/2020 00:40	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*77.0-120*		*03/22/2020 00:40*	WG1447924

Sample Narrative:

L1200909-03 WG1447924: Chromatographic pattern most closely resembles diesel fuel.

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0166	0.0302	1	03/21/2020 15:52	WG1447922
Acrylonitrile	U		0.00230	0.0151	1	03/21/2020 15:52	WG1447922
Benzene	U		0.000484	0.00121	1	03/21/2020 15:52	WG1447922
Bromobenzene	U		0.00127	0.0151	1	03/21/2020 15:52	WG1447922
Bromodichloromethane	U		0.000953	0.00302	1	03/21/2020 15:52	WG1447922
Bromochloromethane	U	J4	0.00137	0.00605	1	03/21/2020 15:52	WG1447922
Bromoform	U		0.00723	0.0302	1	03/21/2020 15:52	WG1447922
Bromomethane	U		0.00448	0.0151	1	03/21/2020 15:52	WG1447922
n-Butylbenzene	0.0254		0.00464	0.0151	1	03/21/2020 15:52	WG1447922
sec-Butylbenzene	0.0275		0.00306	0.0151	1	03/21/2020 15:52	WG1447922
tert-Butylbenzene	U		0.00187	0.00605	1	03/21/2020 15:52	WG1447922
Carbon disulfide	U		0.00491	0.0151	1	03/21/2020 15:52	WG1447922
Carbon tetrachloride	U		0.00131	0.00605	1	03/21/2020 15:52	WG1447922
Chlorobenzene	U		0.000693	0.00302	1	03/21/2020 15:52	WG1447922
Chlorodibromomethane	U		0.000544	0.00302	1	03/21/2020 15:52	WG1447922
Chloroethane	U		0.00131	0.00605	1	03/21/2020 15:52	WG1447922
Chloroform	U		0.000502	0.00302	1	03/21/2020 15:52	WG1447922
Chloromethane	U		0.00168	0.0151	1	03/21/2020 15:52	WG1447922
2-Chlorotoluene	U		0.00111	0.00302	1	03/21/2020 15:52	WG1447922
4-Chlorotoluene	U		0.00137	0.00605	1	03/21/2020 15:52	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00617	0.0302	1	03/21/2020 15:52	WG1447922
1,2-Dibromoethane	U		0.000635	0.00302	1	03/21/2020 15:52	WG1447922
Dibromomethane	U		0.00121	0.00605	1	03/21/2020 15:52	WG1447922
1,2-Dichlorobenzene	U		0.00175	0.00605	1	03/21/2020 15:52	WG1447922
1,3-Dichlorobenzene	U		0.00206	0.00605	1	03/21/2020 15:52	WG1447922
1,4-Dichlorobenzene	U		0.00238	0.00605	1	03/21/2020 15:52	WG1447922
Dichlorodifluoromethane	U		0.000989	0.00302	1	03/21/2020 15:52	WG1447922
1,1-Dichloroethane	U		0.000695	0.00302	1	03/21/2020 15:52	WG1447922
1,2-Dichloroethane	U		0.000575	0.00302	1	03/21/2020 15:52	WG1447922
1,1-Dichloroethene	U		0.000605	0.00302	1	03/21/2020 15:52	WG1447922
cis-1,2-Dichloroethene	U		0.000835	0.00302	1	03/21/2020 15:52	WG1447922
trans-1,2-Dichloroethene	U		0.00173	0.00605	1	03/21/2020 15:52	WG1447922
1,2-Dichloropropane	U		0.00154	0.00605	1	03/21/2020 15:52	WG1447922
1,1-Dichloropropene	U		0.000847	0.00302	1	03/21/2020 15:52	WG1447922
1,3-Dichloropropane	U		0.00212	0.00605	1	03/21/2020 15:52	WG1447922
cis-1,3-Dichloropropene	U		0.000820	0.00302	1	03/21/2020 15:52	WG1447922
trans-1,3-Dichloropropene	U		0.00185	0.00605	1	03/21/2020 15:52	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00169	0.00605	1	03/21/2020 15:52	WG1447922
2,2-Dichloropropane	U		0.000959	0.00302	1	03/21/2020 15:52	WG1447922
Di-isopropyl ether	U		0.000423	0.00121	1	03/21/2020 15:52	WG1447922
Ethylbenzene	0.00163	J	0.000641	0.00302	1	03/21/2020 15:52	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U		0.0154	0.0302	1	03/21/2020 15:52	WG1447922
2-Hexanone	U		0.0121	0.0302	1	03/21/2020 15:52	WG1447922
n-Hexane	U		0.00128	0.00605	1	03/21/2020 15:52	WG1447922
Iodomethane	U		0.00732	0.0151	1	03/21/2020 15:52	WG1447922
Isopropylbenzene	0.00347		0.00104	0.00302	1	03/21/2020 15:52	WG1447922
p-Isopropyltoluene	0.0129		0.00282	0.00605	1	03/21/2020 15:52	WG1447922
2-Butanone (MEK)	U		0.0151	0.0302	1	03/21/2020 15:52	WG1447922
Methylene Chloride	U		0.00803	0.0302	1	03/21/2020 15:52	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0121	0.0302	1	03/21/2020 15:52	WG1447922
Methyl tert-butyl ether	U		0.000357	0.00121	1	03/21/2020 15:52	WG1447922
Naphthalene	U		0.00377	0.0151	1	03/21/2020 15:52	WG1447922
n-Propylbenzene	0.00824		0.00143	0.00605	1	03/21/2020 15:52	WG1447922
Styrene	U		0.00330	0.0151	1	03/21/2020 15:52	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000605	0.00302	1	03/21/2020 15:52	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000472	0.00302	1	03/21/2020 15:52	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000816	0.00302	1	03/21/2020 15:52	WG1447922
Tetrachloroethene	U		0.000847	0.00302	1	03/21/2020 15:52	WG1447922
Toluene	U		0.00151	0.00605	1	03/21/2020 15:52	WG1447922
1,2,3-Trichlorobenzene	U		0.000756	0.0151	1	03/21/2020 15:52	WG1447922
1,2,4-Trichlorobenzene	U		0.00583	0.0151	1	03/21/2020 15:52	WG1447922
1,1,1-Trichloroethane	U		0.000333	0.00302	1	03/21/2020 15:52	WG1447922
1,1,2-Trichloroethane	U		0.00107	0.00302	1	03/21/2020 15:52	WG1447922
Trichloroethene	U		0.000484	0.00121	1	03/21/2020 15:52	WG1447922
Trichlorofluoromethane	U		0.000605	0.00302	1	03/21/2020 15:52	WG1447922
1,2,3-Trichloropropane	U		0.00617	0.0151	1	03/21/2020 15:52	WG1447922
1,2,4-Trimethylbenzene	0.0133		0.00140	0.00605	1	03/21/2020 15:52	WG1447922
1,2,3-Trimethylbenzene	0.166		0.00139	0.00605	1	03/21/2020 15:52	WG1447922
1,3,5-Trimethylbenzene	0.0947		0.00131	0.00605	1	03/21/2020 15:52	WG1447922
Vinyl acetate	U	J0	0.00426	0.0151	1	03/21/2020 15:52	WG1447922
Vinyl chloride	U		0.000826	0.00302	1	03/21/2020 15:52	WG1447922
Xylenes, Total	0.0269		0.00578	0.00786	1	03/21/2020 15:52	WG1447922
(S) Toluene-d8	*110*			*75.0-131*		*03/21/2020 15:52*	WG1447922
(S) 4-Bromofluorobenzene	*112*			*67.0-138*		*03/21/2020 15:52*	WG1447922
(S) 1,2-Dichloroethane-d4	*91.9*			*70.0-130*		*03/21/2020 15:52*	WG1447922

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	114		1.61	4.84	1	03/25/2020 13:05	WG1448873
Residual Range Organics (RRO)	U		4.03	12.1	1	03/25/2020 13:05	WG1448873
(S) o-Terphenyl	*46.6*			*18.0-148*		*03/25/2020 13:05*	WG1448873

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.1		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.910	2.68	25	03/22/2020 01:04	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*99.4*			*77.0-120*		*03/22/2020 01:04*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0272	J3	0.0147	0.0268	1	03/21/2020 16:11	WG1447922
Acrylonitrile	U		0.00204	0.0134	1	03/21/2020 16:11	WG1447922
Benzene	0.000639	J	0.000429	0.00107	1	03/21/2020 16:11	WG1447922
Bromobenzene	U		0.00113	0.0134	1	03/21/2020 16:11	WG1447922
Bromodichloromethane	U		0.000846	0.00268	1	03/21/2020 16:11	WG1447922
Bromochloromethane	U	J4	0.00121	0.00537	1	03/21/2020 16:11	WG1447922
Bromoform	U		0.00642	0.0268	1	03/21/2020 16:11	WG1447922
Bromomethane	U		0.00397	0.0134	1	03/21/2020 16:11	WG1447922
n-Butylbenzene	U		0.00412	0.0134	1	03/21/2020 16:11	WG1447922
sec-Butylbenzene	U		0.00272	0.0134	1	03/21/2020 16:11	WG1447922
tert-Butylbenzene	U		0.00166	0.00537	1	03/21/2020 16:11	WG1447922
Carbon disulfide	U		0.00436	0.0134	1	03/21/2020 16:11	WG1447922
Carbon tetrachloride	U		0.00116	0.00537	1	03/21/2020 16:11	WG1447922
Chlorobenzene	U		0.000615	0.00268	1	03/21/2020 16:11	WG1447922
Chlorodibromomethane	U		0.000483	0.00268	1	03/21/2020 16:11	WG1447922
Chloroethane	U		0.00116	0.00537	1	03/21/2020 16:11	WG1447922
Chloroform	U		0.000446	0.00268	1	03/21/2020 16:11	WG1447922
Chloromethane	U		0.00149	0.0134	1	03/21/2020 16:11	WG1447922
2-Chlorotoluene	U		0.000988	0.00268	1	03/21/2020 16:11	WG1447922
4-Chlorotoluene	U		0.00121	0.00537	1	03/21/2020 16:11	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00548	0.0268	1	03/21/2020 16:11	WG1447922
1,2-Dibromoethane	U		0.000564	0.00268	1	03/21/2020 16:11	WG1447922
Dibromomethane	U		0.00107	0.00537	1	03/21/2020 16:11	WG1447922
1,2-Dichlorobenzene	U		0.00156	0.00537	1	03/21/2020 16:11	WG1447922
1,3-Dichlorobenzene	U		0.00183	0.00537	1	03/21/2020 16:11	WG1447922
1,4-Dichlorobenzene	U		0.00212	0.00537	1	03/21/2020 16:11	WG1447922
Dichlorodifluoromethane	U		0.000878	0.00268	1	03/21/2020 16:11	WG1447922
1,1-Dichloroethane	U		0.000617	0.00268	1	03/21/2020 16:11	WG1447922
1,2-Dichloroethane	U		0.000510	0.00268	1	03/21/2020 16:11	WG1447922
1,1-Dichloroethene	U		0.000537	0.00268	1	03/21/2020 16:11	WG1447922
cis-1,2-Dichloroethene	U		0.000741	0.00268	1	03/21/2020 16:11	WG1447922
trans-1,2-Dichloroethene	U		0.00154	0.00537	1	03/21/2020 16:11	WG1447922
1,2-Dichloropropane	U		0.00136	0.00537	1	03/21/2020 16:11	WG1447922
1,1-Dichloropropene	U		0.000752	0.00268	1	03/21/2020 16:11	WG1447922
1,3-Dichloropropane	U		0.00188	0.00537	1	03/21/2020 16:11	WG1447922
cis-1,3-Dichloropropene	U		0.000728	0.00268	1	03/21/2020 16:11	WG1447922
trans-1,3-Dichloropropene	U		0.00164	0.00537	1	03/21/2020 16:11	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00150	0.00537	1	03/21/2020 16:11	WG1447922
2,2-Dichloropropane	U		0.000851	0.00268	1	03/21/2020 16:11	WG1447922
Di-isopropyl ether	U		0.000376	0.00107	1	03/21/2020 16:11	WG1447922
Ethylbenzene	U		0.000569	0.00268	1	03/21/2020 16:11	WG1447922
Hexachloro-1,3-butadiene	U		0.0136	0.0268	1	03/21/2020 16:11	WG1447922
2-Hexanone	U		0.0107	0.0268	1	03/21/2020 16:11	WG1447922
n-Hexane	U		0.00114	0.00537	1	03/21/2020 16:11	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00650	0.0134	1	03/21/2020 16:11	WG1447922
Isopropylbenzene	U		0.000927	0.00268	1	03/21/2020 16:11	WG1447922
p-Isopropyltoluene	U		0.00250	0.00537	1	03/21/2020 16:11	WG1447922
2-Butanone (MEK)	0.0458	B	0.0134	0.0268	1	03/21/2020 16:11	WG1447922
Methylene Chloride	U		0.00713	0.0268	1	03/21/2020 16:11	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0268	1	03/21/2020 16:11	WG1447922
Methyl tert-butyl ether	U		0.000317	0.00107	1	03/21/2020 16:11	WG1447922
Naphthalene	U		0.00335	0.0134	1	03/21/2020 16:11	WG1447922
n-Propylbenzene	U		0.00127	0.00537	1	03/21/2020 16:11	WG1447922
Styrene	U		0.00293	0.0134	1	03/21/2020 16:11	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000537	0.00268	1	03/21/2020 16:11	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000419	0.00268	1	03/21/2020 16:11	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000725	0.00268	1	03/21/2020 16:11	WG1447922
Tetrachloroethene	0.00661		0.000752	0.00268	1	03/21/2020 16:11	WG1447922
Toluene	0.00144	J	0.00134	0.00537	1	03/21/2020 16:11	WG1447922
1,2,3-Trichlorobenzene	U		0.000671	0.0134	1	03/21/2020 16:11	WG1447922
1,2,4-Trichlorobenzene	U		0.00518	0.0134	1	03/21/2020 16:11	WG1447922
1,1,1-Trichloroethane	U		0.000295	0.00268	1	03/21/2020 16:11	WG1447922
1,1,2-Trichloroethane	U		0.000948	0.00268	1	03/21/2020 16:11	WG1447922
Trichloroethene	U		0.000429	0.00107	1	03/21/2020 16:11	WG1447922
Trichlorofluoromethane	U		0.000537	0.00268	1	03/21/2020 16:11	WG1447922
1,2,3-Trichloropropane	U		0.00548	0.0134	1	03/21/2020 16:11	WG1447922
1,2,4-Trimethylbenzene	U		0.00125	0.00537	1	03/21/2020 16:11	WG1447922
1,2,3-Trimethylbenzene	0.00126	J	0.00123	0.00537	1	03/21/2020 16:11	WG1447922
1,3,5-Trimethylbenzene	U		0.00116	0.00537	1	03/21/2020 16:11	WG1447922
Vinyl acetate	U	J0	0.00378	0.0134	1	03/21/2020 16:11	WG1447922
Vinyl chloride	U		0.000733	0.00268	1	03/21/2020 16:11	WG1447922
Xylenes, Total	U		0.00513	0.00698	1	03/21/2020 16:11	WG1447922
(S) Toluene-d8	*114*			*75.0-131*		*03/21/2020 16:11*	WG1447922
(S) 4-Bromofluorobenzene	*95.1*			*67.0-138*		*03/21/2020 16:11*	WG1447922
(S) 1,2-Dichloroethane-d4	*86.1*			*70.0-130*		*03/21/2020 16:11*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.8		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.00	2.95	25	03/22/2020 01:28	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*77.0-120*		*03/22/2020 01:28*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0162	0.0295	1	03/21/2020 16:30	WG1447922
Acrylonitrile	U		0.00224	0.0147	1	03/21/2020 16:30	WG1447922
Benzene	0.182		0.000472	0.00118	1	03/21/2020 16:30	WG1447922
Bromobenzene	U		0.00124	0.0147	1	03/21/2020 16:30	WG1447922
Bromodichloromethane	U		0.000929	0.00295	1	03/21/2020 16:30	WG1447922
Bromochloromethane	U	J4	0.00133	0.00590	1	03/21/2020 16:30	WG1447922
Bromoform	U		0.00705	0.0295	1	03/21/2020 16:30	WG1447922
Bromomethane	U		0.00436	0.0147	1	03/21/2020 16:30	WG1447922
n-Butylbenzene	U		0.00453	0.0147	1	03/21/2020 16:30	WG1447922
sec-Butylbenzene	U		0.00298	0.0147	1	03/21/2020 16:30	WG1447922
tert-Butylbenzene	U		0.00183	0.00590	1	03/21/2020 16:30	WG1447922
Carbon disulfide	U		0.00479	0.0147	1	03/21/2020 16:30	WG1447922
Carbon tetrachloride	U		0.00127	0.00590	1	03/21/2020 16:30	WG1447922
Chlorobenzene	U		0.000676	0.00295	1	03/21/2020 16:30	WG1447922
Chlorodibromomethane	U		0.000531	0.00295	1	03/21/2020 16:30	WG1447922
Chloroethane	U		0.00127	0.00590	1	03/21/2020 16:30	WG1447922
Chloroform	U		0.000489	0.00295	1	03/21/2020 16:30	WG1447922
Chloromethane	U		0.00164	0.0147	1	03/21/2020 16:30	WG1447922
2-Chlorotoluene	U		0.00108	0.00295	1	03/21/2020 16:30	WG1447922
4-Chlorotoluene	U		0.00133	0.00590	1	03/21/2020 16:30	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00601	0.0295	1	03/21/2020 16:30	WG1447922
1,2-Dibromoethane	U		0.000619	0.00295	1	03/21/2020 16:30	WG1447922
Dibromomethane	U		0.00118	0.00590	1	03/21/2020 16:30	WG1447922
1,2-Dichlorobenzene	U		0.00171	0.00590	1	03/21/2020 16:30	WG1447922
1,3-Dichlorobenzene	U		0.00200	0.00590	1	03/21/2020 16:30	WG1447922
1,4-Dichlorobenzene	U		0.00232	0.00590	1	03/21/2020 16:30	WG1447922
Dichlorodifluoromethane	U		0.000964	0.00295	1	03/21/2020 16:30	WG1447922
1,1-Dichloroethane	U		0.000678	0.00295	1	03/21/2020 16:30	WG1447922
1,2-Dichloroethane	U		0.000560	0.00295	1	03/21/2020 16:30	WG1447922
1,1-Dichloroethene	U		0.000590	0.00295	1	03/21/2020 16:30	WG1447922
cis-1,2-Dichloroethene	U		0.000814	0.00295	1	03/21/2020 16:30	WG1447922
trans-1,2-Dichloroethene	U		0.00169	0.00590	1	03/21/2020 16:30	WG1447922
1,2-Dichloropropane	U		0.00150	0.00590	1	03/21/2020 16:30	WG1447922
1,1-Dichloropropene	U		0.000825	0.00295	1	03/21/2020 16:30	WG1447922
1,3-Dichloropropane	U		0.00206	0.00590	1	03/21/2020 16:30	WG1447922
cis-1,3-Dichloropropene	U		0.000799	0.00295	1	03/21/2020 16:30	WG1447922
trans-1,3-Dichloropropene	U		0.00180	0.00590	1	03/21/2020 16:30	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00165	0.00590	1	03/21/2020 16:30	WG1447922
2,2-Dichloropropane	U		0.000935	0.00295	1	03/21/2020 16:30	WG1447922
Di-isopropyl ether	U		0.000413	0.00118	1	03/21/2020 16:30	WG1447922
Ethylbenzene	0.00311		0.000625	0.00295	1	03/21/2020 16:30	WG1447922
Hexachloro-1,3-butadiene	U		0.0150	0.0295	1	03/21/2020 16:30	WG1447922
2-Hexanone	U		0.0118	0.0295	1	03/21/2020 16:30	WG1447922
n-Hexane	0.0355		0.00125	0.00590	1	03/21/2020 16:30	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00713	0.0147	1	03/21/2020 16:30	WG1447922
Isopropylbenzene	U		0.00102	0.00295	1	03/21/2020 16:30	WG1447922
p-Isopropyltoluene	U		0.00275	0.00590	1	03/21/2020 16:30	WG1447922
2-Butanone (MEK)	U		0.0147	0.0295	1	03/21/2020 16:30	WG1447922
Methylene Chloride	U		0.00783	0.0295	1	03/21/2020 16:30	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0118	0.0295	1	03/21/2020 16:30	WG1447922
Methyl tert-butyl ether	U		0.000348	0.00118	1	03/21/2020 16:30	WG1447922
Naphthalene	0.0129	J	0.00368	0.0147	1	03/21/2020 16:30	WG1447922
n-Propylbenzene	U		0.00139	0.00590	1	03/21/2020 16:30	WG1447922
Styrene	U		0.00322	0.0147	1	03/21/2020 16:30	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000590	0.00295	1	03/21/2020 16:30	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000460	0.00295	1	03/21/2020 16:30	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000796	0.00295	1	03/21/2020 16:30	WG1447922
Tetrachloroethene	0.0126		0.000825	0.00295	1	03/21/2020 16:30	WG1447922
Toluene	0.0400		0.00147	0.00590	1	03/21/2020 16:30	WG1447922
1,2,3-Trichlorobenzene	U		0.000737	0.0147	1	03/21/2020 16:30	WG1447922
1,2,4-Trichlorobenzene	U		0.00568	0.0147	1	03/21/2020 16:30	WG1447922
1,1,1-Trichloroethane	U		0.000324	0.00295	1	03/21/2020 16:30	WG1447922
1,1,2-Trichloroethane	U		0.00104	0.00295	1	03/21/2020 16:30	WG1447922
Trichloroethene	U		0.000472	0.00118	1	03/21/2020 16:30	WG1447922
Trichlorofluoromethane	U		0.000590	0.00295	1	03/21/2020 16:30	WG1447922
1,2,3-Trichloropropane	U		0.00601	0.0147	1	03/21/2020 16:30	WG1447922
1,2,4-Trimethylbenzene	0.00304	J	0.00137	0.00590	1	03/21/2020 16:30	WG1447922
1,2,3-Trimethylbenzene	0.00395	J	0.00136	0.00590	1	03/21/2020 16:30	WG1447922
1,3,5-Trimethylbenzene	0.00162	J	0.00127	0.00590	1	03/21/2020 16:30	WG1447922
Vinyl acetate	U	J0	0.00415	0.0147	1	03/21/2020 16:30	WG1447922
Vinyl chloride	U		0.000805	0.00295	1	03/21/2020 16:30	WG1447922
Xylenes, Total	0.0141		0.00564	0.00766	1	03/21/2020 16:30	WG1447922
(S) Toluene-d8	*115*			*75.0-131*		*03/21/2020 16:30*	WG1447922
(S) 4-Bromofluorobenzene	*92.4*			*67.0-138*		*03/21/2020 16:30*	WG1447922
(S) 1,2-Dichloroethane-d4	*92.7*			*70.0-130*		*03/21/2020 16:30*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.8		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.05	3.09	25	03/22/2020 01:52	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*03/22/2020 01:52*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0170	0.0309	1	03/21/2020 16:49	WG1447922
Acrylonitrile	U		0.00235	0.0155	1	03/21/2020 16:49	WG1447922
Benzene	0.0257		0.000495	0.00124	1	03/21/2020 16:49	WG1447922
Bromobenzene	U		0.00130	0.0155	1	03/21/2020 16:49	WG1447922
Bromodichloromethane	U		0.000975	0.00309	1	03/21/2020 16:49	WG1447922
Bromochloromethane	U	J4	0.00140	0.00619	1	03/21/2020 16:49	WG1447922
Bromoform	U		0.00740	0.0309	1	03/21/2020 16:49	WG1447922
Bromomethane	U		0.00458	0.0155	1	03/21/2020 16:49	WG1447922
n-Butylbenzene	U		0.00475	0.0155	1	03/21/2020 16:49	WG1447922
sec-Butylbenzene	U		0.00313	0.0155	1	03/21/2020 16:49	WG1447922
tert-Butylbenzene	U		0.00192	0.00619	1	03/21/2020 16:49	WG1447922
Carbon disulfide	U		0.00502	0.0155	1	03/21/2020 16:49	WG1447922
Carbon tetrachloride	U		0.00134	0.00619	1	03/21/2020 16:49	WG1447922
Chlorobenzene	U		0.000709	0.00309	1	03/21/2020 16:49	WG1447922
Chlorodibromomethane	U		0.000557	0.00309	1	03/21/2020 16:49	WG1447922
Chloroethane	U		0.00134	0.00619	1	03/21/2020 16:49	WG1447922
Chloroform	U		0.000514	0.00309	1	03/21/2020 16:49	WG1447922
Chloromethane	U		0.00172	0.0155	1	03/21/2020 16:49	WG1447922
2-Chlorotoluene	U		0.00114	0.00309	1	03/21/2020 16:49	WG1447922
4-Chlorotoluene	U		0.00140	0.00619	1	03/21/2020 16:49	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00631	0.0309	1	03/21/2020 16:49	WG1447922
1,2-Dibromoethane	U		0.000650	0.00309	1	03/21/2020 16:49	WG1447922
Dibromomethane	U		0.00124	0.00619	1	03/21/2020 16:49	WG1447922
1,2-Dichlorobenzene	U		0.00179	0.00619	1	03/21/2020 16:49	WG1447922
1,3-Dichlorobenzene	U		0.00210	0.00619	1	03/21/2020 16:49	WG1447922
1,4-Dichlorobenzene	U		0.00244	0.00619	1	03/21/2020 16:49	WG1447922
Dichlorodifluoromethane	U		0.00101	0.00309	1	03/21/2020 16:49	WG1447922
1,1-Dichloroethane	U		0.000712	0.00309	1	03/21/2020 16:49	WG1447922
1,2-Dichloroethane	U		0.000588	0.00309	1	03/21/2020 16:49	WG1447922
1,1-Dichloroethene	U		0.000619	0.00309	1	03/21/2020 16:49	WG1447922
cis-1,2-Dichloroethene	U		0.000854	0.00309	1	03/21/2020 16:49	WG1447922
trans-1,2-Dichloroethene	U		0.00177	0.00619	1	03/21/2020 16:49	WG1447922
1,2-Dichloropropane	U		0.00157	0.00619	1	03/21/2020 16:49	WG1447922
1,1-Dichloropropene	U		0.000866	0.00309	1	03/21/2020 16:49	WG1447922
1,3-Dichloropropane	U		0.00217	0.00619	1	03/21/2020 16:49	WG1447922
cis-1,3-Dichloropropene	U		0.000839	0.00309	1	03/21/2020 16:49	WG1447922
trans-1,3-Dichloropropene	U		0.00189	0.00619	1	03/21/2020 16:49	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00173	0.00619	1	03/21/2020 16:49	WG1447922
2,2-Dichloropropane	U		0.000981	0.00309	1	03/21/2020 16:49	WG1447922
Di-isopropyl ether	U		0.000433	0.00124	1	03/21/2020 16:49	WG1447922
Ethylbenzene	0.00103	J	0.000656	0.00309	1	03/21/2020 16:49	WG1447922
Hexachloro-1,3-butadiene	U		0.0157	0.0309	1	03/21/2020 16:49	WG1447922
2-Hexanone	U		0.0124	0.0309	1	03/21/2020 16:49	WG1447922
n-Hexane	0.00902		0.00131	0.00619	1	03/21/2020 16:49	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00749	0.0155	1	03/21/2020 16:49	WG1447922
Isopropylbenzene	U		0.00107	0.00309	1	03/21/2020 16:49	WG1447922
p-Isopropyltoluene	U		0.00288	0.00619	1	03/21/2020 16:49	WG1447922
2-Butanone (MEK)	0.0249	B J	0.0155	0.0309	1	03/21/2020 16:49	WG1447922
Methylene Chloride	U		0.00822	0.0309	1	03/21/2020 16:49	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0124	0.0309	1	03/21/2020 16:49	WG1447922
Methyl tert-butyl ether	U		0.000365	0.00124	1	03/21/2020 16:49	WG1447922
Naphthalene	U		0.00386	0.0155	1	03/21/2020 16:49	WG1447922
n-Propylbenzene	U		0.00146	0.00619	1	03/21/2020 16:49	WG1447922
Styrene	U		0.00338	0.0155	1	03/21/2020 16:49	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000619	0.00309	1	03/21/2020 16:49	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000483	0.00309	1	03/21/2020 16:49	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000835	0.00309	1	03/21/2020 16:49	WG1447922
Tetrachloroethene	0.0126		0.000866	0.00309	1	03/21/2020 16:49	WG1447922
Toluene	0.00613	J	0.00155	0.00619	1	03/21/2020 16:49	WG1447922
1,2,3-Trichlorobenzene	U		0.000773	0.0155	1	03/21/2020 16:49	WG1447922
1,2,4-Trichlorobenzene	U		0.00596	0.0155	1	03/21/2020 16:49	WG1447922
1,1,1-Trichloroethane	U		0.000340	0.00309	1	03/21/2020 16:49	WG1447922
1,1,2-Trichloroethane	U		0.00109	0.00309	1	03/21/2020 16:49	WG1447922
Trichloroethene	U		0.000495	0.00124	1	03/21/2020 16:49	WG1447922
Trichlorofluoromethane	U		0.000619	0.00309	1	03/21/2020 16:49	WG1447922
1,2,3-Trichloropropane	U		0.00631	0.0155	1	03/21/2020 16:49	WG1447922
1,2,4-Trimethylbenzene	U		0.00144	0.00619	1	03/21/2020 16:49	WG1447922
1,2,3-Trimethylbenzene	U		0.00142	0.00619	1	03/21/2020 16:49	WG1447922
1,3,5-Trimethylbenzene	U		0.00134	0.00619	1	03/21/2020 16:49	WG1447922
Vinyl acetate	U	J0	0.00436	0.0155	1	03/21/2020 16:49	WG1447922
Vinyl chloride	U		0.000845	0.00309	1	03/21/2020 16:49	WG1447922
Xylenes, Total	U		0.00592	0.00804	1	03/21/2020 16:49	WG1447922
(S) Toluene-d8	*115*			*75.0-131*		*03/21/2020 16:49*	WG1447922
(S) 4-Bromofluorobenzene	*92.3*			*67.0-138*		*03/21/2020 16:49*	WG1447922
(S) 1,2-Dichloroethane-d4	*89.6*			*70.0-130*		*03/21/2020 16:49*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.1		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.952	2.81	25	03/22/2020 02:16	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*96.9*			*77.0-120*		*03/22/2020 02:16*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0154	0.0281	1	03/21/2020 17:08	WG1447922
Acrylonitrile	U		0.00213	0.0140	1	03/21/2020 17:08	WG1447922
Benzene	0.000744	J	0.000449	0.00112	1	03/21/2020 17:08	WG1447922
Bromobenzene	U		0.00118	0.0140	1	03/21/2020 17:08	WG1447922
Bromodichloromethane	U		0.000884	0.00281	1	03/21/2020 17:08	WG1447922
Bromochloromethane	U	J4	0.00127	0.00561	1	03/21/2020 17:08	WG1447922
Bromoform	U		0.00671	0.0281	1	03/21/2020 17:08	WG1447922
Bromomethane	U		0.00415	0.0140	1	03/21/2020 17:08	WG1447922
n-Butylbenzene	U		0.00431	0.0140	1	03/21/2020 17:08	WG1447922
sec-Butylbenzene	U		0.00284	0.0140	1	03/21/2020 17:08	WG1447922
tert-Butylbenzene	U		0.00174	0.00561	1	03/21/2020 17:08	WG1447922
Carbon disulfide	U		0.00456	0.0140	1	03/21/2020 17:08	WG1447922
Carbon tetrachloride	U		0.00121	0.00561	1	03/21/2020 17:08	WG1447922
Chlorobenzene	U		0.000643	0.00281	1	03/21/2020 17:08	WG1447922
Chlorodibromomethane	U		0.000505	0.00281	1	03/21/2020 17:08	WG1447922
Chloroethane	U		0.00121	0.00561	1	03/21/2020 17:08	WG1447922
Chloroform	U		0.000466	0.00281	1	03/21/2020 17:08	WG1447922
Chloromethane	U		0.00156	0.0140	1	03/21/2020 17:08	WG1447922
2-Chlorotoluene	U		0.00103	0.00281	1	03/21/2020 17:08	WG1447922
4-Chlorotoluene	U		0.00127	0.00561	1	03/21/2020 17:08	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00572	0.0281	1	03/21/2020 17:08	WG1447922
1,2-Dibromoethane	U		0.000589	0.00281	1	03/21/2020 17:08	WG1447922
Dibromomethane	U		0.00112	0.00561	1	03/21/2020 17:08	WG1447922
1,2-Dichlorobenzene	U		0.00163	0.00561	1	03/21/2020 17:08	WG1447922
1,3-Dichlorobenzene	U		0.00191	0.00561	1	03/21/2020 17:08	WG1447922
1,4-Dichlorobenzene	U		0.00221	0.00561	1	03/21/2020 17:08	WG1447922
Dichlorodifluoromethane	U		0.000918	0.00281	1	03/21/2020 17:08	WG1447922
1,1-Dichloroethane	U		0.000645	0.00281	1	03/21/2020 17:08	WG1447922
1,2-Dichloroethane	U		0.000533	0.00281	1	03/21/2020 17:08	WG1447922
1,1-Dichloroethene	U		0.000561	0.00281	1	03/21/2020 17:08	WG1447922
cis-1,2-Dichloroethene	U		0.000774	0.00281	1	03/21/2020 17:08	WG1447922
trans-1,2-Dichloroethene	U		0.00160	0.00561	1	03/21/2020 17:08	WG1447922
1,2-Dichloropropane	U		0.00143	0.00561	1	03/21/2020 17:08	WG1447922
1,1-Dichloropropene	U		0.000786	0.00281	1	03/21/2020 17:08	WG1447922
1,3-Dichloropropane	U		0.00196	0.00561	1	03/21/2020 17:08	WG1447922
cis-1,3-Dichloropropene	U		0.000761	0.00281	1	03/21/2020 17:08	WG1447922
trans-1,3-Dichloropropene	U		0.00172	0.00561	1	03/21/2020 17:08	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00157	0.00561	1	03/21/2020 17:08	WG1447922
2,2-Dichloropropane	U		0.000890	0.00281	1	03/21/2020 17:08	WG1447922
Di-isopropyl ether	U		0.000393	0.00112	1	03/21/2020 17:08	WG1447922
Ethylbenzene	0.000897	J	0.000595	0.00281	1	03/21/2020 17:08	WG1447922
Hexachloro-1,3-butadiene	U		0.0143	0.0281	1	03/21/2020 17:08	WG1447922
2-Hexanone	U		0.0112	0.0281	1	03/21/2020 17:08	WG1447922
n-Hexane	U		0.00119	0.00561	1	03/21/2020 17:08	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00679	0.0140	1	03/21/2020 17:08	WG1447922
Isopropylbenzene	U		0.000969	0.00281	1	03/21/2020 17:08	WG1447922
p-Isopropyltoluene	U		0.00261	0.00561	1	03/21/2020 17:08	WG1447922
2-Butanone (MEK)	U		0.0140	0.0281	1	03/21/2020 17:08	WG1447922
Methylene Chloride	U		0.00745	0.0281	1	03/21/2020 17:08	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0112	0.0281	1	03/21/2020 17:08	WG1447922
Methyl tert-butyl ether	U		0.000331	0.00112	1	03/21/2020 17:08	WG1447922
Naphthalene	0.00646	J	0.00350	0.0140	1	03/21/2020 17:08	WG1447922
n-Propylbenzene	U		0.00132	0.00561	1	03/21/2020 17:08	WG1447922
Styrene	U		0.00306	0.0140	1	03/21/2020 17:08	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000561	0.00281	1	03/21/2020 17:08	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000438	0.00281	1	03/21/2020 17:08	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000758	0.00281	1	03/21/2020 17:08	WG1447922
Tetrachloroethene	U		0.000786	0.00281	1	03/21/2020 17:08	WG1447922
Toluene	0.00210	J	0.00140	0.00561	1	03/21/2020 17:08	WG1447922
1,2,3-Trichlorobenzene	U		0.000701	0.0140	1	03/21/2020 17:08	WG1447922
1,2,4-Trichlorobenzene	U		0.00541	0.0140	1	03/21/2020 17:08	WG1447922
1,1,1-Trichloroethane	U		0.000309	0.00281	1	03/21/2020 17:08	WG1447922
1,1,2-Trichloroethane	U		0.000991	0.00281	1	03/21/2020 17:08	WG1447922
Trichloroethene	U		0.000449	0.00112	1	03/21/2020 17:08	WG1447922
Trichlorofluoromethane	U		0.000561	0.00281	1	03/21/2020 17:08	WG1447922
1,2,3-Trichloropropane	U		0.00572	0.0140	1	03/21/2020 17:08	WG1447922
1,2,4-Trimethylbenzene	0.00259	J	0.00130	0.00561	1	03/21/2020 17:08	WG1447922
1,2,3-Trimethylbenzene	0.00258	J	0.00129	0.00561	1	03/21/2020 17:08	WG1447922
1,3,5-Trimethylbenzene	0.00128	J	0.00121	0.00561	1	03/21/2020 17:08	WG1447922
Vinyl acetate	U	J0	0.00395	0.0140	1	03/21/2020 17:08	WG1447922
Vinyl chloride	U		0.000767	0.00281	1	03/21/2020 17:08	WG1447922
Xylenes, Total	U		0.00536	0.00729	1	03/21/2020 17:08	WG1447922
(S) Toluene-d8	*115*			*75.0-131*		*03/21/2020 17:08*	WG1447922
(S) 4-Bromofluorobenzene	*92.7*			*67.0-138*		*03/21/2020 17:08*	WG1447922
(S) 1,2-Dichloroethane-d4	*91.4*			*70.0-130*		*03/21/2020 17:08*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.5		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.937	2.76	25	03/22/2020 03:03	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*03/22/2020 03:03*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0151	0.0276	1	03/21/2020 17:27	WG1447922
Acrylonitrile	U		0.00210	0.0138	1	03/21/2020 17:27	WG1447922
Benzene	0.000493	J	0.000442	0.00111	1	03/21/2020 17:27	WG1447922
Bromobenzene	U		0.00116	0.0138	1	03/21/2020 17:27	WG1447922
Bromodichloromethane	U		0.000871	0.00276	1	03/21/2020 17:27	WG1447922
Bromochloromethane	U	J4	0.00125	0.00553	1	03/21/2020 17:27	WG1447922
Bromoform	U		0.00661	0.0276	1	03/21/2020 17:27	WG1447922
Bromomethane	U		0.00409	0.0138	1	03/21/2020 17:27	WG1447922
n-Butylbenzene	U		0.00424	0.0138	1	03/21/2020 17:27	WG1447922
sec-Butylbenzene	U		0.00280	0.0138	1	03/21/2020 17:27	WG1447922
tert-Butylbenzene	U		0.00171	0.00553	1	03/21/2020 17:27	WG1447922
Carbon disulfide	U		0.00449	0.0138	1	03/21/2020 17:27	WG1447922
Carbon tetrachloride	U		0.00119	0.00553	1	03/21/2020 17:27	WG1447922
Chlorobenzene	U		0.000633	0.00276	1	03/21/2020 17:27	WG1447922
Chlorodibromomethane	U		0.000497	0.00276	1	03/21/2020 17:27	WG1447922
Chloroethane	U		0.00119	0.00553	1	03/21/2020 17:27	WG1447922
Chloroform	U		0.000459	0.00276	1	03/21/2020 17:27	WG1447922
Chloromethane	U		0.00154	0.0138	1	03/21/2020 17:27	WG1447922
2-Chlorotoluene	U		0.00102	0.00276	1	03/21/2020 17:27	WG1447922
4-Chlorotoluene	U		0.00125	0.00553	1	03/21/2020 17:27	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00564	0.0276	1	03/21/2020 17:27	WG1447922
1,2-Dibromoethane	U		0.000580	0.00276	1	03/21/2020 17:27	WG1447922
Dibromomethane	U		0.00111	0.00553	1	03/21/2020 17:27	WG1447922
1,2-Dichlorobenzene	U		0.00160	0.00553	1	03/21/2020 17:27	WG1447922
1,3-Dichlorobenzene	U		0.00188	0.00553	1	03/21/2020 17:27	WG1447922
1,4-Dichlorobenzene	U		0.00218	0.00553	1	03/21/2020 17:27	WG1447922
Dichlorodifluoromethane	U		0.000904	0.00276	1	03/21/2020 17:27	WG1447922
1,1-Dichloroethane	U		0.000636	0.00276	1	03/21/2020 17:27	WG1447922
1,2-Dichloroethane	U		0.000525	0.00276	1	03/21/2020 17:27	WG1447922
1,1-Dichloroethene	U		0.000553	0.00276	1	03/21/2020 17:27	WG1447922
cis-1,2-Dichloroethene	U		0.000763	0.00276	1	03/21/2020 17:27	WG1447922
trans-1,2-Dichloroethene	U		0.00158	0.00553	1	03/21/2020 17:27	WG1447922
1,2-Dichloropropane	U		0.00140	0.00553	1	03/21/2020 17:27	WG1447922
1,1-Dichloropropene	U		0.000774	0.00276	1	03/21/2020 17:27	WG1447922
1,3-Dichloropropane	U		0.00193	0.00553	1	03/21/2020 17:27	WG1447922
cis-1,3-Dichloropropene	U		0.000749	0.00276	1	03/21/2020 17:27	WG1447922
trans-1,3-Dichloropropene	U		0.00169	0.00553	1	03/21/2020 17:27	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00155	0.00553	1	03/21/2020 17:27	WG1447922
2,2-Dichloropropane	U		0.000876	0.00276	1	03/21/2020 17:27	WG1447922
Di-isopropyl ether	U		0.000387	0.00111	1	03/21/2020 17:27	WG1447922
Ethylbenzene	0.000627	J	0.000586	0.00276	1	03/21/2020 17:27	WG1447922
Hexachloro-1,3-butadiene	U		0.0140	0.0276	1	03/21/2020 17:27	WG1447922
2-Hexanone	U		0.0111	0.0276	1	03/21/2020 17:27	WG1447922
n-Hexane	0.103		0.00117	0.00553	1	03/21/2020 17:27	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00669	0.0138	1	03/21/2020 17:27	WG1447922
Isopropylbenzene	U		0.000954	0.00276	1	03/21/2020 17:27	WG1447922
p-Isopropyltoluene	0.00487	J	0.00258	0.00553	1	03/21/2020 17:27	WG1447922
2-Butanone (MEK)	0.0166	B J	0.0138	0.0276	1	03/21/2020 17:27	WG1447922
Methylene Chloride	U		0.00734	0.0276	1	03/21/2020 17:27	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0276	1	03/21/2020 17:27	WG1447922
Methyl tert-butyl ether	U		0.000326	0.00111	1	03/21/2020 17:27	WG1447922
Naphthalene	U		0.00345	0.0138	1	03/21/2020 17:27	WG1447922
n-Propylbenzene	U		0.00130	0.00553	1	03/21/2020 17:27	WG1447922
Styrene	U		0.00302	0.0138	1	03/21/2020 17:27	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000553	0.00276	1	03/21/2020 17:27	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000431	0.00276	1	03/21/2020 17:27	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000746	0.00276	1	03/21/2020 17:27	WG1447922
Tetrachloroethene	0.144		0.000774	0.00276	1	03/21/2020 17:27	WG1447922
Toluene	U		0.00138	0.00553	1	03/21/2020 17:27	WG1447922
1,2,3-Trichlorobenzene	U		0.000691	0.0138	1	03/21/2020 17:27	WG1447922
1,2,4-Trichlorobenzene	U		0.00533	0.0138	1	03/21/2020 17:27	WG1447922
1,1,1-Trichloroethane	U		0.000304	0.00276	1	03/21/2020 17:27	WG1447922
1,1,2-Trichloroethane	U		0.000976	0.00276	1	03/21/2020 17:27	WG1447922
Trichloroethene	0.00179		0.000442	0.00111	1	03/21/2020 17:27	WG1447922
Trichlorofluoromethane	U		0.000553	0.00276	1	03/21/2020 17:27	WG1447922
1,2,3-Trichloropropane	U		0.00564	0.0138	1	03/21/2020 17:27	WG1447922
1,2,4-Trimethylbenzene	0.00181	J	0.00128	0.00553	1	03/21/2020 17:27	WG1447922
1,2,3-Trimethylbenzene	0.00197	J	0.00127	0.00553	1	03/21/2020 17:27	WG1447922
1,3,5-Trimethylbenzene	U		0.00119	0.00553	1	03/21/2020 17:27	WG1447922
Vinyl acetate	U	J0	0.00389	0.0138	1	03/21/2020 17:27	WG1447922
Vinyl chloride	U		0.000755	0.00276	1	03/21/2020 17:27	WG1447922
Xylenes, Total	U		0.00528	0.00718	1	03/21/2020 17:27	WG1447922
(S) Toluene-d8	*114*			*75.0-131*		*03/21/2020 17:27*	WG1447922
(S) 4-Bromofluorobenzene	*91.2*			*67.0-138*		*03/21/2020 17:27*	WG1447922
(S) 1,2-Dichloroethane-d4	*91.6*			*70.0-130*		*03/21/2020 17:27*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	66.3		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	10.7		2.23	6.61	43.8	03/22/2020 03:27	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*94.4*			*77.0-120*		*03/22/2020 03:27*	WG1447924

Sample Narrative:

L1200909-09 WG1447924: No discernable petroleum pattern.

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0303	0.0555	1.47	03/21/2020 11:28	WG1447922
Acrylonitrile	U		0.00421	0.0278	1.47	03/21/2020 11:28	WG1447922
Benzene	0.0244		0.000887	0.00222	1.47	03/21/2020 11:28	WG1447922
Bromobenzene	U		0.00232	0.0278	1.47	03/21/2020 11:28	WG1447922
Bromodichloromethane	U		0.00175	0.00555	1.47	03/21/2020 11:28	WG1447922
Bromochloromethane	U	J4	0.00250	0.0111	1.47	03/21/2020 11:28	WG1447922
Bromoform	U		0.0133	0.0555	1.47	03/21/2020 11:28	WG1447922
Bromomethane	U		0.00821	0.0278	1.47	03/21/2020 11:28	WG1447922
n-Butylbenzene	U		0.00851	0.0278	1.47	03/21/2020 11:28	WG1447922
sec-Butylbenzene	U		0.00561	0.0278	1.47	03/21/2020 11:28	WG1447922
tert-Butylbenzene	U		0.00344	0.0111	1.47	03/21/2020 11:28	WG1447922
Carbon disulfide	U		0.00900	0.0278	1.47	03/21/2020 11:28	WG1447922
Carbon tetrachloride	U		0.00240	0.0111	1.47	03/21/2020 11:28	WG1447922
Chlorobenzene	U		0.00127	0.00555	1.47	03/21/2020 11:28	WG1447922
Chlorodibromomethane	U		0.000997	0.00555	1.47	03/21/2020 11:28	WG1447922
Chloroethane	U		0.00240	0.0111	1.47	03/21/2020 11:28	WG1447922
Chloroform	U		0.000920	0.00555	1.47	03/21/2020 11:28	WG1447922
Chloromethane	U		0.00308	0.0278	1.47	03/21/2020 11:28	WG1447922
2-Chlorotoluene	U		0.00204	0.00555	1.47	03/21/2020 11:28	WG1447922
4-Chlorotoluene	U		0.00250	0.0111	1.47	03/21/2020 11:28	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.0113	0.0555	1.47	03/21/2020 11:28	WG1447922
1,2-Dibromoethane	U		0.00116	0.00555	1.47	03/21/2020 11:28	WG1447922
Dibromomethane	U		0.00222	0.0111	1.47	03/21/2020 11:28	WG1447922
1,2-Dichlorobenzene	U		0.00321	0.0111	1.47	03/21/2020 11:28	WG1447922
1,3-Dichlorobenzene	U		0.00377	0.0111	1.47	03/21/2020 11:28	WG1447922
1,4-Dichlorobenzene	U		0.00437	0.0111	1.47	03/21/2020 11:28	WG1447922
Dichlorodifluoromethane	U		0.00181	0.00555	1.47	03/21/2020 11:28	WG1447922
1,1-Dichloroethane	U		0.00127	0.00555	1.47	03/21/2020 11:28	WG1447922
1,2-Dichloroethane	U		0.00105	0.00555	1.47	03/21/2020 11:28	WG1447922
1,1-Dichloroethene	U		0.00111	0.00555	1.47	03/21/2020 11:28	WG1447922
cis-1,2-Dichloroethene	0.00271	J	0.00152	0.00555	1.47	03/21/2020 11:28	WG1447922
trans-1,2-Dichloroethene	U		0.00317	0.0111	1.47	03/21/2020 11:28	WG1447922
1,2-Dichloropropane	U		0.00282	0.0111	1.47	03/21/2020 11:28	WG1447922
1,1-Dichloropropene	U		0.00155	0.00555	1.47	03/21/2020 11:28	WG1447922
1,3-Dichloropropane	U		0.00388	0.0111	1.47	03/21/2020 11:28	WG1447922
cis-1,3-Dichloropropene	U		0.00150	0.00555	1.47	03/21/2020 11:28	WG1447922
trans-1,3-Dichloropropene	U		0.00339	0.0111	1.47	03/21/2020 11:28	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00311	0.0111	1.47	03/21/2020 11:28	WG1447922
2,2-Dichloropropane	U		0.00176	0.00555	1.47	03/21/2020 11:28	WG1447922
Di-isopropyl ether	U		0.000777	0.00222	1.47	03/21/2020 11:28	WG1447922
Ethylbenzene	0.00410	J	0.00117	0.00555	1.47	03/21/2020 11:28	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U		0.0282	0.0555	1.47	03/21/2020 11:28	WG1447922
2-Hexanone	U		0.0222	0.0555	1.47	03/21/2020 11:28	WG1447922
n-Hexane	0.635		0.00235	0.0111	1.47	03/21/2020 11:28	WG1447922
Iodomethane	U		0.0134	0.0278	1.47	03/21/2020 11:28	WG1447922
Isopropylbenzene	0.00199	J	0.00192	0.00555	1.47	03/21/2020 11:28	WG1447922
p-Isopropyltoluene	0.0549		0.00517	0.0111	1.47	03/21/2020 11:28	WG1447922
2-Butanone (MEK)	U		0.0278	0.0555	1.47	03/21/2020 11:28	WG1447922
Methylene Chloride	U		0.0147	0.0555	1.47	03/21/2020 11:28	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0222	0.0555	1.47	03/21/2020 11:28	WG1447922
Methyl tert-butyl ether	U		0.000655	0.00222	1.47	03/21/2020 11:28	WG1447922
Naphthalene	U		0.00692	0.0278	1.47	03/21/2020 11:28	WG1447922
n-Propylbenzene	U		0.00261	0.0111	1.47	03/21/2020 11:28	WG1447922
Styrene	U		0.00605	0.0278	1.47	03/21/2020 11:28	WG1447922
1,1,1,2-Tetrachloroethane	U		0.00111	0.00555	1.47	03/21/2020 11:28	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000864	0.00555	1.47	03/21/2020 11:28	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.00150	0.00555	1.47	03/21/2020 11:28	WG1447922
Tetrachloroethene	0.220		0.00155	0.00555	1.47	03/21/2020 11:28	WG1447922
Toluene	0.0104	J	0.00278	0.0111	1.47	03/21/2020 11:28	WG1447922
1,2,3-Trichlorobenzene	U		0.00139	0.0278	1.47	03/21/2020 11:28	WG1447922
1,2,4-Trichlorobenzene	U		0.0107	0.0278	1.47	03/21/2020 11:28	WG1447922
1,1,1-Trichloroethane	U		0.000609	0.00555	1.47	03/21/2020 11:28	WG1447922
1,1,2-Trichloroethane	U		0.00196	0.00555	1.47	03/21/2020 11:28	WG1447922
Trichloroethene	0.00122	J	0.000887	0.00222	1.47	03/21/2020 11:28	WG1447922
Trichlorofluoromethane	U		0.00111	0.00555	1.47	03/21/2020 11:28	WG1447922
1,2,3-Trichloropropane	U		0.0113	0.0278	1.47	03/21/2020 11:28	WG1447922
1,2,4-Trimethylbenzene	0.00572	J	0.00258	0.0111	1.47	03/21/2020 11:28	WG1447922
1,2,3-Trimethylbenzene	0.00433	J	0.00255	0.0111	1.47	03/21/2020 11:28	WG1447922
1,3,5-Trimethylbenzene	0.00321	J	0.00240	0.0111	1.47	03/21/2020 11:28	WG1447922
Vinyl acetate	U	J0	0.00780	0.0278	1.47	03/21/2020 11:28	WG1447922
Vinyl chloride	U		0.00151	0.00555	1.47	03/21/2020 11:28	WG1447922
Xylenes, Total	0.0163		0.0106	0.0144	1.47	03/21/2020 11:28	WG1447922
(S) Toluene-d8	*113*			*75.0-131*		*03/21/2020 11:28*	WG1447922
(S) 4-Bromofluorobenzene	*92.6*			*67.0-138*		*03/21/2020 11:28*	WG1447922
(S) 1,2-Dichloroethane-d4	*89.8*			*70.0-130*		*03/21/2020 11:28*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.9		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.954	2.81	25	03/22/2020 03:50	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*98.3*			*77.0-120*		*03/22/2020 03:50*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0154	0.0281	1	03/21/2020 11:47	WG1447922
Acrylonitrile	U		0.00214	0.0141	1	03/21/2020 11:47	WG1447922
Benzene	0.00540		0.000450	0.00112	1	03/21/2020 11:47	WG1447922
Bromobenzene	U		0.00118	0.0141	1	03/21/2020 11:47	WG1447922
Bromodichloromethane	U		0.000886	0.00281	1	03/21/2020 11:47	WG1447922
Bromochloromethane	U	J4	0.00127	0.00562	1	03/21/2020 11:47	WG1447922
Bromoform	U		0.00672	0.0281	1	03/21/2020 11:47	WG1447922
Bromomethane	U		0.00416	0.0141	1	03/21/2020 11:47	WG1447922
n-Butylbenzene	U		0.00432	0.0141	1	03/21/2020 11:47	WG1447922
sec-Butylbenzene	U		0.00285	0.0141	1	03/21/2020 11:47	WG1447922
tert-Butylbenzene	U		0.00174	0.00562	1	03/21/2020 11:47	WG1447922
Carbon disulfide	U		0.00457	0.0141	1	03/21/2020 11:47	WG1447922
Carbon tetrachloride	U		0.00121	0.00562	1	03/21/2020 11:47	WG1447922
Chlorobenzene	U		0.000644	0.00281	1	03/21/2020 11:47	WG1447922
Chlorodibromomethane	U		0.000506	0.00281	1	03/21/2020 11:47	WG1447922
Chloroethane	U		0.00121	0.00562	1	03/21/2020 11:47	WG1447922
Chloroform	U		0.000467	0.00281	1	03/21/2020 11:47	WG1447922
Chloromethane	U		0.00156	0.0141	1	03/21/2020 11:47	WG1447922
2-Chlorotoluene	U		0.00103	0.00281	1	03/21/2020 11:47	WG1447922
4-Chlorotoluene	U		0.00127	0.00562	1	03/21/2020 11:47	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00574	0.0281	1	03/21/2020 11:47	WG1447922
1,2-Dibromoethane	U		0.000590	0.00281	1	03/21/2020 11:47	WG1447922
Dibromomethane	U		0.00112	0.00562	1	03/21/2020 11:47	WG1447922
1,2-Dichlorobenzene	U		0.00163	0.00562	1	03/21/2020 11:47	WG1447922
1,3-Dichlorobenzene	U		0.00191	0.00562	1	03/21/2020 11:47	WG1447922
1,4-Dichlorobenzene	U		0.00222	0.00562	1	03/21/2020 11:47	WG1447922
Dichlorodifluoromethane	U		0.000920	0.00281	1	03/21/2020 11:47	WG1447922
1,1-Dichloroethane	U		0.000647	0.00281	1	03/21/2020 11:47	WG1447922
1,2-Dichloroethane	U		0.000534	0.00281	1	03/21/2020 11:47	WG1447922
1,1-Dichloroethene	U		0.000562	0.00281	1	03/21/2020 11:47	WG1447922
cis-1,2-Dichloroethene	0.00215	J	0.000776	0.00281	1	03/21/2020 11:47	WG1447922
trans-1,2-Dichloroethene	U		0.00161	0.00562	1	03/21/2020 11:47	WG1447922
1,2-Dichloropropane	U		0.00143	0.00562	1	03/21/2020 11:47	WG1447922
1,1-Dichloropropene	U		0.000787	0.00281	1	03/21/2020 11:47	WG1447922
1,3-Dichloropropane	U		0.00197	0.00562	1	03/21/2020 11:47	WG1447922
cis-1,3-Dichloropropene	U		0.000762	0.00281	1	03/21/2020 11:47	WG1447922
trans-1,3-Dichloropropene	U		0.00172	0.00562	1	03/21/2020 11:47	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00157	0.00562	1	03/21/2020 11:47	WG1447922
2,2-Dichloropropane	U		0.000892	0.00281	1	03/21/2020 11:47	WG1447922
Di-isopropyl ether	U		0.000394	0.00112	1	03/21/2020 11:47	WG1447922
Ethylbenzene	0.00295		0.000596	0.00281	1	03/21/2020 11:47	WG1447922
Hexachloro-1,3-butadiene	U		0.0143	0.0281	1	03/21/2020 11:47	WG1447922
2-Hexanone	U		0.0112	0.0281	1	03/21/2020 11:47	WG1447922
n-Hexane	0.0904		0.00119	0.00562	1	03/21/2020 11:47	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00680	0.0141	1	03/21/2020 11:47	WG1447922
Isopropylbenzene	U		0.000971	0.00281	1	03/21/2020 11:47	WG1447922
p-Isopropyltoluene	0.00586		0.00262	0.00562	1	03/21/2020 11:47	WG1447922
2-Butanone (MEK)	U		0.0141	0.0281	1	03/21/2020 11:47	WG1447922
Methylene Chloride	U		0.00747	0.0281	1	03/21/2020 11:47	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0112	0.0281	1	03/21/2020 11:47	WG1447922
Methyl tert-butyl ether	U		0.000332	0.00112	1	03/21/2020 11:47	WG1447922
Naphthalene	0.0180		0.00351	0.0141	1	03/21/2020 11:47	WG1447922
n-Propylbenzene	0.00171	J	0.00133	0.00562	1	03/21/2020 11:47	WG1447922
Styrene	U		0.00307	0.0141	1	03/21/2020 11:47	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000562	0.00281	1	03/21/2020 11:47	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000439	0.00281	1	03/21/2020 11:47	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000759	0.00281	1	03/21/2020 11:47	WG1447922
Tetrachloroethene	0.00690		0.000787	0.00281	1	03/21/2020 11:47	WG1447922
Toluene	0.00750		0.00141	0.00562	1	03/21/2020 11:47	WG1447922
1,2,3-Trichlorobenzene	U		0.000703	0.0141	1	03/21/2020 11:47	WG1447922
1,2,4-Trichlorobenzene	U		0.00542	0.0141	1	03/21/2020 11:47	WG1447922
1,1,1-Trichloroethane	U		0.000309	0.00281	1	03/21/2020 11:47	WG1447922
1,1,2-Trichloroethane	U		0.000993	0.00281	1	03/21/2020 11:47	WG1447922
Trichloroethene	U		0.000450	0.00112	1	03/21/2020 11:47	WG1447922
Trichlorofluoromethane	U		0.000562	0.00281	1	03/21/2020 11:47	WG1447922
1,2,3-Trichloropropane	U		0.00574	0.0141	1	03/21/2020 11:47	WG1447922
1,2,4-Trimethylbenzene	0.00720		0.00130	0.00562	1	03/21/2020 11:47	WG1447922
1,2,3-Trimethylbenzene	0.00623		0.00129	0.00562	1	03/21/2020 11:47	WG1447922
1,3,5-Trimethylbenzene	0.00260	J	0.00121	0.00562	1	03/21/2020 11:47	WG1447922
Vinyl acetate	U	J0	0.00396	0.0141	1	03/21/2020 11:47	WG1447922
Vinyl chloride	U		0.000768	0.00281	1	03/21/2020 11:47	WG1447922
Xylenes, Total	0.0144		0.00538	0.00731	1	03/21/2020 11:47	WG1447922
(S) Toluene-d8	*114*			*75.0-131*		*03/21/2020 11:47*	WG1447922
(S) 4-Bromofluorobenzene	*92.7*			*67.0-138*		*03/21/2020 11:47*	WG1447922
(S) 1,2-Dichloroethane-d4	*91.4*			*70.0-130*		*03/21/2020 11:47*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.3		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.918	2.71	25	03/22/2020 04:14	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*98.6*			*77.0-120*		*03/22/2020 04:14*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0148	0.0271	1	03/21/2020 12:06	WG1447922
Acrylonitrile	U		0.00206	0.0135	1	03/21/2020 12:06	WG1447922
Benzene	U		0.000433	0.00108	1	03/21/2020 12:06	WG1447922
Bromobenzene	U		0.00114	0.0135	1	03/21/2020 12:06	WG1447922
Bromodichloromethane	U		0.000853	0.00271	1	03/21/2020 12:06	WG1447922
Bromochloromethane	U	J4	0.00122	0.00541	1	03/21/2020 12:06	WG1447922
Bromoform	U		0.00648	0.0271	1	03/21/2020 12:06	WG1447922
Bromomethane	U		0.00401	0.0135	1	03/21/2020 12:06	WG1447922
n-Butylbenzene	U		0.00416	0.0135	1	03/21/2020 12:06	WG1447922
sec-Butylbenzene	U		0.00274	0.0135	1	03/21/2020 12:06	WG1447922
tert-Butylbenzene	U		0.00168	0.00541	1	03/21/2020 12:06	WG1447922
Carbon disulfide	U		0.00440	0.0135	1	03/21/2020 12:06	WG1447922
Carbon tetrachloride	U		0.00117	0.00541	1	03/21/2020 12:06	WG1447922
Chlorobenzene	U		0.000620	0.00271	1	03/21/2020 12:06	WG1447922
Chlorodibromomethane	U		0.000487	0.00271	1	03/21/2020 12:06	WG1447922
Chloroethane	U		0.00117	0.00541	1	03/21/2020 12:06	WG1447922
Chloroform	U		0.000449	0.00271	1	03/21/2020 12:06	WG1447922
Chloromethane	U		0.00151	0.0135	1	03/21/2020 12:06	WG1447922
2-Chlorotoluene	U		0.000996	0.00271	1	03/21/2020 12:06	WG1447922
4-Chlorotoluene	U		0.00122	0.00541	1	03/21/2020 12:06	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00552	0.0271	1	03/21/2020 12:06	WG1447922
1,2-Dibromoethane	U		0.000568	0.00271	1	03/21/2020 12:06	WG1447922
Dibromomethane	U		0.00108	0.00541	1	03/21/2020 12:06	WG1447922
1,2-Dichlorobenzene	U		0.00157	0.00541	1	03/21/2020 12:06	WG1447922
1,3-Dichlorobenzene	U		0.00184	0.00541	1	03/21/2020 12:06	WG1447922
1,4-Dichlorobenzene	U		0.00213	0.00541	1	03/21/2020 12:06	WG1447922
Dichlorodifluoromethane	U		0.000886	0.00271	1	03/21/2020 12:06	WG1447922
1,1-Dichloroethane	U		0.000623	0.00271	1	03/21/2020 12:06	WG1447922
1,2-Dichloroethane	U		0.000514	0.00271	1	03/21/2020 12:06	WG1447922
1,1-Dichloroethene	U		0.000541	0.00271	1	03/21/2020 12:06	WG1447922
cis-1,2-Dichloroethene	U		0.000747	0.00271	1	03/21/2020 12:06	WG1447922
trans-1,2-Dichloroethene	U		0.00155	0.00541	1	03/21/2020 12:06	WG1447922
1,2-Dichloropropane	U		0.00138	0.00541	1	03/21/2020 12:06	WG1447922
1,1-Dichloropropene	U		0.000758	0.00271	1	03/21/2020 12:06	WG1447922
1,3-Dichloropropane	U		0.00189	0.00541	1	03/21/2020 12:06	WG1447922
cis-1,3-Dichloropropene	U		0.000734	0.00271	1	03/21/2020 12:06	WG1447922
trans-1,3-Dichloropropene	U		0.00166	0.00541	1	03/21/2020 12:06	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00152	0.00541	1	03/21/2020 12:06	WG1447922
2,2-Dichloropropane	U		0.000859	0.00271	1	03/21/2020 12:06	WG1447922
Di-isopropyl ether	U		0.000379	0.00108	1	03/21/2020 12:06	WG1447922
Ethylbenzene	U		0.000574	0.00271	1	03/21/2020 12:06	WG1447922
Hexachloro-1,3-butadiene	U		0.0138	0.0271	1	03/21/2020 12:06	WG1447922
2-Hexanone	U		0.0108	0.0271	1	03/21/2020 12:06	WG1447922
n-Hexane	0.0243		0.00115	0.00541	1	03/21/2020 12:06	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00655	0.0135	1	03/21/2020 12:06	WG1447922
Isopropylbenzene	U		0.000934	0.00271	1	03/21/2020 12:06	WG1447922
p-Isopropyltoluene	U		0.00252	0.00541	1	03/21/2020 12:06	WG1447922
2-Butanone (MEK)	0.0177	B J	0.0135	0.0271	1	03/21/2020 12:06	WG1447922
Methylene Chloride	U		0.00719	0.0271	1	03/21/2020 12:06	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0108	0.0271	1	03/21/2020 12:06	WG1447922
Methyl tert-butyl ether	U		0.000319	0.00108	1	03/21/2020 12:06	WG1447922
Naphthalene	U		0.00338	0.0135	1	03/21/2020 12:06	WG1447922
n-Propylbenzene	U		0.00128	0.00541	1	03/21/2020 12:06	WG1447922
Styrene	U		0.00296	0.0135	1	03/21/2020 12:06	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000541	0.00271	1	03/21/2020 12:06	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000422	0.00271	1	03/21/2020 12:06	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000731	0.00271	1	03/21/2020 12:06	WG1447922
Tetrachloroethene	0.0175		0.000758	0.00271	1	03/21/2020 12:06	WG1447922
Toluene	U		0.00135	0.00541	1	03/21/2020 12:06	WG1447922
1,2,3-Trichlorobenzene	U		0.000677	0.0135	1	03/21/2020 12:06	WG1447922
1,2,4-Trichlorobenzene	U		0.00522	0.0135	1	03/21/2020 12:06	WG1447922
1,1,1-Trichloroethane	U		0.000298	0.00271	1	03/21/2020 12:06	WG1447922
1,1,2-Trichloroethane	U		0.000956	0.00271	1	03/21/2020 12:06	WG1447922
Trichloroethene	U		0.000433	0.00108	1	03/21/2020 12:06	WG1447922
Trichlorofluoromethane	U		0.000541	0.00271	1	03/21/2020 12:06	WG1447922
1,2,3-Trichloropropane	U		0.00552	0.0135	1	03/21/2020 12:06	WG1447922
1,2,4-Trimethylbenzene	0.00184	J	0.00126	0.00541	1	03/21/2020 12:06	WG1447922
1,2,3-Trimethylbenzene	0.00206	J	0.00125	0.00541	1	03/21/2020 12:06	WG1447922
1,3,5-Trimethylbenzene	0.00130	J	0.00117	0.00541	1	03/21/2020 12:06	WG1447922
Vinyl acetate	U	J0	0.00381	0.0135	1	03/21/2020 12:06	WG1447922
Vinyl chloride	U		0.000740	0.00271	1	03/21/2020 12:06	WG1447922
Xylenes, Total	U		0.00518	0.00704	1	03/21/2020 12:06	WG1447922
(S) Toluene-d8	*115*			*75.0-131*		*03/21/2020 12:06*	WG1447922
(S) 4-Bromofluorobenzene	*93.3*			*67.0-138*		*03/21/2020 12:06*	WG1447922
(S) 1,2-Dichloroethane-d4	*90.3*			*70.0-130*		*03/21/2020 12:06*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	64.1		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	10.7		1.75	5.15	33	03/22/2020 04:38	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*77.0-120*		*03/22/2020 04:38*	WG1447924

Sample Narrative:

L1200909-12 WG1447924: No discernable petroleum pattern.

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0243	0.0444	1.14	03/21/2020 12:25	WG1447922
Acrylonitrile	U		0.00338	0.0223	1.14	03/21/2020 12:25	WG1447922
Benzene	0.00315		0.000711	0.00178	1.14	03/21/2020 12:25	WG1447922
Bromobenzene	U		0.00187	0.0223	1.14	03/21/2020 12:25	WG1447922
Bromodichloromethane	U		0.00140	0.00444	1.14	03/21/2020 12:25	WG1447922
Bromochloromethane	U	J4	0.00201	0.00889	1.14	03/21/2020 12:25	WG1447922
Bromoform	U		0.0106	0.0444	1.14	03/21/2020 12:25	WG1447922
Bromomethane	U		0.00658	0.0223	1.14	03/21/2020 12:25	WG1447922
n-Butylbenzene	U		0.00683	0.0223	1.14	03/21/2020 12:25	WG1447922
sec-Butylbenzene	U		0.00449	0.0223	1.14	03/21/2020 12:25	WG1447922
tert-Butylbenzene	U		0.00276	0.00889	1.14	03/21/2020 12:25	WG1447922
Carbon disulfide	U		0.00722	0.0223	1.14	03/21/2020 12:25	WG1447922
Carbon tetrachloride	U		0.00192	0.00889	1.14	03/21/2020 12:25	WG1447922
Chlorobenzene	U		0.00102	0.00444	1.14	03/21/2020 12:25	WG1447922
Chlorodibromomethane	U		0.000800	0.00444	1.14	03/21/2020 12:25	WG1447922
Chloroethane	U		0.00192	0.00889	1.14	03/21/2020 12:25	WG1447922
Chloroform	U		0.000738	0.00444	1.14	03/21/2020 12:25	WG1447922
Chloromethane	U		0.00246	0.0223	1.14	03/21/2020 12:25	WG1447922
2-Chlorotoluene	U		0.00164	0.00444	1.14	03/21/2020 12:25	WG1447922
4-Chlorotoluene	U		0.00201	0.00889	1.14	03/21/2020 12:25	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00906	0.0444	1.14	03/21/2020 12:25	WG1447922
1,2-Dibromoethane	U		0.000934	0.00444	1.14	03/21/2020 12:25	WG1447922
Dibromomethane	U		0.00178	0.00889	1.14	03/21/2020 12:25	WG1447922
1,2-Dichlorobenzene	U		0.00257	0.00889	1.14	03/21/2020 12:25	WG1447922
1,3-Dichlorobenzene	U		0.00303	0.00889	1.14	03/21/2020 12:25	WG1447922
1,4-Dichlorobenzene	U		0.00351	0.00889	1.14	03/21/2020 12:25	WG1447922
Dichlorodifluoromethane	U		0.00146	0.00444	1.14	03/21/2020 12:25	WG1447922
1,1-Dichloroethane	U		0.00102	0.00444	1.14	03/21/2020 12:25	WG1447922
1,2-Dichloroethane	U		0.000845	0.00444	1.14	03/21/2020 12:25	WG1447922
1,1-Dichloroethene	U		0.000889	0.00444	1.14	03/21/2020 12:25	WG1447922
cis-1,2-Dichloroethene	0.0270		0.00123	0.00444	1.14	03/21/2020 12:25	WG1447922
trans-1,2-Dichloroethene	0.00401	J	0.00254	0.00889	1.14	03/21/2020 12:25	WG1447922
1,2-Dichloropropane	U		0.00226	0.00889	1.14	03/21/2020 12:25	WG1447922
1,1-Dichloropropene	U		0.00124	0.00444	1.14	03/21/2020 12:25	WG1447922
1,3-Dichloropropane	U		0.00312	0.00889	1.14	03/21/2020 12:25	WG1447922
cis-1,3-Dichloropropene	U		0.00121	0.00444	1.14	03/21/2020 12:25	WG1447922
trans-1,3-Dichloropropene	U		0.00271	0.00889	1.14	03/21/2020 12:25	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00250	0.00889	1.14	03/21/2020 12:25	WG1447922
2,2-Dichloropropane	U		0.00141	0.00444	1.14	03/21/2020 12:25	WG1447922
Di-isopropyl ether	U		0.000622	0.00178	1.14	03/21/2020 12:25	WG1447922
Ethylbenzene	0.00413	J	0.000942	0.00444	1.14	03/21/2020 12:25	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U		0.0226	0.0444	1.14	03/21/2020 12:25	WG1447922
2-Hexanone	U		0.0178	0.0444	1.14	03/21/2020 12:25	WG1447922
n-Hexane	0.967		0.00189	0.00889	1.14	03/21/2020 12:25	WG1447922
Iodomethane	U		0.0108	0.0223	1.14	03/21/2020 12:25	WG1447922
Isopropylbenzene	U		0.00153	0.00444	1.14	03/21/2020 12:25	WG1447922
p-Isopropyltoluene	0.00608	J	0.00415	0.00889	1.14	03/21/2020 12:25	WG1447922
2-Butanone (MEK)	U		0.0223	0.0444	1.14	03/21/2020 12:25	WG1447922
Methylene Chloride	U		0.0118	0.0444	1.14	03/21/2020 12:25	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0178	0.0444	1.14	03/21/2020 12:25	WG1447922
Methyl tert-butyl ether	U		0.000524	0.00178	1.14	03/21/2020 12:25	WG1447922
Naphthalene	U		0.00555	0.0223	1.14	03/21/2020 12:25	WG1447922
n-Propylbenzene	U		0.00211	0.00889	1.14	03/21/2020 12:25	WG1447922
Styrene	U		0.00485	0.0223	1.14	03/21/2020 12:25	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000889	0.00444	1.14	03/21/2020 12:25	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000694	0.00444	1.14	03/21/2020 12:25	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.00120	0.00444	1.14	03/21/2020 12:25	WG1447922
Tetrachloroethene	0.134		0.00124	0.00444	1.14	03/21/2020 12:25	WG1447922
Toluene	0.0123		0.00223	0.00889	1.14	03/21/2020 12:25	WG1447922
1,2,3-Trichlorobenzene	U		0.00111	0.0223	1.14	03/21/2020 12:25	WG1447922
1,2,4-Trichlorobenzene	U		0.00856	0.0223	1.14	03/21/2020 12:25	WG1447922
1,1,1-Trichloroethane	U		0.000490	0.00444	1.14	03/21/2020 12:25	WG1447922
1,1,2-Trichloroethane	U		0.00158	0.00444	1.14	03/21/2020 12:25	WG1447922
Trichloroethene	0.00613		0.000711	0.00178	1.14	03/21/2020 12:25	WG1447922
Trichlorofluoromethane	U		0.000889	0.00444	1.14	03/21/2020 12:25	WG1447922
1,2,3-Trichloropropane	U		0.00906	0.0223	1.14	03/21/2020 12:25	WG1447922
1,2,4-Trimethylbenzene	0.00667	J	0.00206	0.00889	1.14	03/21/2020 12:25	WG1447922
1,2,3-Trimethylbenzene	0.00608	J	0.00204	0.00889	1.14	03/21/2020 12:25	WG1447922
1,3,5-Trimethylbenzene	0.00298	J	0.00192	0.00889	1.14	03/21/2020 12:25	WG1447922
Vinyl acetate	U	J0	0.00625	0.0223	1.14	03/21/2020 12:25	WG1447922
Vinyl chloride	U		0.00121	0.00444	1.14	03/21/2020 12:25	WG1447922
Xylenes, Total	0.0149		0.00850	0.0116	1.14	03/21/2020 12:25	WG1447922
(S) Toluene-d8	*114*			*75.0-131*		*03/21/2020 12:25*	WG1447922
(S) 4-Bromofluorobenzene	*94.1*			*67.0-138*		*03/21/2020 12:25*	WG1447922
(S) 1,2-Dichloroethane-d4	*93.4*			*70.0-130*		*03/21/2020 12:25*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.2		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.995	2.93	25	03/22/2020 05:02	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*03/22/2020 05:02*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0161	0.0293	1	03/21/2020 12:43	WG1447922
Acrylonitrile	U		0.00223	0.0147	1	03/21/2020 12:43	WG1447922
Benzene	0.00200		0.000470	0.00117	1	03/21/2020 12:43	WG1447922
Bromobenzene	U		0.00123	0.0147	1	03/21/2020 12:43	WG1447922
Bromodichloromethane	U		0.000925	0.00293	1	03/21/2020 12:43	WG1447922
Bromochloromethane	U	J4	0.00133	0.00587	1	03/21/2020 12:43	WG1447922
Bromoform	U		0.00702	0.0293	1	03/21/2020 12:43	WG1447922
Bromomethane	U		0.00434	0.0147	1	03/21/2020 12:43	WG1447922
n-Butylbenzene	U		0.00451	0.0147	1	03/21/2020 12:43	WG1447922
sec-Butylbenzene	U		0.00297	0.0147	1	03/21/2020 12:43	WG1447922
tert-Butylbenzene	U		0.00182	0.00587	1	03/21/2020 12:43	WG1447922
Carbon disulfide	U		0.00477	0.0147	1	03/21/2020 12:43	WG1447922
Carbon tetrachloride	U		0.00127	0.00587	1	03/21/2020 12:43	WG1447922
Chlorobenzene	U		0.000673	0.00293	1	03/21/2020 12:43	WG1447922
Chlorodibromomethane	U		0.000528	0.00293	1	03/21/2020 12:43	WG1447922
Chloroethane	U		0.00127	0.00587	1	03/21/2020 12:43	WG1447922
Chloroform	U		0.000487	0.00293	1	03/21/2020 12:43	WG1447922
Chloromethane	U		0.00163	0.0147	1	03/21/2020 12:43	WG1447922
2-Chlorotoluene	U		0.00108	0.00293	1	03/21/2020 12:43	WG1447922
4-Chlorotoluene	U		0.00133	0.00587	1	03/21/2020 12:43	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00599	0.0293	1	03/21/2020 12:43	WG1447922
1,2-Dibromoethane	U		0.000616	0.00293	1	03/21/2020 12:43	WG1447922
Dibromomethane	U		0.00117	0.00587	1	03/21/2020 12:43	WG1447922
1,2-Dichlorobenzene	U		0.00170	0.00587	1	03/21/2020 12:43	WG1447922
1,3-Dichlorobenzene	U		0.00200	0.00587	1	03/21/2020 12:43	WG1447922
1,4-Dichlorobenzene	U		0.00231	0.00587	1	03/21/2020 12:43	WG1447922
Dichlorodifluoromethane	U		0.000960	0.00293	1	03/21/2020 12:43	WG1447922
1,1-Dichloroethane	U		0.000675	0.00293	1	03/21/2020 12:43	WG1447922
1,2-Dichloroethane	U		0.000558	0.00293	1	03/21/2020 12:43	WG1447922
1,1-Dichloroethene	U		0.000587	0.00293	1	03/21/2020 12:43	WG1447922
cis-1,2-Dichloroethene	U		0.000810	0.00293	1	03/21/2020 12:43	WG1447922
trans-1,2-Dichloroethene	U		0.00168	0.00587	1	03/21/2020 12:43	WG1447922
1,2-Dichloropropane	U		0.00149	0.00587	1	03/21/2020 12:43	WG1447922
1,1-Dichloropropene	U		0.000822	0.00293	1	03/21/2020 12:43	WG1447922
1,3-Dichloropropane	U		0.00205	0.00587	1	03/21/2020 12:43	WG1447922
cis-1,3-Dichloropropene	U		0.000796	0.00293	1	03/21/2020 12:43	WG1447922
trans-1,3-Dichloropropene	U		0.00180	0.00587	1	03/21/2020 12:43	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00164	0.00587	1	03/21/2020 12:43	WG1447922
2,2-Dichloropropane	U		0.000931	0.00293	1	03/21/2020 12:43	WG1447922
Di-isopropyl ether	U		0.000411	0.00117	1	03/21/2020 12:43	WG1447922
Ethylbenzene	U		0.000622	0.00293	1	03/21/2020 12:43	WG1447922
Hexachloro-1,3-butadiene	U		0.0149	0.0293	1	03/21/2020 12:43	WG1447922
2-Hexanone	U		0.0117	0.0293	1	03/21/2020 12:43	WG1447922
n-Hexane	0.00923		0.00124	0.00587	1	03/21/2020 12:43	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00710	0.0147	1	03/21/2020 12:43	WG1447922
Isopropylbenzene	U		0.00101	0.00293	1	03/21/2020 12:43	WG1447922
p-Isopropyltoluene	U		0.00274	0.00587	1	03/21/2020 12:43	WG1447922
2-Butanone (MEK)	U		0.0147	0.0293	1	03/21/2020 12:43	WG1447922
Methylene Chloride	U		0.00779	0.0293	1	03/21/2020 12:43	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0293	1	03/21/2020 12:43	WG1447922
Methyl tert-butyl ether	U		0.000346	0.00117	1	03/21/2020 12:43	WG1447922
Naphthalene	U		0.00366	0.0147	1	03/21/2020 12:43	WG1447922
n-Propylbenzene	U		0.00139	0.00587	1	03/21/2020 12:43	WG1447922
Styrene	U		0.00320	0.0147	1	03/21/2020 12:43	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000587	0.00293	1	03/21/2020 12:43	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000458	0.00293	1	03/21/2020 12:43	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000792	0.00293	1	03/21/2020 12:43	WG1447922
Tetrachloroethene	0.110		0.000822	0.00293	1	03/21/2020 12:43	WG1447922
Toluene	U		0.00147	0.00587	1	03/21/2020 12:43	WG1447922
1,2,3-Trichlorobenzene	U		0.000734	0.0147	1	03/21/2020 12:43	WG1447922
1,2,4-Trichlorobenzene	U		0.00566	0.0147	1	03/21/2020 12:43	WG1447922
1,1,1-Trichloroethane	U		0.000323	0.00293	1	03/21/2020 12:43	WG1447922
1,1,2-Trichloroethane	U		0.00104	0.00293	1	03/21/2020 12:43	WG1447922
Trichloroethene	0.00466		0.000470	0.00117	1	03/21/2020 12:43	WG1447922
Trichlorofluoromethane	U		0.000587	0.00293	1	03/21/2020 12:43	WG1447922
1,2,3-Trichloropropane	U		0.00599	0.0147	1	03/21/2020 12:43	WG1447922
1,2,4-Trimethylbenzene	U		0.00136	0.00587	1	03/21/2020 12:43	WG1447922
1,2,3-Trimethylbenzene	0.00143	J	0.00135	0.00587	1	03/21/2020 12:43	WG1447922
1,3,5-Trimethylbenzene	U		0.00127	0.00587	1	03/21/2020 12:43	WG1447922
Vinyl acetate	U	J0	0.00413	0.0147	1	03/21/2020 12:43	WG1447922
Vinyl chloride	U		0.000802	0.00293	1	03/21/2020 12:43	WG1447922
Xylenes, Total	U		0.00561	0.00763	1	03/21/2020 12:43	WG1447922
(S) Toluene-d8	*113*			*75.0-131*		*03/21/2020 12:43*	WG1447922
(S) 4-Bromofluorobenzene	*91.1*			*67.0-138*		*03/21/2020 12:43*	WG1447922
(S) 1,2-Dichloroethane-d4	*93.5*			*70.0-130*		*03/21/2020 12:43*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	72.9		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.33	3.94	28.7	03/22/2020 05:27	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*77.0-120*		*03/22/2020 05:27*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0254	0.0464	1.35	03/21/2020 13:02	WG1447922
Acrylonitrile	U		0.00352	0.0232	1.35	03/21/2020 13:02	WG1447922
Benzene	0.0103		0.000741	0.00185	1.35	03/21/2020 13:02	WG1447922
Bromobenzene	U		0.00195	0.0232	1.35	03/21/2020 13:02	WG1447922
Bromodichloromethane	U		0.00145	0.00464	1.35	03/21/2020 13:02	WG1447922
Bromochloromethane	U	J4	0.00210	0.00926	1.35	03/21/2020 13:02	WG1447922
Bromoform	U		0.0111	0.0464	1.35	03/21/2020 13:02	WG1447922
Bromomethane	U		0.00686	0.0232	1.35	03/21/2020 13:02	WG1447922
n-Butylbenzene	0.00949	J	0.00710	0.0232	1.35	03/21/2020 13:02	WG1447922
sec-Butylbenzene	U		0.00469	0.0232	1.35	03/21/2020 13:02	WG1447922
tert-Butylbenzene	U		0.00287	0.00926	1.35	03/21/2020 13:02	WG1447922
Carbon disulfide	U		0.00751	0.0232	1.35	03/21/2020 13:02	WG1447922
Carbon tetrachloride	U		0.00200	0.00926	1.35	03/21/2020 13:02	WG1447922
Chlorobenzene	U		0.00106	0.00464	1.35	03/21/2020 13:02	WG1447922
Chlorodibromomethane	U		0.000834	0.00464	1.35	03/21/2020 13:02	WG1447922
Chloroethane	U		0.00200	0.00926	1.35	03/21/2020 13:02	WG1447922
Chloroform	U		0.000768	0.00464	1.35	03/21/2020 13:02	WG1447922
Chloromethane	U		0.00258	0.0232	1.35	03/21/2020 13:02	WG1447922
2-Chlorotoluene	U		0.00170	0.00464	1.35	03/21/2020 13:02	WG1447922
4-Chlorotoluene	U		0.00210	0.00926	1.35	03/21/2020 13:02	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00945	0.0464	1.35	03/21/2020 13:02	WG1447922
1,2-Dibromoethane	U		0.000972	0.00464	1.35	03/21/2020 13:02	WG1447922
Dibromomethane	U		0.00185	0.00926	1.35	03/21/2020 13:02	WG1447922
1,2-Dichlorobenzene	U		0.00269	0.00926	1.35	03/21/2020 13:02	WG1447922
1,3-Dichlorobenzene	U		0.00315	0.00926	1.35	03/21/2020 13:02	WG1447922
1,4-Dichlorobenzene	U		0.00365	0.00926	1.35	03/21/2020 13:02	WG1447922
Dichlorodifluoromethane	U		0.00151	0.00464	1.35	03/21/2020 13:02	WG1447922
1,1-Dichloroethane	U		0.00106	0.00464	1.35	03/21/2020 13:02	WG1447922
1,2-Dichloroethane	U		0.000879	0.00464	1.35	03/21/2020 13:02	WG1447922
1,1-Dichloroethene	U		0.000926	0.00464	1.35	03/21/2020 13:02	WG1447922
cis-1,2-Dichloroethene	0.0732		0.00128	0.00464	1.35	03/21/2020 13:02	WG1447922
trans-1,2-Dichloroethene	0.00518	J	0.00265	0.00926	1.35	03/21/2020 13:02	WG1447922
1,2-Dichloropropane	U		0.00234	0.00926	1.35	03/21/2020 13:02	WG1447922
1,1-Dichloropropene	U		0.00130	0.00464	1.35	03/21/2020 13:02	WG1447922
1,3-Dichloropropane	U		0.00324	0.00926	1.35	03/21/2020 13:02	WG1447922
cis-1,3-Dichloropropene	U		0.00125	0.00464	1.35	03/21/2020 13:02	WG1447922
trans-1,3-Dichloropropene	U		0.00284	0.00926	1.35	03/21/2020 13:02	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00259	0.00926	1.35	03/21/2020 13:02	WG1447922
2,2-Dichloropropane	U		0.00147	0.00464	1.35	03/21/2020 13:02	WG1447922
Di-isopropyl ether	U		0.000649	0.00185	1.35	03/21/2020 13:02	WG1447922
Ethylbenzene	0.0343		0.000982	0.00464	1.35	03/21/2020 13:02	WG1447922
Hexachloro-1,3-butadiene	U		0.0234	0.0464	1.35	03/21/2020 13:02	WG1447922
2-Hexanone	U		0.0185	0.0464	1.35	03/21/2020 13:02	WG1447922
n-Hexane	0.568		0.00196	0.00926	1.35	03/21/2020 13:02	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.0112	0.0232	1.35	03/21/2020 13:02	WG1447922
Isopropylbenzene	0.00852		0.00160	0.00464	1.35	03/21/2020 13:02	WG1447922
p-Isopropyltoluene	0.0705		0.00432	0.00926	1.35	03/21/2020 13:02	WG1447922
2-Butanone (MEK)	0.0658	B	0.0232	0.0464	1.35	03/21/2020 13:02	WG1447922
Methylene Chloride	U		0.0123	0.0464	1.35	03/21/2020 13:02	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0185	0.0464	1.35	03/21/2020 13:02	WG1447922
Methyl tert-butyl ether	U		0.000546	0.00185	1.35	03/21/2020 13:02	WG1447922
Naphthalene	0.0429		0.00577	0.0232	1.35	03/21/2020 13:02	WG1447922
n-Propylbenzene	0.0113		0.00218	0.00926	1.35	03/21/2020 13:02	WG1447922
Styrene	U		0.00506	0.0232	1.35	03/21/2020 13:02	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000926	0.00464	1.35	03/21/2020 13:02	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000723	0.00464	1.35	03/21/2020 13:02	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.00125	0.00464	1.35	03/21/2020 13:02	WG1447922
Tetrachloroethene	2.41		0.00130	0.00464	1.35	03/21/2020 13:02	WG1447922
Toluene	0.0938		0.00232	0.00926	1.35	03/21/2020 13:02	WG1447922
1,2,3-Trichlorobenzene	U		0.00116	0.0232	1.35	03/21/2020 13:02	WG1447922
1,2,4-Trichlorobenzene	U		0.00893	0.0232	1.35	03/21/2020 13:02	WG1447922
1,1,1-Trichloroethane	U		0.000509	0.00464	1.35	03/21/2020 13:02	WG1447922
1,1,2-Trichloroethane	U		0.00163	0.00464	1.35	03/21/2020 13:02	WG1447922
Trichloroethene	0.108		0.000741	0.00185	1.35	03/21/2020 13:02	WG1447922
Trichlorofluoromethane	U		0.000926	0.00464	1.35	03/21/2020 13:02	WG1447922
1,2,3-Trichloropropane	U		0.00945	0.0232	1.35	03/21/2020 13:02	WG1447922
1,2,4-Trimethylbenzene	0.0601		0.00215	0.00926	1.35	03/21/2020 13:02	WG1447922
1,2,3-Trimethylbenzene	0.0491		0.00213	0.00926	1.35	03/21/2020 13:02	WG1447922
1,3,5-Trimethylbenzene	0.0219		0.00200	0.00926	1.35	03/21/2020 13:02	WG1447922
Vinyl acetate	U	J0	0.00651	0.0232	1.35	03/21/2020 13:02	WG1447922
Vinyl chloride	U		0.00126	0.00464	1.35	03/21/2020 13:02	WG1447922
Xylenes, Total	0.189		0.00885	0.0120	1.35	03/21/2020 13:02	WG1447922
(S) Toluene-d8	*113*			*75.0-131*		*03/21/2020 13:02*	WG1447922
(S) 4-Bromofluorobenzene	*91.0*			*67.0-138*		*03/21/2020 13:02*	WG1447922
(S) 1,2-Dichloroethane-d4	*92.9*			*70.0-130*		*03/21/2020 13:02*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	65.0		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.30	3.85	25	03/22/2020 05:51	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*97.9*			*77.0-120*		*03/22/2020 05:51*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0211	0.0385	1	03/21/2020 13:21	WG1447922
Acrylonitrile	U		0.00292	0.0192	1	03/21/2020 13:21	WG1447922
Benzene	0.00112	J	0.000615	0.00154	1	03/21/2020 13:21	WG1447922
Bromobenzene	U		0.00162	0.0192	1	03/21/2020 13:21	WG1447922
Bromodichloromethane	U		0.00121	0.00385	1	03/21/2020 13:21	WG1447922
Bromochloromethane	U	J4	0.00174	0.00769	1	03/21/2020 13:21	WG1447922
Bromoform	U		0.00920	0.0385	1	03/21/2020 13:21	WG1447922
Bromomethane	U		0.00569	0.0192	1	03/21/2020 13:21	WG1447922
n-Butylbenzene	U		0.00591	0.0192	1	03/21/2020 13:21	WG1447922
sec-Butylbenzene	U		0.00389	0.0192	1	03/21/2020 13:21	WG1447922
tert-Butylbenzene	U		0.00238	0.00769	1	03/21/2020 13:21	WG1447922
Carbon disulfide	0.0171	J	0.00625	0.0192	1	03/21/2020 13:21	WG1447922
Carbon tetrachloride	U		0.00166	0.00769	1	03/21/2020 13:21	WG1447922
Chlorobenzene	U		0.000882	0.00385	1	03/21/2020 13:21	WG1447922
Chlorodibromomethane	U		0.000692	0.00385	1	03/21/2020 13:21	WG1447922
Chloroethane	U		0.00166	0.00769	1	03/21/2020 13:21	WG1447922
Chloroform	U		0.000638	0.00385	1	03/21/2020 13:21	WG1447922
Chloromethane	U		0.00214	0.0192	1	03/21/2020 13:21	WG1447922
2-Chlorotoluene	U		0.00142	0.00385	1	03/21/2020 13:21	WG1447922
4-Chlorotoluene	U		0.00174	0.00769	1	03/21/2020 13:21	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00785	0.0385	1	03/21/2020 13:21	WG1447922
1,2-Dibromoethane	U		0.000808	0.00385	1	03/21/2020 13:21	WG1447922
Dibromomethane	U		0.00154	0.00769	1	03/21/2020 13:21	WG1447922
1,2-Dichlorobenzene	U		0.00223	0.00769	1	03/21/2020 13:21	WG1447922
1,3-Dichlorobenzene	U		0.00262	0.00769	1	03/21/2020 13:21	WG1447922
1,4-Dichlorobenzene	U		0.00303	0.00769	1	03/21/2020 13:21	WG1447922
Dichlorodifluoromethane	U		0.00126	0.00385	1	03/21/2020 13:21	WG1447922
1,1-Dichloroethane	U		0.000885	0.00385	1	03/21/2020 13:21	WG1447922
1,2-Dichloroethane	U		0.000731	0.00385	1	03/21/2020 13:21	WG1447922
1,1-Dichloroethene	U		0.000769	0.00385	1	03/21/2020 13:21	WG1447922
cis-1,2-Dichloroethene	U		0.00106	0.00385	1	03/21/2020 13:21	WG1447922
trans-1,2-Dichloroethene	U		0.00220	0.00769	1	03/21/2020 13:21	WG1447922
1,2-Dichloropropane	U		0.00195	0.00769	1	03/21/2020 13:21	WG1447922
1,1-Dichloropropene	U		0.00108	0.00385	1	03/21/2020 13:21	WG1447922
1,3-Dichloropropane	U		0.00269	0.00769	1	03/21/2020 13:21	WG1447922
cis-1,3-Dichloropropene	U		0.00104	0.00385	1	03/21/2020 13:21	WG1447922
trans-1,3-Dichloropropene	U		0.00235	0.00769	1	03/21/2020 13:21	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00215	0.00769	1	03/21/2020 13:21	WG1447922
2,2-Dichloropropane	U		0.00122	0.00385	1	03/21/2020 13:21	WG1447922
Di-isopropyl ether	U		0.000538	0.00154	1	03/21/2020 13:21	WG1447922
Ethylbenzene	0.00163	J	0.000815	0.00385	1	03/21/2020 13:21	WG1447922
Hexachloro-1,3-butadiene	U		0.0195	0.0385	1	03/21/2020 13:21	WG1447922
2-Hexanone	U		0.0154	0.0385	1	03/21/2020 13:21	WG1447922
n-Hexane	0.0189		0.00163	0.00769	1	03/21/2020 13:21	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00931	0.0192	1	03/21/2020 13:21	WG1447922
Isopropylbenzene	U		0.00133	0.00385	1	03/21/2020 13:21	WG1447922
p-Isopropyltoluene	0.0126		0.00358	0.00769	1	03/21/2020 13:21	WG1447922
2-Butanone (MEK)	0.0391	B	0.0192	0.0385	1	03/21/2020 13:21	WG1447922
Methylene Chloride	U		0.0102	0.0385	1	03/21/2020 13:21	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0154	0.0385	1	03/21/2020 13:21	WG1447922
Methyl tert-butyl ether	U		0.000454	0.00154	1	03/21/2020 13:21	WG1447922
Naphthalene	0.00814	J	0.00480	0.0192	1	03/21/2020 13:21	WG1447922
n-Propylbenzene	U		0.00182	0.00769	1	03/21/2020 13:21	WG1447922
Styrene	U		0.00420	0.0192	1	03/21/2020 13:21	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000769	0.00385	1	03/21/2020 13:21	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000600	0.00385	1	03/21/2020 13:21	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.00104	0.00385	1	03/21/2020 13:21	WG1447922
Tetrachloroethene	U		0.00108	0.00385	1	03/21/2020 13:21	WG1447922
Toluene	0.00665	J	0.00192	0.00769	1	03/21/2020 13:21	WG1447922
1,2,3-Trichlorobenzene	U		0.000962	0.0192	1	03/21/2020 13:21	WG1447922
1,2,4-Trichlorobenzene	U		0.00742	0.0192	1	03/21/2020 13:21	WG1447922
1,1,1-Trichloroethane	U		0.000423	0.00385	1	03/21/2020 13:21	WG1447922
1,1,2-Trichloroethane	U		0.00136	0.00385	1	03/21/2020 13:21	WG1447922
Trichloroethene	U		0.000615	0.00154	1	03/21/2020 13:21	WG1447922
Trichlorofluoromethane	U		0.000769	0.00385	1	03/21/2020 13:21	WG1447922
1,2,3-Trichloropropane	U		0.00785	0.0192	1	03/21/2020 13:21	WG1447922
1,2,4-Trimethylbenzene	0.00182	J	0.00178	0.00769	1	03/21/2020 13:21	WG1447922
1,2,3-Trimethylbenzene	0.00306	J	0.00177	0.00769	1	03/21/2020 13:21	WG1447922
1,3,5-Trimethylbenzene	U		0.00166	0.00769	1	03/21/2020 13:21	WG1447922
Vinyl acetate	U	J0	0.00542	0.0192	1	03/21/2020 13:21	WG1447922
Vinyl chloride	U		0.00105	0.00385	1	03/21/2020 13:21	WG1447922
Xylenes, Total	U		0.00735	0.0100	1	03/21/2020 13:21	WG1447922
(S) Toluene-d8	*113*			*75.0-131*		*03/21/2020 13:21*	WG1447922
(S) 4-Bromofluorobenzene	*90.8*			*67.0-138*		*03/21/2020 13:21*	WG1447922
(S) 1,2-Dichloroethane-d4	*87.0*			*70.0-130*		*03/21/2020 13:21*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.9		1	03/22/2020 00:56	WG1448017

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.932	2.75	25	03/22/2020 06:15	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*99.6*			*77.0-120*		*03/22/2020 06:15*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0151	0.0275	1	03/21/2020 13:40	WG1447922
Acrylonitrile	U		0.00209	0.0137	1	03/21/2020 13:40	WG1447922
Benzene	U		0.000440	0.00110	1	03/21/2020 13:40	WG1447922
Bromobenzene	U		0.00115	0.0137	1	03/21/2020 13:40	WG1447922
Bromodichloromethane	U		0.000866	0.00275	1	03/21/2020 13:40	WG1447922
Bromochloromethane	U	J4	0.00124	0.00550	1	03/21/2020 13:40	WG1447922
Bromoform	U		0.00658	0.0275	1	03/21/2020 13:40	WG1447922
Bromomethane	U		0.00407	0.0137	1	03/21/2020 13:40	WG1447922
n-Butylbenzene	U		0.00422	0.0137	1	03/21/2020 13:40	WG1447922
sec-Butylbenzene	U		0.00278	0.0137	1	03/21/2020 13:40	WG1447922
tert-Butylbenzene	U		0.00170	0.00550	1	03/21/2020 13:40	WG1447922
Carbon disulfide	U		0.00446	0.0137	1	03/21/2020 13:40	WG1447922
Carbon tetrachloride	U		0.00119	0.00550	1	03/21/2020 13:40	WG1447922
Chlorobenzene	U		0.000630	0.00275	1	03/21/2020 13:40	WG1447922
Chlorodibromomethane	U		0.000495	0.00275	1	03/21/2020 13:40	WG1447922
Chloroethane	U		0.00119	0.00550	1	03/21/2020 13:40	WG1447922
Chloroform	U		0.000456	0.00275	1	03/21/2020 13:40	WG1447922
Chloromethane	U		0.00153	0.0137	1	03/21/2020 13:40	WG1447922
2-Chlorotoluene	U		0.00101	0.00275	1	03/21/2020 13:40	WG1447922
4-Chlorotoluene	U		0.00124	0.00550	1	03/21/2020 13:40	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00561	0.0275	1	03/21/2020 13:40	WG1447922
1,2-Dibromoethane	U		0.000577	0.00275	1	03/21/2020 13:40	WG1447922
Dibromomethane	U		0.00110	0.00550	1	03/21/2020 13:40	WG1447922
1,2-Dichlorobenzene	U		0.00159	0.00550	1	03/21/2020 13:40	WG1447922
1,3-Dichlorobenzene	U		0.00187	0.00550	1	03/21/2020 13:40	WG1447922
1,4-Dichlorobenzene	U		0.00217	0.00550	1	03/21/2020 13:40	WG1447922
Dichlorodifluoromethane	U		0.000899	0.00275	1	03/21/2020 13:40	WG1447922
1,1-Dichloroethane	U		0.000632	0.00275	1	03/21/2020 13:40	WG1447922
1,2-Dichloroethane	U		0.000522	0.00275	1	03/21/2020 13:40	WG1447922
1,1-Dichloroethene	U		0.000550	0.00275	1	03/21/2020 13:40	WG1447922
cis-1,2-Dichloroethene	0.00123	J	0.000759	0.00275	1	03/21/2020 13:40	WG1447922
trans-1,2-Dichloroethene	U		0.00157	0.00550	1	03/21/2020 13:40	WG1447922
1,2-Dichloropropane	U		0.00140	0.00550	1	03/21/2020 13:40	WG1447922
1,1-Dichloropropene	U		0.000770	0.00275	1	03/21/2020 13:40	WG1447922
1,3-Dichloropropane	U		0.00192	0.00550	1	03/21/2020 13:40	WG1447922
cis-1,3-Dichloropropene	U		0.000745	0.00275	1	03/21/2020 13:40	WG1447922
trans-1,3-Dichloropropene	U		0.00168	0.00550	1	03/21/2020 13:40	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00154	0.00550	1	03/21/2020 13:40	WG1447922
2,2-Dichloropropane	U		0.000872	0.00275	1	03/21/2020 13:40	WG1447922
Di-isopropyl ether	U		0.000385	0.00110	1	03/21/2020 13:40	WG1447922
Ethylbenzene	U		0.000583	0.00275	1	03/21/2020 13:40	WG1447922
Hexachloro-1,3-butadiene	U		0.0140	0.0275	1	03/21/2020 13:40	WG1447922
2-Hexanone	U		0.0110	0.0275	1	03/21/2020 13:40	WG1447922
n-Hexane	0.00531	J	0.00117	0.00550	1	03/21/2020 13:40	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00665	0.0137	1	03/21/2020 13:40	WG1447922
Isopropylbenzene	U		0.000949	0.00275	1	03/21/2020 13:40	WG1447922
p-Isopropyltoluene	U		0.00256	0.00550	1	03/21/2020 13:40	WG1447922
2-Butanone (MEK)	U		0.0137	0.0275	1	03/21/2020 13:40	WG1447922
Methylene Chloride	U		0.00730	0.0275	1	03/21/2020 13:40	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0275	1	03/21/2020 13:40	WG1447922
Methyl tert-butyl ether	U		0.000324	0.00110	1	03/21/2020 13:40	WG1447922
Naphthalene	U		0.00343	0.0137	1	03/21/2020 13:40	WG1447922
n-Propylbenzene	U		0.00130	0.00550	1	03/21/2020 13:40	WG1447922
Styrene	U		0.00300	0.0137	1	03/21/2020 13:40	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000550	0.00275	1	03/21/2020 13:40	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000429	0.00275	1	03/21/2020 13:40	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000742	0.00275	1	03/21/2020 13:40	WG1447922
Tetrachloroethene	0.0164		0.000770	0.00275	1	03/21/2020 13:40	WG1447922
Toluene	0.00142	J	0.00137	0.00550	1	03/21/2020 13:40	WG1447922
1,2,3-Trichlorobenzene	U		0.000687	0.0137	1	03/21/2020 13:40	WG1447922
1,2,4-Trichlorobenzene	U		0.00530	0.0137	1	03/21/2020 13:40	WG1447922
1,1,1-Trichloroethane	U		0.000302	0.00275	1	03/21/2020 13:40	WG1447922
1,1,2-Trichloroethane	U		0.000971	0.00275	1	03/21/2020 13:40	WG1447922
Trichloroethene	U		0.000440	0.00110	1	03/21/2020 13:40	WG1447922
Trichlorofluoromethane	U		0.000550	0.00275	1	03/21/2020 13:40	WG1447922
1,2,3-Trichloropropane	U		0.00561	0.0137	1	03/21/2020 13:40	WG1447922
1,2,4-Trimethylbenzene	U		0.00128	0.00550	1	03/21/2020 13:40	WG1447922
1,2,3-Trimethylbenzene	U		0.00126	0.00550	1	03/21/2020 13:40	WG1447922
1,3,5-Trimethylbenzene	U		0.00119	0.00550	1	03/21/2020 13:40	WG1447922
Vinyl acetate	U	J0	0.00387	0.0137	1	03/21/2020 13:40	WG1447922
Vinyl chloride	U		0.000751	0.00275	1	03/21/2020 13:40	WG1447922
Xylenes, Total	U		0.00526	0.00715	1	03/21/2020 13:40	WG1447922
(S) Toluene-d8	*112*			*75.0-131*		*03/21/2020 13:40*	WG1447922
(S) 4-Bromofluorobenzene	*88.9*			*67.0-138*		*03/21/2020 13:40*	WG1447922
(S) 1,2-Dichloroethane-d4	*89.0*			*70.0-130*		*03/21/2020 13:40*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.4		1	03/22/2020 00:56	WG1448017

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.03	3.03	25	03/22/2020 06:39	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*03/22/2020 06:39*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0252	0.0461	1.52	03/21/2020 13:59	WG1447922
Acrylonitrile	U		0.00351	0.0231	1.52	03/21/2020 13:59	WG1447922
Benzene	U		0.000738	0.00184	1.52	03/21/2020 13:59	WG1447922
Bromobenzene	U		0.00194	0.0231	1.52	03/21/2020 13:59	WG1447922
Bromodichloromethane	U		0.00146	0.00461	1.52	03/21/2020 13:59	WG1447922
Bromochloromethane	U	J4	0.00209	0.00922	1.52	03/21/2020 13:59	WG1447922
Bromoform	U		0.0110	0.0461	1.52	03/21/2020 13:59	WG1447922
Bromomethane	U		0.00682	0.0231	1.52	03/21/2020 13:59	WG1447922
n-Butylbenzene	U		0.00709	0.0231	1.52	03/21/2020 13:59	WG1447922
sec-Butylbenzene	U		0.00467	0.0231	1.52	03/21/2020 13:59	WG1447922
tert-Butylbenzene	U		0.00286	0.00922	1.52	03/21/2020 13:59	WG1447922
Carbon disulfide	U		0.00749	0.0231	1.52	03/21/2020 13:59	WG1447922
Carbon tetrachloride	U		0.00199	0.00922	1.52	03/21/2020 13:59	WG1447922
Chlorobenzene	U		0.00106	0.00461	1.52	03/21/2020 13:59	WG1447922
Chlorodibromomethane	U		0.000830	0.00461	1.52	03/21/2020 13:59	WG1447922
Chloroethane	U		0.00199	0.00922	1.52	03/21/2020 13:59	WG1447922
Chloroform	U		0.000766	0.00461	1.52	03/21/2020 13:59	WG1447922
Chloromethane	U		0.00256	0.0231	1.52	03/21/2020 13:59	WG1447922
2-Chlorotoluene	U		0.00170	0.00461	1.52	03/21/2020 13:59	WG1447922
4-Chlorotoluene	U		0.00209	0.00922	1.52	03/21/2020 13:59	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00941	0.0461	1.52	03/21/2020 13:59	WG1447922
1,2-Dibromoethane	U		0.000969	0.00461	1.52	03/21/2020 13:59	WG1447922
Dibromomethane	U		0.00184	0.00922	1.52	03/21/2020 13:59	WG1447922
1,2-Dichlorobenzene	U		0.00267	0.00922	1.52	03/21/2020 13:59	WG1447922
1,3-Dichlorobenzene	U		0.00313	0.00922	1.52	03/21/2020 13:59	WG1447922
1,4-Dichlorobenzene	U		0.00363	0.00922	1.52	03/21/2020 13:59	WG1447922
Dichlorodifluoromethane	U		0.00150	0.00461	1.52	03/21/2020 13:59	WG1447922
1,1-Dichloroethane	U		0.00106	0.00461	1.52	03/21/2020 13:59	WG1447922
1,2-Dichloroethane	U		0.000876	0.00461	1.52	03/21/2020 13:59	WG1447922
1,1-Dichloroethene	U		0.000922	0.00461	1.52	03/21/2020 13:59	WG1447922
cis-1,2-Dichloroethene	U		0.00127	0.00461	1.52	03/21/2020 13:59	WG1447922
trans-1,2-Dichloroethene	U		0.00263	0.00922	1.52	03/21/2020 13:59	WG1447922
1,2-Dichloropropane	U		0.00234	0.00922	1.52	03/21/2020 13:59	WG1447922
1,1-Dichloropropene	U		0.00129	0.00461	1.52	03/21/2020 13:59	WG1447922
1,3-Dichloropropane	U		0.00323	0.00922	1.52	03/21/2020 13:59	WG1447922
cis-1,3-Dichloropropene	U		0.00125	0.00461	1.52	03/21/2020 13:59	WG1447922
trans-1,3-Dichloropropene	U		0.00283	0.00922	1.52	03/21/2020 13:59	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00259	0.00922	1.52	03/21/2020 13:59	WG1447922
2,2-Dichloropropane	U		0.00147	0.00461	1.52	03/21/2020 13:59	WG1447922
Di-isopropyl ether	U		0.000646	0.00184	1.52	03/21/2020 13:59	WG1447922
Ethylbenzene	U		0.000978	0.00461	1.52	03/21/2020 13:59	WG1447922
Hexachloro-1,3-butadiene	U		0.0234	0.0461	1.52	03/21/2020 13:59	WG1447922
2-Hexanone	U		0.0184	0.0461	1.52	03/21/2020 13:59	WG1447922
n-Hexane	0.00336	J	0.00195	0.00922	1.52	03/21/2020 13:59	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.0112	0.0231	1.52	03/21/2020 13:59	WG1447922
Isopropylbenzene	U		0.00159	0.00461	1.52	03/21/2020 13:59	WG1447922
p-Isopropyltoluene	U		0.00430	0.00922	1.52	03/21/2020 13:59	WG1447922
2-Butanone (MEK)	U		0.0231	0.0461	1.52	03/21/2020 13:59	WG1447922
Methylene Chloride	U		0.0123	0.0461	1.52	03/21/2020 13:59	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0184	0.0461	1.52	03/21/2020 13:59	WG1447922
Methyl tert-butyl ether	U		0.000544	0.00184	1.52	03/21/2020 13:59	WG1447922
Naphthalene	U		0.00575	0.0231	1.52	03/21/2020 13:59	WG1447922
n-Propylbenzene	U		0.00217	0.00922	1.52	03/21/2020 13:59	WG1447922
Styrene	U		0.00504	0.0231	1.52	03/21/2020 13:59	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000922	0.00461	1.52	03/21/2020 13:59	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000720	0.00461	1.52	03/21/2020 13:59	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.00125	0.00461	1.52	03/21/2020 13:59	WG1447922
Tetrachloroethene	0.00336	J	0.00129	0.00461	1.52	03/21/2020 13:59	WG1447922
Toluene	U		0.00231	0.00922	1.52	03/21/2020 13:59	WG1447922
1,2,3-Trichlorobenzene	U		0.00115	0.0231	1.52	03/21/2020 13:59	WG1447922
1,2,4-Trichlorobenzene	U		0.00890	0.0231	1.52	03/21/2020 13:59	WG1447922
1,1,1-Trichloroethane	U		0.000507	0.00461	1.52	03/21/2020 13:59	WG1447922
1,1,2-Trichloroethane	U		0.00163	0.00461	1.52	03/21/2020 13:59	WG1447922
Trichloroethene	U		0.000738	0.00184	1.52	03/21/2020 13:59	WG1447922
Trichlorofluoromethane	U		0.000922	0.00461	1.52	03/21/2020 13:59	WG1447922
1,2,3-Trichloropropane	U		0.00941	0.0231	1.52	03/21/2020 13:59	WG1447922
1,2,4-Trimethylbenzene	U		0.00214	0.00922	1.52	03/21/2020 13:59	WG1447922
1,2,3-Trimethylbenzene	U		0.00212	0.00922	1.52	03/21/2020 13:59	WG1447922
1,3,5-Trimethylbenzene	U		0.00199	0.00922	1.52	03/21/2020 13:59	WG1447922
Vinyl acetate	U	J0	0.00649	0.0231	1.52	03/21/2020 13:59	WG1447922
Vinyl chloride	U		0.00126	0.00461	1.52	03/21/2020 13:59	WG1447922
Xylenes, Total	U		0.00882	0.0120	1.52	03/21/2020 13:59	WG1447922
(S) Toluene-d8	*113*			*75.0-131*		*03/21/2020 13:59*	WG1447922
(S) 4-Bromofluorobenzene	*89.0*			*67.0-138*		*03/21/2020 13:59*	WG1447922
(S) 1,2-Dichloroethane-d4	*89.1*			*70.0-130*		*03/21/2020 13:59*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.4		1	03/22/2020 00:56	WG1448017

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.938	2.76	25	03/22/2020 07:03	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*99.8*			*77.0-120*		*03/22/2020 07:03*	WG1447924

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0152	0.0276	1	03/21/2020 14:18	WG1447922
Acrylonitrile	U		0.00210	0.0138	1	03/21/2020 14:18	WG1447922
Benzene	U		0.000442	0.00111	1	03/21/2020 14:18	WG1447922
Bromobenzene	U		0.00116	0.0138	1	03/21/2020 14:18	WG1447922
Bromodichloromethane	U		0.000871	0.00276	1	03/21/2020 14:18	WG1447922
Bromochloromethane	U	J4	0.00125	0.00553	1	03/21/2020 14:18	WG1447922
Bromoform	U		0.00661	0.0276	1	03/21/2020 14:18	WG1447922
Bromomethane	U		0.00409	0.0138	1	03/21/2020 14:18	WG1447922
n-Butylbenzene	U		0.00425	0.0138	1	03/21/2020 14:18	WG1447922
sec-Butylbenzene	U		0.00280	0.0138	1	03/21/2020 14:18	WG1447922
tert-Butylbenzene	U		0.00171	0.00553	1	03/21/2020 14:18	WG1447922
Carbon disulfide	U		0.00449	0.0138	1	03/21/2020 14:18	WG1447922
Carbon tetrachloride	U		0.00119	0.00553	1	03/21/2020 14:18	WG1447922
Chlorobenzene	U		0.000634	0.00276	1	03/21/2020 14:18	WG1447922
Chlorodibromomethane	U		0.000498	0.00276	1	03/21/2020 14:18	WG1447922
Chloroethane	U		0.00119	0.00553	1	03/21/2020 14:18	WG1447922
Chloroform	U		0.000459	0.00276	1	03/21/2020 14:18	WG1447922
Chloromethane	U		0.00154	0.0138	1	03/21/2020 14:18	WG1447922
2-Chlorotoluene	U		0.00102	0.00276	1	03/21/2020 14:18	WG1447922
4-Chlorotoluene	U		0.00125	0.00553	1	03/21/2020 14:18	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00564	0.0276	1	03/21/2020 14:18	WG1447922
1,2-Dibromoethane	U		0.000581	0.00276	1	03/21/2020 14:18	WG1447922
Dibromomethane	U		0.00111	0.00553	1	03/21/2020 14:18	WG1447922
1,2-Dichlorobenzene	U		0.00160	0.00553	1	03/21/2020 14:18	WG1447922
1,3-Dichlorobenzene	U		0.00188	0.00553	1	03/21/2020 14:18	WG1447922
1,4-Dichlorobenzene	U		0.00218	0.00553	1	03/21/2020 14:18	WG1447922
Dichlorodifluoromethane	U		0.000905	0.00276	1	03/21/2020 14:18	WG1447922
1,1-Dichloroethane	U		0.000636	0.00276	1	03/21/2020 14:18	WG1447922
1,2-Dichloroethane	U		0.000525	0.00276	1	03/21/2020 14:18	WG1447922
1,1-Dichloroethene	U		0.000553	0.00276	1	03/21/2020 14:18	WG1447922
cis-1,2-Dichloroethene	0.00751		0.000763	0.00276	1	03/21/2020 14:18	WG1447922
trans-1,2-Dichloroethene	U		0.00158	0.00553	1	03/21/2020 14:18	WG1447922
1,2-Dichloropropane	U		0.00140	0.00553	1	03/21/2020 14:18	WG1447922
1,1-Dichloropropene	U		0.000774	0.00276	1	03/21/2020 14:18	WG1447922
1,3-Dichloropropane	U		0.00194	0.00553	1	03/21/2020 14:18	WG1447922
cis-1,3-Dichloropropene	U		0.000750	0.00276	1	03/21/2020 14:18	WG1447922
trans-1,3-Dichloropropene	U		0.00169	0.00553	1	03/21/2020 14:18	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00155	0.00553	1	03/21/2020 14:18	WG1447922
2,2-Dichloropropane	U		0.000877	0.00276	1	03/21/2020 14:18	WG1447922
Di-isopropyl ether	U		0.000387	0.00111	1	03/21/2020 14:18	WG1447922
Ethylbenzene	U		0.000586	0.00276	1	03/21/2020 14:18	WG1447922
Hexachloro-1,3-butadiene	U		0.0140	0.0276	1	03/21/2020 14:18	WG1447922
2-Hexanone	U		0.0111	0.0276	1	03/21/2020 14:18	WG1447922
n-Hexane	U		0.00117	0.00553	1	03/21/2020 14:18	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00669	0.0138	1	03/21/2020 14:18	WG1447922
Isopropylbenzene	U		0.000954	0.00276	1	03/21/2020 14:18	WG1447922
p-Isopropyltoluene	U		0.00258	0.00553	1	03/21/2020 14:18	WG1447922
2-Butanone (MEK)	U		0.0138	0.0276	1	03/21/2020 14:18	WG1447922
Methylene Chloride	U		0.00734	0.0276	1	03/21/2020 14:18	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0276	1	03/21/2020 14:18	WG1447922
Methyl tert-butyl ether	U		0.000326	0.00111	1	03/21/2020 14:18	WG1447922
Naphthalene	U		0.00345	0.0138	1	03/21/2020 14:18	WG1447922
n-Propylbenzene	U		0.00131	0.00553	1	03/21/2020 14:18	WG1447922
Styrene	U		0.00302	0.0138	1	03/21/2020 14:18	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000553	0.00276	1	03/21/2020 14:18	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000431	0.00276	1	03/21/2020 14:18	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000747	0.00276	1	03/21/2020 14:18	WG1447922
Tetrachloroethene	0.00811		0.000774	0.00276	1	03/21/2020 14:18	WG1447922
Toluene	U		0.00138	0.00553	1	03/21/2020 14:18	WG1447922
1,2,3-Trichlorobenzene	U		0.000691	0.0138	1	03/21/2020 14:18	WG1447922
1,2,4-Trichlorobenzene	U		0.00533	0.0138	1	03/21/2020 14:18	WG1447922
1,1,1-Trichloroethane	U		0.000304	0.00276	1	03/21/2020 14:18	WG1447922
1,1,2-Trichloroethane	U		0.000977	0.00276	1	03/21/2020 14:18	WG1447922
Trichloroethene	0.00341		0.000442	0.00111	1	03/21/2020 14:18	WG1447922
Trichlorofluoromethane	U		0.000553	0.00276	1	03/21/2020 14:18	WG1447922
1,2,3-Trichloropropane	U		0.00564	0.0138	1	03/21/2020 14:18	WG1447922
1,2,4-Trimethylbenzene	U		0.00128	0.00553	1	03/21/2020 14:18	WG1447922
1,2,3-Trimethylbenzene	U		0.00127	0.00553	1	03/21/2020 14:18	WG1447922
1,3,5-Trimethylbenzene	U		0.00119	0.00553	1	03/21/2020 14:18	WG1447922
Vinyl acetate	U	J0	0.00389	0.0138	1	03/21/2020 14:18	WG1447922
Vinyl chloride	U		0.000755	0.00276	1	03/21/2020 14:18	WG1447922
Xylenes, Total	U		0.00529	0.00719	1	03/21/2020 14:18	WG1447922
(S) Toluene-d8	*112*			*75.0-131*		*03/21/2020 14:18*	WG1447922
(S) 4-Bromofluorobenzene	*88.8*			*67.0-138*		*03/21/2020 14:18*	WG1447922
(S) 1,2-Dichloroethane-d4	*89.8*			*70.0-130*		*03/21/2020 14:18*	WG1447922

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.6		1	03/22/2020 00:56	WG1448017

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.991	2.92	25	03/22/2020 15:32	WG1448464
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*77.0-120*		*03/22/2020 15:32*	WG1448464

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0160	0.0292	1	03/21/2020 22:30	WG1448125
Acrylonitrile	U		0.00222	0.0146	1	03/21/2020 22:30	WG1448125
Benzene	0.000491	J	0.000467	0.00117	1	03/21/2020 22:30	WG1448125
Bromobenzene	U		0.00123	0.0146	1	03/21/2020 22:30	WG1448125
Bromodichloromethane	U		0.000920	0.00292	1	03/21/2020 22:30	WG1448125
Bromochloromethane	U		0.00132	0.00584	1	03/21/2020 22:30	WG1448125
Bromoform	U		0.00699	0.0292	1	03/21/2020 22:30	WG1448125
Bromomethane	U		0.00432	0.0146	1	03/21/2020 22:30	WG1448125
n-Butylbenzene	U		0.00449	0.0146	1	03/21/2020 22:30	WG1448125
sec-Butylbenzene	U		0.00296	0.0146	1	03/21/2020 22:30	WG1448125
tert-Butylbenzene	U		0.00181	0.00584	1	03/21/2020 22:30	WG1448125
Carbon disulfide	0.0125	J	0.00474	0.0146	1	03/21/2020 22:30	WG1448125
Carbon tetrachloride	U		0.00126	0.00584	1	03/21/2020 22:30	WG1448125
Chlorobenzene	U		0.000669	0.00292	1	03/21/2020 22:30	WG1448125
Chlorodibromomethane	U		0.000526	0.00292	1	03/21/2020 22:30	WG1448125
Chloroethane	U		0.00126	0.00584	1	03/21/2020 22:30	WG1448125
Chloroform	U		0.000485	0.00292	1	03/21/2020 22:30	WG1448125
Chloromethane	U		0.00162	0.0146	1	03/21/2020 22:30	WG1448125
2-Chlorotoluene	U		0.00107	0.00292	1	03/21/2020 22:30	WG1448125
4-Chlorotoluene	U		0.00132	0.00584	1	03/21/2020 22:30	WG1448125
1,2-Dibromo-3-Chloropropane	U		0.00596	0.0292	1	03/21/2020 22:30	WG1448125
1,2-Dibromoethane	U		0.000613	0.00292	1	03/21/2020 22:30	WG1448125
Dibromomethane	U		0.00117	0.00584	1	03/21/2020 22:30	WG1448125
1,2-Dichlorobenzene	U		0.00169	0.00584	1	03/21/2020 22:30	WG1448125
1,3-Dichlorobenzene	U		0.00199	0.00584	1	03/21/2020 22:30	WG1448125
1,4-Dichlorobenzene	U		0.00230	0.00584	1	03/21/2020 22:30	WG1448125
Dichlorodifluoromethane	U		0.000955	0.00292	1	03/21/2020 22:30	WG1448125
1,1-Dichloroethane	U		0.000672	0.00292	1	03/21/2020 22:30	WG1448125
1,2-Dichloroethane	U		0.000555	0.00292	1	03/21/2020 22:30	WG1448125
1,1-Dichloroethene	U		0.000584	0.00292	1	03/21/2020 22:30	WG1448125
cis-1,2-Dichloroethene	0.00834		0.000806	0.00292	1	03/21/2020 22:30	WG1448125
trans-1,2-Dichloroethene	U		0.00167	0.00584	1	03/21/2020 22:30	WG1448125
1,2-Dichloropropane	U		0.00148	0.00584	1	03/21/2020 22:30	WG1448125
1,1-Dichloropropene	U		0.000818	0.00292	1	03/21/2020 22:30	WG1448125
1,3-Dichloropropane	U		0.00204	0.00584	1	03/21/2020 22:30	WG1448125
cis-1,3-Dichloropropene	U		0.000792	0.00292	1	03/21/2020 22:30	WG1448125
trans-1,3-Dichloropropene	U		0.00179	0.00584	1	03/21/2020 22:30	WG1448125
trans-1,4-Dichloro-2-butene	U		0.00164	0.00584	1	03/21/2020 22:30	WG1448125
2,2-Dichloropropane	U		0.000926	0.00292	1	03/21/2020 22:30	WG1448125
Di-isopropyl ether	U		0.000409	0.00117	1	03/21/2020 22:30	WG1448125
Ethylbenzene	U		0.000619	0.00292	1	03/21/2020 22:30	WG1448125
Hexachloro-1,3-butadiene	U		0.0148	0.0292	1	03/21/2020 22:30	WG1448125
2-Hexanone	U		0.0117	0.0292	1	03/21/2020 22:30	WG1448125
n-Hexane	0.00869		0.00124	0.00584	1	03/21/2020 22:30	WG1448125

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00707	0.0146	1	03/21/2020 22:30	WG1448125
Isopropylbenzene	U		0.00101	0.00292	1	03/21/2020 22:30	WG1448125
p-Isopropyltoluene	U		0.00272	0.00584	1	03/21/2020 22:30	WG1448125
2-Butanone (MEK)	0.0296	B	0.0146	0.0292	1	03/21/2020 22:30	WG1448125
Methylene Chloride	U		0.00776	0.0292	1	03/21/2020 22:30	WG1448125
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0292	1	03/21/2020 22:30	WG1448125
Methyl tert-butyl ether	U		0.000345	0.00117	1	03/21/2020 22:30	WG1448125
Naphthalene	0.0395	J0 J3	0.00364	0.0146	1	03/21/2020 22:30	WG1448125
n-Propylbenzene	U		0.00138	0.00584	1	03/21/2020 22:30	WG1448125
Styrene	U		0.00319	0.0146	1	03/21/2020 22:30	WG1448125
1,1,1,2-Tetrachloroethane	U		0.000584	0.00292	1	03/21/2020 22:30	WG1448125
1,1,2,2-Tetrachloroethane	U		0.000456	0.00292	1	03/21/2020 22:30	WG1448125
1,1,2-Trichlorotrifluoroethane	U		0.000788	0.00292	1	03/21/2020 22:30	WG1448125
Tetrachloroethene	U		0.000818	0.00292	1	03/21/2020 22:30	WG1448125
Toluene	0.00217	J	0.00146	0.00584	1	03/21/2020 22:30	WG1448125
1,2,3-Trichlorobenzene	U	J3	0.000730	0.0146	1	03/21/2020 22:30	WG1448125
1,2,4-Trichlorobenzene	U	J3	0.00563	0.0146	1	03/21/2020 22:30	WG1448125
1,1,1-Trichloroethane	U		0.000321	0.00292	1	03/21/2020 22:30	WG1448125
1,1,2-Trichloroethane	U		0.00103	0.00292	1	03/21/2020 22:30	WG1448125
Trichloroethene	U		0.000467	0.00117	1	03/21/2020 22:30	WG1448125
Trichlorofluoromethane	U		0.000584	0.00292	1	03/21/2020 22:30	WG1448125
1,2,3-Trichloropropane	U		0.00596	0.0146	1	03/21/2020 22:30	WG1448125
1,2,4-Trimethylbenzene	U		0.00135	0.00584	1	03/21/2020 22:30	WG1448125
1,2,3-Trimethylbenzene	U		0.00134	0.00584	1	03/21/2020 22:30	WG1448125
1,3,5-Trimethylbenzene	U		0.00126	0.00584	1	03/21/2020 22:30	WG1448125
Vinyl acetate	U		0.00411	0.0146	1	03/21/2020 22:30	WG1448125
Vinyl chloride	0.00682		0.000798	0.00292	1	03/21/2020 22:30	WG1448125
Xylenes, Total	U		0.00558	0.00759	1	03/21/2020 22:30	WG1448125
(S) Toluene-d8	*113*			*75.0-131*		*03/21/2020 22:30*	WG1448125
(S) 4-Bromofluorobenzene	*92.7*			*67.0-138*		*03/21/2020 22:30*	WG1448125
(S) 1,2-Dichloroethane-d4	*93.9*			*70.0-130*		*03/21/2020 22:30*	WG1448125

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.4		1	03/22/2020 00:56	WG1448017

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.938	2.77	25	03/22/2020 15:56	WG1448464
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*		*03/22/2020 15:56*	WG1448464

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0152	0.0277	1	03/21/2020 22:49	WG1448125
Acrylonitrile	U		0.00210	0.0138	1	03/21/2020 22:49	WG1448125
Benzene	U		0.000443	0.00111	1	03/21/2020 22:49	WG1448125
Bromobenzene	U		0.00116	0.0138	1	03/21/2020 22:49	WG1448125
Bromodichloromethane	U		0.000872	0.00277	1	03/21/2020 22:49	WG1448125
Bromochloromethane	U		0.00125	0.00553	1	03/21/2020 22:49	WG1448125
Bromoform	U		0.00662	0.0277	1	03/21/2020 22:49	WG1448125
Bromomethane	U		0.00409	0.0138	1	03/21/2020 22:49	WG1448125
n-Butylbenzene	U		0.00425	0.0138	1	03/21/2020 22:49	WG1448125
sec-Butylbenzene	U		0.00280	0.0138	1	03/21/2020 22:49	WG1448125
tert-Butylbenzene	U		0.00172	0.00553	1	03/21/2020 22:49	WG1448125
Carbon disulfide	U		0.00449	0.0138	1	03/21/2020 22:49	WG1448125
Carbon tetrachloride	U		0.00120	0.00553	1	03/21/2020 22:49	WG1448125
Chlorobenzene	U		0.000634	0.00277	1	03/21/2020 22:49	WG1448125
Chlorodibromomethane	U		0.000498	0.00277	1	03/21/2020 22:49	WG1448125
Chloroethane	U		0.00120	0.00553	1	03/21/2020 22:49	WG1448125
Chloroform	U		0.000459	0.00277	1	03/21/2020 22:49	WG1448125
Chloromethane	U		0.00154	0.0138	1	03/21/2020 22:49	WG1448125
2-Chlorotoluene	U		0.00102	0.00277	1	03/21/2020 22:49	WG1448125
4-Chlorotoluene	U		0.00125	0.00553	1	03/21/2020 22:49	WG1448125
1,2-Dibromo-3-Chloropropane	U		0.00564	0.0277	1	03/21/2020 22:49	WG1448125
1,2-Dibromoethane	U		0.000581	0.00277	1	03/21/2020 22:49	WG1448125
Dibromomethane	U		0.00111	0.00553	1	03/21/2020 22:49	WG1448125
1,2-Dichlorobenzene	U		0.00160	0.00553	1	03/21/2020 22:49	WG1448125
1,3-Dichlorobenzene	U		0.00188	0.00553	1	03/21/2020 22:49	WG1448125
1,4-Dichlorobenzene	U		0.00218	0.00553	1	03/21/2020 22:49	WG1448125
Dichlorodifluoromethane	U		0.000905	0.00277	1	03/21/2020 22:49	WG1448125
1,1-Dichloroethane	U		0.000636	0.00277	1	03/21/2020 22:49	WG1448125
1,2-Dichloroethane	U		0.000526	0.00277	1	03/21/2020 22:49	WG1448125
1,1-Dichloroethene	U		0.000553	0.00277	1	03/21/2020 22:49	WG1448125
cis-1,2-Dichloroethene	0.00838		0.000764	0.00277	1	03/21/2020 22:49	WG1448125
trans-1,2-Dichloroethene	U		0.00158	0.00553	1	03/21/2020 22:49	WG1448125
1,2-Dichloropropane	U		0.00141	0.00553	1	03/21/2020 22:49	WG1448125
1,1-Dichloropropene	U		0.000775	0.00277	1	03/21/2020 22:49	WG1448125
1,3-Dichloropropane	U		0.00194	0.00553	1	03/21/2020 22:49	WG1448125
cis-1,3-Dichloropropene	U		0.000750	0.00277	1	03/21/2020 22:49	WG1448125
trans-1,3-Dichloropropene	U		0.00169	0.00553	1	03/21/2020 22:49	WG1448125
trans-1,4-Dichloro-2-butene	U		0.00155	0.00553	1	03/21/2020 22:49	WG1448125
2,2-Dichloropropane	U		0.000878	0.00277	1	03/21/2020 22:49	WG1448125
Di-isopropyl ether	U		0.000387	0.00111	1	03/21/2020 22:49	WG1448125
Ethylbenzene	U		0.000587	0.00277	1	03/21/2020 22:49	WG1448125
Hexachloro-1,3-butadiene	U		0.0141	0.0277	1	03/21/2020 22:49	WG1448125
2-Hexanone	U		0.0111	0.0277	1	03/21/2020 22:49	WG1448125
n-Hexane	U		0.00117	0.00553	1	03/21/2020 22:49	WG1448125

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00669	0.0138	1	03/21/2020 22:49	WG1448125
Isopropylbenzene	U		0.000955	0.00277	1	03/21/2020 22:49	WG1448125
p-Isopropyltoluene	U		0.00258	0.00553	1	03/21/2020 22:49	WG1448125
2-Butanone (MEK)	U		0.0138	0.0277	1	03/21/2020 22:49	WG1448125
Methylene Chloride	U		0.00735	0.0277	1	03/21/2020 22:49	WG1448125
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0277	1	03/21/2020 22:49	WG1448125
Methyl tert-butyl ether	U		0.000326	0.00111	1	03/21/2020 22:49	WG1448125
Naphthalene	U	J0 J3	0.00345	0.0138	1	03/21/2020 22:49	WG1448125
n-Propylbenzene	U		0.00131	0.00553	1	03/21/2020 22:49	WG1448125
Styrene	U		0.00302	0.0138	1	03/21/2020 22:49	WG1448125
1,1,1,2-Tetrachloroethane	U		0.000553	0.00277	1	03/21/2020 22:49	WG1448125
1,1,2,2-Tetrachloroethane	U		0.000432	0.00277	1	03/21/2020 22:49	WG1448125
1,1,2-Trichlorotrifluoroethane	U		0.000747	0.00277	1	03/21/2020 22:49	WG1448125
Tetrachloroethene	0.00976		0.000775	0.00277	1	03/21/2020 22:49	WG1448125
Toluene	U		0.00138	0.00553	1	03/21/2020 22:49	WG1448125
1,2,3-Trichlorobenzene	U	J3	0.000692	0.0138	1	03/21/2020 22:49	WG1448125
1,2,4-Trichlorobenzene	U	J3	0.00533	0.0138	1	03/21/2020 22:49	WG1448125
1,1,1-Trichloroethane	U		0.000304	0.00277	1	03/21/2020 22:49	WG1448125
1,1,2-Trichloroethane	U		0.000977	0.00277	1	03/21/2020 22:49	WG1448125
Trichloroethene	0.00361		0.000443	0.00111	1	03/21/2020 22:49	WG1448125
Trichlorofluoromethane	U		0.000553	0.00277	1	03/21/2020 22:49	WG1448125
1,2,3-Trichloropropane	U		0.00564	0.0138	1	03/21/2020 22:49	WG1448125
1,2,4-Trimethylbenzene	U		0.00128	0.00553	1	03/21/2020 22:49	WG1448125
1,2,3-Trimethylbenzene	U		0.00127	0.00553	1	03/21/2020 22:49	WG1448125
1,3,5-Trimethylbenzene	U		0.00120	0.00553	1	03/21/2020 22:49	WG1448125
Vinyl acetate	U		0.00390	0.0138	1	03/21/2020 22:49	WG1448125
Vinyl chloride	U		0.000756	0.00277	1	03/21/2020 22:49	WG1448125
Xylenes, Total	U		0.00529	0.00719	1	03/21/2020 22:49	WG1448125
(S) Toluene-d8	*114*			*75.0-131*		*03/21/2020 22:49*	WG1448125
(S) 4-Bromofluorobenzene	*91.3*			*67.0-138*		*03/21/2020 22:49*	WG1448125
(S) 1,2-Dichloroethane-d4	*92.1*			*70.0-130*		*03/21/2020 22:49*	WG1448125

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	03/21/2020 13:23	WG1448006
(S) a,a,a-Trifluorotoluene(FID)	*103*			*78.0-120*		*03/21/2020 13:23*	WG1448006

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	4.42	J J0	1.05	25.0	1	03/24/2020 01:18	WG1449115
Acrylonitrile	U		0.873	5.00	1	03/24/2020 01:18	WG1449115
Benzene	U		0.0896	0.500	1	03/24/2020 01:18	WG1449115
Bromobenzene	U	J4	0.133	0.500	1	03/24/2020 01:18	WG1449115
Bromodichloromethane	U		0.0800	0.500	1	03/24/2020 01:18	WG1449115
Bromochloromethane	U		0.145	0.500	1	03/24/2020 01:18	WG1449115
Bromoform	U		0.186	0.500	1	03/24/2020 01:18	WG1449115
Bromomethane	U	J0	0.157	2.50	1	03/24/2020 01:18	WG1449115
n-Butylbenzene	U		0.143	0.500	1	03/24/2020 01:18	WG1449115
sec-Butylbenzene	U		0.134	0.500	1	03/24/2020 01:18	WG1449115
tert-Butylbenzene	U		0.183	0.500	1	03/24/2020 01:18	WG1449115
Carbon disulfide	U		0.101	0.500	1	03/24/2020 01:18	WG1449115
Carbon tetrachloride	U		0.159	0.500	1	03/24/2020 01:18	WG1449115
Chlorobenzene	U		0.140	0.500	1	03/24/2020 01:18	WG1449115
Chlorodibromomethane	U		0.128	0.500	1	03/24/2020 01:18	WG1449115
Chloroethane	U		0.141	2.50	1	03/24/2020 01:18	WG1449115
Chloroform	U		0.0860	0.500	1	03/24/2020 01:18	WG1449115
Chloromethane	U		0.153	1.25	1	03/24/2020 01:18	WG1449115
2-Chlorotoluene	U	J4	0.111	0.500	1	03/24/2020 01:18	WG1449115
4-Chlorotoluene	U		0.0972	0.500	1	03/24/2020 01:18	WG1449115
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	03/24/2020 01:18	WG1449115
1,2-Dibromoethane	U		0.193	0.500	1	03/24/2020 01:18	WG1449115
Dibromomethane	U		0.117	0.500	1	03/24/2020 01:18	WG1449115
1,2-Dichlorobenzene	U		0.101	0.500	1	03/24/2020 01:18	WG1449115
1,3-Dichlorobenzene	U		0.130	0.500	1	03/24/2020 01:18	WG1449115
1,4-Dichlorobenzene	U		0.121	0.500	1	03/24/2020 01:18	WG1449115
Dichlorodifluoromethane	U		0.127	2.50	1	03/24/2020 01:18	WG1449115
1,1-Dichloroethane	U		0.114	0.500	1	03/24/2020 01:18	WG1449115
1,2-Dichloroethane	U		0.108	0.500	1	03/24/2020 01:18	WG1449115
1,1-Dichloroethene	U		0.188	0.500	1	03/24/2020 01:18	WG1449115
cis-1,2-Dichloroethene	U		0.0933	0.500	1	03/24/2020 01:18	WG1449115
trans-1,2-Dichloroethene	U		0.152	0.500	1	03/24/2020 01:18	WG1449115
1,2-Dichloropropane	U		0.190	0.500	1	03/24/2020 01:18	WG1449115
1,1-Dichloropropene	U		0.128	0.500	1	03/24/2020 01:18	WG1449115
1,3-Dichloropropane	U		0.147	1.00	1	03/24/2020 01:18	WG1449115
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/24/2020 01:18	WG1449115
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/24/2020 01:18	WG1449115
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	03/24/2020 01:18	WG1449115
2,2-Dichloropropane	U	J4	0.0929	0.500	1	03/24/2020 01:18	WG1449115
Di-isopropyl ether	U	J4	0.0924	0.500	1	03/24/2020 01:18	WG1449115
Ethylbenzene	U		0.158	0.500	1	03/24/2020 01:18	WG1449115
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/24/2020 01:18	WG1449115
2-Hexanone	U		0.757	5.00	1	03/24/2020 01:18	WG1449115
n-Hexane	U	J4	0.305	5.00	1	03/24/2020 01:18	WG1449115
Iodomethane	U		0.377	10.0	1	03/24/2020 01:18	WG1449115
Isopropylbenzene	U		0.126	0.500	1	03/24/2020 01:18	WG1449115
p-Isopropyltoluene	U		0.138	0.500	1	03/24/2020 01:18	WG1449115
2-Butanone (MEK)	U		1.28	5.00	1	03/24/2020 01:18	WG1449115

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	03/24/2020 01:18	WG1449115
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	03/24/2020 01:18	WG1449115
Methyl tert-butyl ether	U		0.102	0.500	1	03/24/2020 01:18	WG1449115
Naphthalene	U		0.174	2.50	1	03/24/2020 01:18	WG1449115
n-Propylbenzene	U		0.162	0.500	1	03/24/2020 22:37	WG1449669
Styrene	U		0.117	0.500	1	03/24/2020 01:18	WG1449115
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/24/2020 01:18	WG1449115
1,1,2,2-Tetrachloroethane	U	J4	0.130	0.500	1	03/24/2020 01:18	WG1449115
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/24/2020 01:18	WG1449115
Tetrachloroethene	U		0.199	0.500	1	03/24/2020 01:18	WG1449115
Toluene	U		0.412	0.500	1	03/24/2020 01:18	WG1449115
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/24/2020 01:18	WG1449115
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/24/2020 01:18	WG1449115
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/24/2020 01:18	WG1449115
1,1,2-Trichloroethane	U		0.186	0.500	1	03/24/2020 01:18	WG1449115
Trichloroethene	U		0.153	0.500	1	03/24/2020 01:18	WG1449115
Trichlorofluoromethane	U		0.130	2.50	1	03/24/2020 01:18	WG1449115
1,2,3-Trichloropropane	U		0.247	2.50	1	03/24/2020 01:18	WG1449115
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/24/2020 01:18	WG1449115
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/24/2020 01:18	WG1449115
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/24/2020 01:18	WG1449115
Vinyl acetate	U	J4	0.645	5.00	1	03/24/2020 01:18	WG1449115
Vinyl chloride	U		0.118	0.500	1	03/24/2020 01:18	WG1449115
Xylenes, Total	U		0.316	1.50	1	03/24/2020 01:18	WG1449115
(S) Toluene-d8	*96.6*			*80.0-120*		*03/24/2020 01:18*	WG1449115
(S) Toluene-d8	*111*			*80.0-120*		*03/24/2020 22:37*	WG1449669
(S) 4-Bromofluorobenzene	*97.9*			*77.0-126*		*03/24/2020 01:18*	WG1449115
(S) 4-Bromofluorobenzene	*109*			*77.0-126*		*03/24/2020 22:37*	WG1449669
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*03/24/2020 01:18*	WG1449115
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*03/24/2020 22:37*	WG1449669

Method Blank (MB)

(MB) R3511550-1 03/22/20 02:30

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00500			

L1200909-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1200909-03 03/22/20 02:30 • (DUP) R3511550-3 03/22/20 02:30

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.7	82.9	1	0.224		10

Laboratory Control Sample (LCS)

(LCS) R3511550-2 03/22/20 02:30

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.1	100	85.0-115	

Method Blank (MB)

(MB) R3511488-1 03/21/20 18:54

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00500			

L1201393-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1201393-01 03/21/20 18:54 • (DUP) R3511488-3 03/21/20 18:54

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.5	83.1	1	0.800		10

Laboratory Control Sample (LCS)

(LCS) R3511488-2 03/21/20 18:54

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3511521-1 03/22/20 00:56

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00500			

L1200921-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1200921-01 03/22/20 00:56 • (DUP) R3511521-3 03/22/20 00:56

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	77.9	78.0	1	0.187		10

Laboratory Control Sample (LCS)

(LCS) R3511521-2 03/22/20 00:56

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3512737-2 03/21/20 21:47

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*99.7*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3512737-1 03/21/20 20:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.41	98.4	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*105*	*77.0-120*	

L1200909-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1200909-01 03/21/20 23:52 • (MS) R3512737-3 03/22/20 07:27 • (MSD) R3512737-4 03/22/20 07:51

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	121	U	113	114	93.3	94.1	25	10.0-149			0.872	27
(S) a,a,a-Trifluorotoluene(FID)					*108*	*109*		*77.0-120*				

Method Blank (MB)

(MB) R3511506-2 03/22/20 13:22

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3511506-1 03/22/20 11:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	4.30	78.2	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*77.0-120*	

L1201415-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1201415-01 03/22/20 17:07 • (MS) R3511506-3 03/23/20 00:29 • (MSD) R3511506-4 03/23/20 00:53

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	164	ND	152	157	92.4	95.5	25	10.0-149			3.23	27
(S) a,a,a-Trifluorotoluene(FID)					*106*	*105*		*77.0-120*				

Method Blank (MB)

(MB) R3511770-2 03/21/20 07:59

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*102*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3511770-1 03/21/20 07:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5340	97.1	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*96.9*	*78.0-120*	

Method Blank (MB)

(MB) R3512913-3 03/21/20 11:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.00100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
Bromochloromethane	U		0.00113	0.00500
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
n-Butylbenzene	U		0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tert-Butylbenzene	U		0.00155	0.00500
Carbon disulfide	U		0.00406	0.0125
Carbon tetrachloride	U		0.00108	0.00500
Chlorobenzene	U		0.000573	0.00250
Chlorodibromomethane	U		0.000450	0.00250
Chloroethane	U		0.00108	0.00500
Chloroform	U		0.000415	0.00250
Chloromethane	U		0.00139	0.0125
2-Chlorotoluene	U		0.000920	0.00250
4-Chlorotoluene	U		0.00113	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0250
1,2-Dibromoethane	U		0.000525	0.00250
Dibromomethane	U		0.00100	0.00500
1,2-Dichlorobenzene	U		0.00145	0.00500
1,3-Dichlorobenzene	U		0.00170	0.00500
1,4-Dichlorobenzene	U		0.00197	0.00500
trans-1,4-Dichloro-2-butene	U		0.00140	0.00500
Dichlorodifluoromethane	U		0.000818	0.00250
1,1-Dichloroethane	U		0.000575	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
1,1-Dichloroethene	U		0.000500	0.00250
cis-1,2-Dichloroethene	U		0.000690	0.00250
trans-1,2-Dichloroethene	U		0.00143	0.00500
1,2-Dichloropropane	U		0.00127	0.00500
1,1-Dichloropropene	U		0.000700	0.00250
1,3-Dichloropropane	U		0.00175	0.00500
cis-1,3-Dichloropropene	U		0.000678	0.00250
trans-1,3-Dichloropropene	U		0.00153	0.00500
2,2-Dichloropropane	U		0.000793	0.00250
Di-isopropyl ether	U		0.000350	0.00100

Method Blank (MB)

(MB) R3512913-3 03/21/20 11:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
n-Hexane	U		0.00106	0.00500
2-Hexanone	U		0.0100	0.0250
Iodomethane	U		0.00605	0.0125
Isopropylbenzene	U		0.000863	0.00250
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0193	J	0.0125	0.0250
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.0100	0.0250
Methyl tert-butyl ether	U		0.000295	0.00100
Naphthalene	U		0.00312	0.0125
n-Propylbenzene	U		0.00118	0.00500
Styrene	U		0.00273	0.0125
1,1,1,2-Tetrachloroethane	U		0.000500	0.00250
1,1,2,2-Tetrachloroethane	U		0.000390	0.00250
Tetrachloroethene	U		0.000700	0.00250
Toluene	U		0.00125	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000675	0.00250
1,2,3-Trichlorobenzene	U		0.000625	0.0125
1,2,4-Trichlorobenzene	U		0.00482	0.0125
1,1,1-Trichloroethane	U		0.000275	0.00250
1,1,2-Trichloroethane	U		0.000883	0.00250
Trichloroethene	U		0.000400	0.00100
Trichlorofluoromethane	U		0.000500	0.00250
1,2,3-Trichloropropane	U		0.00510	0.0125
1,2,3-Trimethylbenzene	U		0.00115	0.00500
1,2,4-Trimethylbenzene	U		0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl acetate	U		0.00352	0.0125
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*113*			*75.0-131*
(S) 4-Bromofluorobenzene	*91.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*90.3*			*70.0-130*

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

(LCS) R3512913-1 03/21/20 09:16 • (LCSD) R3512913-2 03/21/20 09:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.419	0.635	67.0	102	10.0-160		J3	41.0	31
Acrylonitrile	0.625	0.596	0.597	95.4	95.5	45.0-153			0.168	22
Benzene	0.125	0.105	0.104	84.0	83.2	70.0-123			0.957	20
Bromobenzene	0.125	0.127	0.128	102	102	73.0-121			0.784	20
Bromodichloromethane	0.125	0.107	0.110	85.6	88.0	73.0-121			2.76	20
Bromochloromethane	0.125	0.0989	0.0956	79.1	76.5	77.0-128		J4	3.39	20
Bromoform	0.125	0.111	0.111	88.8	88.8	64.0-132			0.000	20
Bromomethane	0.125	0.0939	0.0894	75.1	71.5	56.0-147			4.91	20
n-Butylbenzene	0.125	0.101	0.101	80.8	80.8	68.0-135			0.000	20
sec-Butylbenzene	0.125	0.115	0.116	92.0	92.8	74.0-130			0.866	20
tert-Butylbenzene	0.125	0.113	0.113	90.4	90.4	75.0-127			0.000	20
Carbon disulfide	0.125	0.0862	0.0874	69.0	69.9	56.0-133			1.38	20
Carbon tetrachloride	0.125	0.0932	0.0932	74.6	74.6	66.0-128			0.000	20
Chlorobenzene	0.125	0.109	0.110	87.2	88.0	76.0-128			0.913	20
Chlorodibromomethane	0.125	0.102	0.101	81.6	80.8	74.0-127			0.985	20
Chloroethane	0.125	0.0933	0.0922	74.6	73.8	61.0-134			1.19	20
Chloroform	0.125	0.111	0.109	88.8	87.2	72.0-123			1.82	20
Chloromethane	0.125	0.0920	0.0916	73.6	73.3	51.0-138			0.436	20
2-Chlorotoluene	0.125	0.112	0.110	89.6	88.0	75.0-124			1.80	20
4-Chlorotoluene	0.125	0.117	0.119	93.6	95.2	75.0-124			1.69	20
1,2-Dibromo-3-Chloropropane	0.125	0.111	0.107	88.8	85.6	59.0-130			3.67	20
1,2-Dibromoethane	0.125	0.110	0.109	88.0	87.2	74.0-128			0.913	20
Dibromomethane	0.125	0.105	0.106	84.0	84.8	75.0-122			0.948	20
1,2-Dichlorobenzene	0.125	0.110	0.109	88.0	87.2	76.0-124			0.913	20
1,3-Dichlorobenzene	0.125	0.119	0.119	95.2	95.2	76.0-125			0.000	20
1,4-Dichlorobenzene	0.125	0.113	0.115	90.4	92.0	77.0-121			1.75	20
trans-1,4-Dichloro-2-butene	0.125	0.115	0.114	92.0	91.2	45.0-143			0.873	20
Dichlorodifluoromethane	0.125	0.102	0.102	81.6	81.6	43.0-156			0.000	20
1,1-Dichloroethane	0.125	0.102	0.102	81.6	81.6	70.0-127			0.000	20
1,2-Dichloroethane	0.125	0.126	0.127	101	102	65.0-131			0.791	20
1,1-Dichloroethene	0.125	0.0974	0.0977	77.9	78.2	65.0-131			0.308	20
cis-1,2-Dichloroethene	0.125	0.103	0.103	82.4	82.4	73.0-125			0.000	20
trans-1,2-Dichloroethene	0.125	0.106	0.103	84.8	82.4	71.0-125			2.87	20
1,2-Dichloropropane	0.125	0.115	0.111	92.0	88.8	74.0-125			3.54	20
1,1-Dichloropropene	0.125	0.0960	0.0968	76.8	77.4	73.0-125			0.830	20
1,3-Dichloropropane	0.125	0.116	0.116	92.8	92.8	80.0-125			0.000	20
cis-1,3-Dichloropropene	0.125	0.106	0.108	84.8	86.4	76.0-127			1.87	20
trans-1,3-Dichloropropene	0.125	0.112	0.111	89.6	88.8	73.0-127			0.897	20
2,2-Dichloropropane	0.125	0.0815	0.0813	65.2	65.0	59.0-135			0.246	20
Di-isopropyl ether	0.125	0.108	0.108	86.4	86.4	60.0-136			0.000	20

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

(LCS) R3512913-1 03/21/20 09:16 • (LCSD) R3512913-2 03/21/20 09:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.125	0.112	0.112	89.6	89.6	74.0-126			0.000	20
Hexachloro-1,3-butadiene	0.125	0.103	0.101	82.4	80.8	57.0-150			1.96	20
2-Hexanone	0.625	0.624	0.623	99.8	99.7	54.0-147			0.160	20
n-Hexane	0.125	0.117	0.116	93.6	92.8	55.0-137			0.858	20
Iodomethane	0.625	0.539	0.537	86.2	85.9	74.0-134			0.372	20
Isopropylbenzene	0.125	0.104	0.103	83.2	82.4	72.0-127			0.966	20
p-Isopropyltoluene	0.125	0.108	0.109	86.4	87.2	72.0-133			0.922	20
2-Butanone (MEK)	0.625	0.632	0.605	101	96.8	30.0-160			4.37	24
Methylene Chloride	0.125	0.0974	0.0971	77.9	77.7	68.0-123			0.308	20
4-Methyl-2-pentanone (MIBK)	0.625	0.593	0.580	94.9	92.8	56.0-143			2.22	20
Methyl tert-butyl ether	0.125	0.106	0.106	84.8	84.8	66.0-132			0.000	20
Naphthalene	0.125	0.110	0.106	88.0	84.8	59.0-130			3.70	20
n-Propylbenzene	0.125	0.115	0.116	92.0	92.8	74.0-126			0.866	20
Styrene	0.125	0.109	0.111	87.2	88.8	72.0-127			1.82	20
1,1,1,2-Tetrachloroethane	0.125	0.104	0.104	83.2	83.2	74.0-129			0.000	20
1,1,2,2-Tetrachloroethane	0.125	0.126	0.125	101	100	68.0-128			0.797	20
Tetrachloroethene	0.125	0.118	0.112	94.4	89.6	70.0-136			5.22	20
Toluene	0.125	0.110	0.111	88.0	88.8	75.0-121			0.905	20
1,1,2-Trichlorotrifluoroethane	0.125	0.102	0.102	81.6	81.6	61.0-139			0.000	20
1,2,3-Trichlorobenzene	0.125	0.119	0.119	95.2	95.2	59.0-139			0.000	20
1,2,4-Trichlorobenzene	0.125	0.121	0.118	96.8	94.4	62.0-137			2.51	20
1,1,1-Trichloroethane	0.125	0.107	0.105	85.6	84.0	69.0-126			1.89	20
1,1,2-Trichloroethane	0.125	0.114	0.114	91.2	91.2	78.0-123			0.000	20
Trichloroethene	0.125	0.105	0.102	84.0	81.6	76.0-126			2.90	20
Trichlorofluoromethane	0.125	0.102	0.102	81.6	81.6	61.0-142			0.000	20
1,2,3-Trichloropropane	0.125	0.116	0.114	92.8	91.2	67.0-129			1.74	20
1,2,3-Trimethylbenzene	0.125	0.101	0.101	80.8	80.8	74.0-124			0.000	20
1,2,4-Trimethylbenzene	0.125	0.107	0.108	85.6	86.4	70.0-126			0.930	20
1,3,5-Trimethylbenzene	0.125	0.121	0.121	96.8	96.8	73.0-127			0.000	20
Vinyl acetate	0.625	0.466	0.462	74.6	73.9	43.0-159			0.862	20
Vinyl chloride	0.125	0.101	0.103	80.8	82.4	63.0-134			1.96	20
Xylenes, Total	0.375	0.321	0.302	85.6	80.5	72.0-127			6.10	20
(S) Toluene-d8				*108*	*108*	*75.0-131*				
(S) 4-Bromofluorobenzene				*97.7*	*97.2*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*103*	*103*	*70.0-130*				

Method Blank (MB)

(MB) R3512026-3 03/21/20 20:24

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.00100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
Bromochloromethane	U		0.00113	0.00500
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
n-Butylbenzene	U		0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tert-Butylbenzene	U		0.00155	0.00500
Carbon disulfide	U		0.00406	0.0125
Carbon tetrachloride	U		0.00108	0.00500
Chlorobenzene	U		0.000573	0.00250
Chlorodibromomethane	U		0.000450	0.00250
Chloroethane	U		0.00108	0.00500
Chloroform	U		0.000415	0.00250
Chloromethane	U		0.00139	0.0125
2-Chlorotoluene	U		0.000920	0.00250
4-Chlorotoluene	U		0.00113	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0250
1,2-Dibromoethane	U		0.000525	0.00250
Dibromomethane	U		0.00100	0.00500
1,2-Dichlorobenzene	U		0.00145	0.00500
1,3-Dichlorobenzene	U		0.00170	0.00500
1,4-Dichlorobenzene	U		0.00197	0.00500
trans-1,4-Dichloro-2-butene	U		0.00140	0.00500
Dichlorodifluoromethane	U		0.000818	0.00250
1,1-Dichloroethane	U		0.000575	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
1,1-Dichloroethene	U		0.000500	0.00250
cis-1,2-Dichloroethene	U		0.000690	0.00250
trans-1,2-Dichloroethene	U		0.00143	0.00500
1,2-Dichloropropane	U		0.00127	0.00500
1,1-Dichloropropene	U		0.000700	0.00250
1,3-Dichloropropane	U		0.00175	0.00500
cis-1,3-Dichloropropene	U		0.000678	0.00250
trans-1,3-Dichloropropene	U		0.00153	0.00500
2,2-Dichloropropane	U		0.000793	0.00250
Di-isopropyl ether	U		0.000350	0.00100

Method Blank (MB)

(MB) R3512026-3 03/21/20 20:24

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
n-Hexane	U		0.00106	0.00500
2-Hexanone	U		0.0100	0.0250
Iodomethane	U		0.00605	0.0125
Isopropylbenzene	U		0.000863	0.00250
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0182	J	0.0125	0.0250
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.0100	0.0250
Methyl tert-butyl ether	U		0.000295	0.00100
Naphthalene	U		0.00312	0.0125
n-Propylbenzene	U		0.00118	0.00500
Styrene	U		0.00273	0.0125
1,1,1,2-Tetrachloroethane	U		0.000500	0.00250
1,1,2,2-Tetrachloroethane	U		0.000390	0.00250
Tetrachloroethene	U		0.000700	0.00250
Toluene	U		0.00125	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000675	0.00250
1,2,3-Trichlorobenzene	U		0.000625	0.0125
1,2,4-Trichlorobenzene	U		0.00482	0.0125
1,1,1-Trichloroethane	U		0.000275	0.00250
1,1,2-Trichloroethane	U		0.000883	0.00250
Trichloroethene	U		0.000400	0.00100
Trichlorofluoromethane	U		0.000500	0.00250
1,2,3-Trichloropropane	U		0.00510	0.0125
1,2,3-Trimethylbenzene	U		0.00115	0.00500
1,2,4-Trimethylbenzene	U		0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl acetate	U		0.00352	0.0125
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*114*			*75.0-131*
(S) 4-Bromofluorobenzene	*88.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*91.0*			*70.0-130*

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

(LCS) R3512026-1 03/21/20 18:30 • (LCSD) R3512026-2 03/21/20 18:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.750	0.560	120	89.6	10.0-160			29.0	31
Acrylonitrile	0.625	0.689	0.616	110	98.6	45.0-153			11.2	22
Benzene	0.125	0.112	0.107	89.6	85.6	70.0-123			4.57	20
Bromobenzene	0.125	0.122	0.122	97.6	97.6	73.0-121			0.000	20
Bromodichloromethane	0.125	0.113	0.109	90.4	87.2	73.0-121			3.60	20
Bromochloromethane	0.125	0.106	0.110	84.8	88.0	77.0-128			3.70	20
Bromoform	0.125	0.110	0.109	88.0	87.2	64.0-132			0.913	20
Bromomethane	0.125	0.107	0.106	85.6	84.8	56.0-147			0.939	20
n-Butylbenzene	0.125	0.103	0.0943	82.4	75.4	68.0-135			8.82	20
sec-Butylbenzene	0.125	0.113	0.109	90.4	87.2	74.0-130			3.60	20
tert-Butylbenzene	0.125	0.109	0.0980	87.2	78.4	75.0-127			10.6	20
Carbon disulfide	0.125	0.103	0.100	82.4	80.0	56.0-133			2.96	20
Carbon tetrachloride	0.125	0.109	0.105	87.2	84.0	66.0-128			3.74	20
Chlorobenzene	0.125	0.110	0.108	88.0	86.4	76.0-128			1.83	20
Chlorodibromomethane	0.125	0.0983	0.0979	78.6	78.3	74.0-127			0.408	20
Chloroethane	0.125	0.110	0.107	88.0	85.6	61.0-134			2.76	20
Chloroform	0.125	0.126	0.125	101	100	72.0-123			0.797	20
Chloromethane	0.125	0.107	0.107	85.6	85.6	51.0-138			0.000	20
2-Chlorotoluene	0.125	0.111	0.107	88.8	85.6	75.0-124			3.67	20
4-Chlorotoluene	0.125	0.118	0.117	94.4	93.6	75.0-124			0.851	20
1,2-Dibromo-3-Chloropropane	0.125	0.116	0.100	92.8	80.0	59.0-130			14.8	20
1,2-Dibromoethane	0.125	0.106	0.106	84.8	84.8	74.0-128			0.000	20
Dibromomethane	0.125	0.108	0.109	86.4	87.2	75.0-122			0.922	20
1,2-Dichlorobenzene	0.125	0.112	0.103	89.6	82.4	76.0-124			8.37	20
1,3-Dichlorobenzene	0.125	0.119	0.115	95.2	92.0	76.0-125			3.42	20
1,4-Dichlorobenzene	0.125	0.114	0.110	91.2	88.0	77.0-121			3.57	20
trans-1,4-Dichloro-2-butene	0.125	0.115	0.120	92.0	96.0	45.0-143			4.26	20
Dichlorodifluoromethane	0.125	0.107	0.108	85.6	86.4	43.0-156			0.930	20
1,1-Dichloroethane	0.125	0.116	0.115	92.8	92.0	70.0-127			0.866	20
1,2-Dichloroethane	0.125	0.126	0.126	101	101	65.0-131			0.000	20
1,1-Dichloroethene	0.125	0.114	0.111	91.2	88.8	65.0-131			2.67	20
cis-1,2-Dichloroethene	0.125	0.115	0.115	92.0	92.0	73.0-125			0.000	20
trans-1,2-Dichloroethene	0.125	0.120	0.117	96.0	93.6	71.0-125			2.53	20
1,2-Dichloropropane	0.125	0.116	0.113	92.8	90.4	74.0-125			2.62	20
1,1-Dichloropropene	0.125	0.105	0.101	84.0	80.8	73.0-125			3.88	20
1,3-Dichloropropane	0.125	0.109	0.109	87.2	87.2	80.0-125			0.000	20
cis-1,3-Dichloropropene	0.125	0.104	0.103	83.2	82.4	76.0-127			0.966	20
trans-1,3-Dichloropropene	0.125	0.106	0.106	84.8	84.8	73.0-127			0.000	20
2,2-Dichloropropane	0.125	0.110	0.105	88.0	84.0	59.0-135			4.65	20
Di-isopropyl ether	0.125	0.119	0.120	95.2	96.0	60.0-136			0.837	20

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

(LCS) R3512026-1 03/21/20 18:30 • (LCSD) R3512026-2 03/21/20 18:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.125	0.119	0.112	95.2	89.6	74.0-126			6.06	20
Hexachloro-1,3-butadiene	0.125	0.108	0.0932	86.4	74.6	57.0-150			14.7	20
2-Hexanone	0.625	0.594	0.585	95.0	93.6	54.0-147			1.53	20
n-Hexane	0.125	0.133	0.123	106	98.4	55.0-137			7.81	20
Iodomethane	0.625	0.627	0.617	100	98.7	74.0-134			1.61	20
Isopropylbenzene	0.125	0.109	0.104	87.2	83.2	72.0-127			4.69	20
p-Isopropyltoluene	0.125	0.109	0.103	87.2	82.4	72.0-133			5.66	20
2-Butanone (MEK)	0.625	0.636	0.597	102	95.5	30.0-160			6.33	24
Methylene Chloride	0.125	0.112	0.112	89.6	89.6	68.0-123			0.000	20
4-Methyl-2-pentanone (MIBK)	0.625	0.591	0.583	94.6	93.3	56.0-143			1.36	20
Methyl tert-butyl ether	0.125	0.119	0.119	95.2	95.2	66.0-132			0.000	20
Naphthalene	0.125	0.115	0.0887	92.0	71.0	59.0-130		J3	25.8	20
n-Propylbenzene	0.125	0.116	0.112	92.8	89.6	74.0-126			3.51	20
Styrene	0.125	0.111	0.109	88.8	87.2	72.0-127			1.82	20
1,1,1,2-Tetrachloroethane	0.125	0.107	0.105	85.6	84.0	74.0-129			1.89	20
1,1,2,2-Tetrachloroethane	0.125	0.132	0.126	106	101	68.0-128			4.65	20
Tetrachloroethene	0.125	0.117	0.113	93.6	90.4	70.0-136			3.48	20
Toluene	0.125	0.112	0.109	89.6	87.2	75.0-121			2.71	20
1,1,2-Trichlorotrifluoroethane	0.125	0.121	0.119	96.8	95.2	61.0-139			1.67	20
1,2,3-Trichlorobenzene	0.125	0.120	0.0899	96.0	71.9	59.0-139		J3	28.7	20
1,2,4-Trichlorobenzene	0.125	0.119	0.0915	95.2	73.2	62.0-137		J3	26.1	20
1,1,1-Trichloroethane	0.125	0.119	0.116	95.2	92.8	69.0-126			2.55	20
1,1,2-Trichloroethane	0.125	0.111	0.110	88.8	88.0	78.0-123			0.905	20
Trichloroethene	0.125	0.102	0.0967	81.6	77.4	76.0-126			5.33	20
Trichlorofluoromethane	0.125	0.119	0.114	95.2	91.2	61.0-142			4.29	20
1,2,3-Trichloropropane	0.125	0.114	0.112	91.2	89.6	67.0-129			1.77	20
1,2,3-Trimethylbenzene	0.125	0.103	0.0974	82.4	77.9	74.0-124			5.59	20
1,2,4-Trimethylbenzene	0.125	0.107	0.103	85.6	82.4	70.0-126			3.81	20
1,3,5-Trimethylbenzene	0.125	0.121	0.117	96.8	93.6	73.0-127			3.36	20
Vinyl acetate	0.625	0.651	0.572	104	91.5	43.0-159			12.9	20
Vinyl chloride	0.125	0.120	0.120	96.0	96.0	63.0-134			0.000	20
Xylenes, Total	0.375	0.334	0.322	89.1	85.9	72.0-127			3.66	20
(S) Toluene-d8				*106*	*106*	*75.0-131*				
(S) 4-Bromofluorobenzene				*100*	*98.6*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*108*	*106*	*70.0-130*				

L1200913-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1200913-02 03/21/20 23:27 • (MS) R3512026-4 03/22/20 03:13 • (MSD) R3512026-5 03/22/20 03:32

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.656	U	0.217	0.195	33.1	29.8	1	10.0-160			10.7	40
Acrylonitrile	0.656	U	0.426	0.375	65.0	57.1	1	10.0-160			12.8	40
Benzene	0.131	U	0.132	0.104	101	79.2	1	10.0-149			24.0	37
Bromobenzene	0.131	U	0.159	0.132	121	101	1	10.0-156			18.1	38
Bromodichloromethane	0.131	U	0.122	0.103	92.8	78.7	1	10.0-143			16.4	37
Bromochloromethane	0.131	U	0.101	0.0900	76.7	68.6	1	10.0-155			11.2	33
Bromoform	0.131	U	0.108	0.0966	82.4	73.6	1	10.0-146			11.3	36
Bromomethane	0.131	U	0.0547	0.0423	41.7	32.2	1	10.0-149			25.5	38
n-Butylbenzene	0.131	U	0.140	0.0951	106	72.5	1	10.0-160			37.9	40
sec-Butylbenzene	0.131	U	0.164	0.117	125	88.8	1	10.0-159			33.7	39
tert-Butylbenzene	0.131	U	0.159	0.119	121	90.4	1	10.0-156			28.8	39
Carbon disulfide	0.131	U	0.111	0.0825	84.8	62.9	1	10.0-145			29.7	39
Carbon tetrachloride	0.131	U	0.0944	0.0843	71.9	64.2	1	10.0-145			11.3	37
Chlorobenzene	0.131	U	0.138	0.111	105	84.8	1	10.0-152			21.1	39
Chlorodibromomethane	0.131	U	0.110	0.0976	84.0	74.4	1	10.0-146			12.1	37
Chloroethane	0.131	U	0.0285	0.0227	21.7	17.3	1	10.0-146			22.6	40
Chloroform	0.131	U	0.130	0.103	99.2	78.2	1	10.0-146			23.7	37
Chloromethane	0.131	U	0.120	0.0847	91.2	64.6	1	10.0-159			34.2	37
2-Chlorotoluene	0.131	U	0.146	0.113	111	86.4	1	10.0-159			25.1	38
4-Chlorotoluene	0.131	U	0.157	0.121	120	92.0	1	10.0-155			26.4	39
1,2-Dibromo-3-Chloropropane	0.131	U	0.0973	0.0933	74.2	71.1	1	10.0-151			4.19	39
1,2-Dibromoethane	0.131	U	0.125	0.115	95.2	88.0	1	10.0-148			7.86	34
Dibromomethane	0.131	U	0.110	0.0937	84.0	71.4	1	10.0-147			16.3	35
1,2-Dichlorobenzene	0.131	U	0.130	0.106	99.2	80.8	1	10.0-155			20.4	37
1,3-Dichlorobenzene	0.131	U	0.147	0.117	112	88.8	1	10.0-153			23.1	38
1,4-Dichlorobenzene	0.131	U	0.141	0.112	107	85.6	1	10.0-151			22.4	38
trans-1,4-Dichloro-2-butene	0.131	U	0.131	0.123	100	93.6	1	10.0-152			6.61	36
Dichlorodifluoromethane	0.131	U	0.139	0.101	106	77.1	1	10.0-160			31.2	35
1,1-Dichloroethane	0.131	U	0.124	0.0975	94.4	74.3	1	10.0-147			23.8	37
1,2-Dichloroethane	0.131	U	0.142	0.122	108	92.8	1	10.0-148			15.1	35
1,1-Dichloroethene	0.131	U	0.131	0.0965	100	73.5	1	10.0-155			30.5	37
cis-1,2-Dichloroethene	0.131	U	0.122	0.0966	92.8	73.6	1	10.0-149			23.1	37
trans-1,2-Dichloroethene	0.131	U	0.127	0.0987	96.8	75.2	1	10.0-150			25.1	37
1,2-Dichloropropane	0.131	U	0.132	0.105	101	80.0	1	10.0-148			23.0	37
1,1-Dichloropropene	0.131	U	0.138	0.104	105	79.2	1	10.0-153			27.8	35
1,3-Dichloropropane	0.131	U	0.140	0.124	106	94.4	1	10.0-154			12.0	35
cis-1,3-Dichloropropene	0.131	U	0.123	0.105	93.6	80.0	1	10.0-151			15.7	37
trans-1,3-Dichloropropene	0.131	U	0.134	0.121	102	92.0	1	10.0-148			10.7	37
2,2-Dichloropropane	0.131	U	0.0890	0.0619	67.8	47.2	1	10.0-138			35.9	36

L1200913-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1200913-02 03/21/20 23:27 • (MS) R3512026-4 03/22/20 03:13 • (MSD) R3512026-5 03/22/20 03:32

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	0.131	U	0.123	0.103	93.6	78.7	1	10.0-147			17.3	36
Ethylbenzene	0.131	U	0.147	0.111	112	84.8	1	10.0-160			27.6	38
Hexachloro-1,3-butadiene	0.131	U	0.184	0.141	140	107	1	10.0-160			26.5	40
2-Hexanone	0.656	U	0.583	0.562	88.8	85.6	1	10.0-160			3.67	36
n-Hexane	0.131	U	0.167	0.115	127	88.0	1	10.0-157			36.4	37
Iodomethane	0.656	U	0.672	0.519	102	79.0	1	10.0-160			25.7	38
Isopropylbenzene	0.131	U	0.132	0.0969	101	73.8	1	10.0-155			30.9	38
p-Isopropyltoluene	0.131	U	0.151	0.108	115	82.4	1	10.0-160			33.2	40
2-Butanone (MEK)	0.656	0.0159	0.378	0.400	55.2	58.5	1	10.0-160			5.67	40
Methylene Chloride	0.131	U	0.115	0.0926	88.0	70.6	1	10.0-141			22.0	37
4-Methyl-2-pentanone (MIBK)	0.656	U	0.541	0.529	82.4	80.6	1	10.0-160			2.16	35
Methyl tert-butyl ether	0.131	U	0.0994	0.0896	75.8	68.2	1	11.0-147			10.4	35
Naphthalene	0.131	U	0.133	0.119	102	90.4	1	10.0-160			11.7	36
n-Propylbenzene	0.131	U	0.163	0.119	124	90.4	1	10.0-158			31.3	38
Styrene	0.131	U	0.132	0.106	101	80.8	1	10.0-160			22.0	40
1,1,1,2-Tetrachloroethane	0.131	U	0.119	0.0946	90.4	72.1	1	10.0-149			22.6	39
1,1,2,2-Tetrachloroethane	0.131	U	0.143	0.127	109	96.8	1	10.0-160			11.7	35
Tetrachloroethene	0.131	U	0.159	0.120	121	91.2	1	10.0-156			27.9	39
Toluene	0.131	U	0.151	0.120	115	91.2	1	10.0-156			23.3	38
1,1,2-Trichlorotrifluoroethane	0.131	U	0.152	0.111	116	84.8	1	10.0-160			31.1	36
1,2,3-Trichlorobenzene	0.131	U	0.135	0.107	103	81.6	1	10.0-160			23.4	40
1,2,4-Trichlorobenzene	0.131	U	0.133	0.101	102	76.9	1	10.0-160			27.7	40
1,1,1-Trichloroethane	0.131	U	0.124	0.0955	94.4	72.8	1	10.0-144			25.8	35
1,1,2-Trichloroethane	0.131	U	0.139	0.125	106	95.2	1	10.0-160			10.4	35
Trichloroethene	0.131	U	0.134	0.105	102	80.0	1	10.0-156			24.6	38
Trichlorofluoromethane	0.131	U	0.0505	0.0334	38.5	25.4	1	10.0-160		J3	40.8	40
1,2,3-Trichloropropane	0.131	U	0.131	0.121	100	92.0	1	10.0-156			8.33	35
1,2,3-Trimethylbenzene	0.131	U	0.132	0.105	101	80.0	1	10.0-160			23.0	36
1,2,4-Trimethylbenzene	0.131	U	0.144	0.112	110	85.6	1	10.0-160			24.6	36
1,3,5-Trimethylbenzene	0.131	U	0.163	0.124	124	94.4	1	10.0-160			27.1	38
Vinyl acetate	0.656	U	0.591	0.138	90.1	21.0	1	10.0-128		J3	124	40
Vinyl chloride	0.131	U	0.139	0.101	106	76.6	1	10.0-160			31.8	37
Xylenes, Total	0.394	U	0.408	0.318	104	80.8	1	10.0-160			24.9	38
(S) Toluene-d8					*112*	*114*		*75.0-131*				
(S) 4-Bromofluorobenzene					*91.9*	*91.6*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*94.4*	*93.1*		*70.0-130*				

Method Blank (MB)

(MB) R3512067-2 03/24/20 00:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3512067-2 03/24/20 00:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*99.9*			*80.0-120*
(S) 4-Bromofluorobenzene	*93.3*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3512067-1 03/23/20 23:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	32.8	131	19.0-160	
Acrylonitrile	25.0	26.6	106	55.0-149	
Benzene	5.00	5.36	107	70.0-123	
Bromobenzene	5.00	6.11	122	73.0-121	J4
Bromodichloromethane	5.00	5.05	101	75.0-120	
Bromochloromethane	5.00	5.18	104	76.0-122	
Bromoform	5.00	4.84	96.8	68.0-132	
Bromomethane	5.00	3.64	72.8	10.0-160	
n-Butylbenzene	5.00	5.48	110	73.0-125	
sec-Butylbenzene	5.00	5.24	105	75.0-125	
tert-Butylbenzene	5.00	4.33	86.6	76.0-124	
Carbon disulfide	5.00	5.58	112	61.0-128	
Carbon tetrachloride	5.00	5.47	109	68.0-126	
Chlorobenzene	5.00	4.91	98.2	80.0-121	
Chlorodibromomethane	5.00	4.56	91.2	77.0-125	
Chloroethane	5.00	4.04	80.8	47.0-150	
Chloroform	5.00	5.17	103	73.0-120	
Chloromethane	5.00	4.32	86.4	41.0-142	
2-Chlorotoluene	5.00	6.31	126	76.0-123	J4
4-Chlorotoluene	5.00	5.75	115	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	4.22	84.4	58.0-134	
1,2-Dibromoethane	5.00	4.74	94.8	80.0-122	
Dibromomethane	5.00	4.83	96.6	80.0-120	
1,2-Dichlorobenzene	5.00	5.19	104	79.0-121	
1,3-Dichlorobenzene	5.00	5.82	116	79.0-120	
1,4-Dichlorobenzene	5.00	5.32	106	79.0-120	
Dichlorodifluoromethane	5.00	5.21	104	51.0-149	
1,1-Dichloroethane	5.00	5.60	112	70.0-126	
1,2-Dichloroethane	5.00	5.19	104	70.0-128	
1,1-Dichloroethene	5.00	5.70	114	71.0-124	
cis-1,2-Dichloroethene	5.00	5.34	107	73.0-120	
trans-1,2-Dichloroethene	5.00	5.12	102	73.0-120	
1,2-Dichloropropane	5.00	5.99	120	77.0-125	
1,1-Dichloropropene	5.00	5.66	113	74.0-126	
1,3-Dichloropropane	5.00	5.23	105	80.0-120	
cis-1,3-Dichloropropene	5.00	5.83	117	80.0-123	
trans-1,3-Dichloropropene	5.00	5.18	104	78.0-124	
trans-1,4-Dichloro-2-butene	5.00	6.04	121	33.0-144	
2,2-Dichloropropane	5.00	6.83	137	58.0-130	J4
Di-isopropyl ether	5.00	7.15	143	58.0-138	J4

Laboratory Control Sample (LCS)

(LCS) R3512067-1 03/23/20 23:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	5.00	5.23	105	79.0-123	
Hexachloro-1,3-butadiene	5.00	5.51	110	54.0-138	
2-Hexanone	25.0	26.7	107	67.0-149	
n-Hexane	5.00	6.91	138	57.0-133	J4
Iodomethane	25.0	26.6	106	33.0-147	
Isopropylbenzene	5.00	5.06	101	76.0-127	
p-Isopropyltoluene	5.00	5.45	109	76.0-125	
2-Butanone (MEK)	25.0	31.7	127	44.0-160	
Methylene Chloride	5.00	5.61	112	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	29.4	118	68.0-142	
Methyl tert-butyl ether	5.00	5.45	109	68.0-125	
Naphthalene	5.00	4.54	90.8	54.0-135	
Styrene	5.00	5.06	101	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	4.39	87.8	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	7.48	150	65.0-130	J4
1,1,2-Trichlorotrifluoroethane	5.00	6.04	121	69.0-132	
Tetrachloroethene	5.00	5.13	103	72.0-132	
Toluene	5.00	4.81	96.2	79.0-120	
1,2,3-Trichlorobenzene	5.00	5.16	103	50.0-138	
1,2,4-Trichlorobenzene	5.00	5.06	101	57.0-137	
1,1,1-Trichloroethane	5.00	5.41	108	73.0-124	
1,1,2-Trichloroethane	5.00	4.92	98.4	80.0-120	
Trichloroethene	5.00	4.60	92.0	78.0-124	
Trichlorofluoromethane	5.00	4.92	98.4	59.0-147	
1,2,3-Trichloropropane	5.00	5.70	114	73.0-130	
1,2,4-Trimethylbenzene	5.00	5.68	114	76.0-121	
1,2,3-Trimethylbenzene	5.00	5.16	103	77.0-120	
1,3,5-Trimethylbenzene	5.00	5.05	101	76.0-122	
Vinyl acetate	25.0	56.9	228	11.0-160	J4
Vinyl chloride	5.00	4.14	82.8	67.0-131	
Xylenes, Total	15.0	15.2	101	79.0-123	
(S) Toluene-d8			*98.8*	*80.0-120*	
(S) 4-Bromofluorobenzene			*91.6*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*103*	*70.0-130*	

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

Method Blank (MB)

(MB) R3512170-4 03/24/20 21:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
n-Propylbenzene	U		0.162	0.500
(S) Toluene-d8	*112*			*80.0-120*
(S) 4-Bromofluorobenzene	*106*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*

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

(LCS) R3512170-1 03/24/20 19:35 • (LCSD) R3512170-3 03/24/20 21:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
n-Propylbenzene	5.00	5.95	5.69	119	114	77.0-124			4.47	20
(S) Toluene-d8				*110*	*107*	*80.0-120*				
(S) 4-Bromofluorobenzene				*112*	*106*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*104*	*103*	*70.0-130*				

Method Blank (MB)

(MB) R3512033-1 03/24/20 13:05

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Diesel Range Organics (DRO)	U		1.33	4.00
Residual Range Organics (RRO)	U		3.33	10.0
(S) o-Terphenyl	*63.8*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3512033-2 03/24/20 13:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	33.8	67.6	50.0-150	
(S) o-Terphenyl			*48.8*	*18.0-148*	

L1200798-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1200798-03 03/25/20 12:27 • (MS) R3512508-1 03/25/20 12:40 • (MSD) R3512508-2 03/25/20 12:52

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	59.0	ND	42.8	44.4	69.8	72.4	1	50.0-150			3.52	20
(S) o-Terphenyl					*60.1*	*63.5*		*18.0-148*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

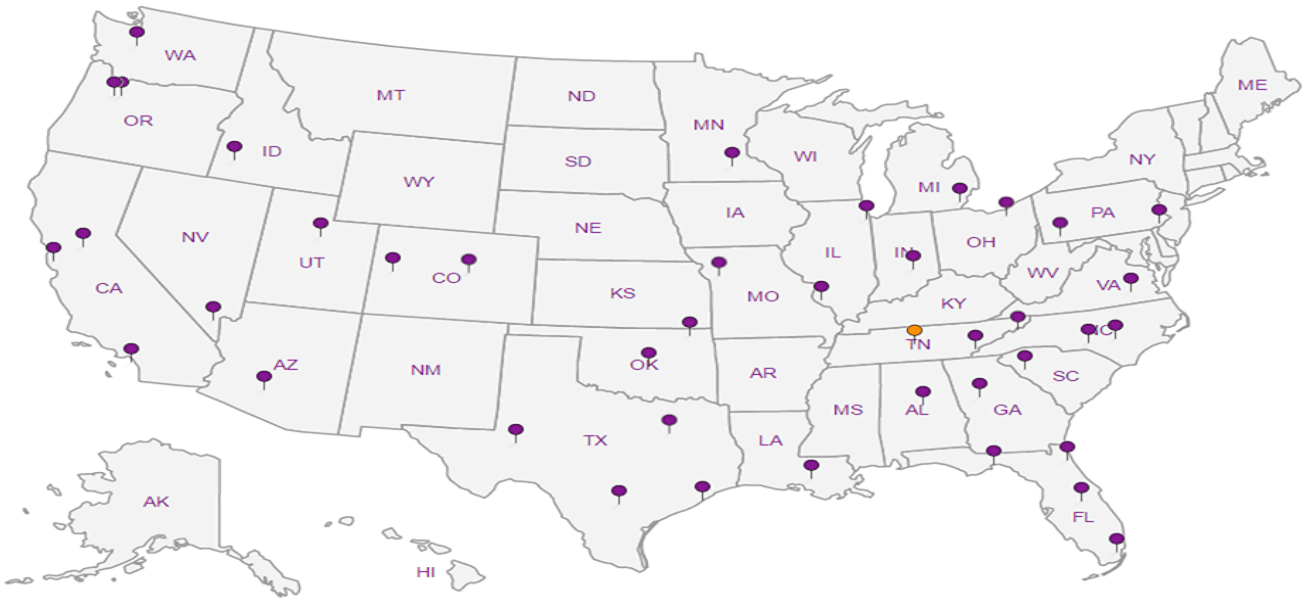
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



PES Environmental, Inc.- WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

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

Pres Chk

Report to: Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;bhaldeman@pesenv.com;sm

Project Description: American Linen

City/State Collected: SEATTLE WA

Please Circle: PT MT CT ET

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

Client Project # 1413. 001.05.202

Lab Project # PESENVSWA-ALP

Collected by (print): R. McLaughlin

Site/Facility ID # American Linen

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote #

Analysis / Container / Preservative

Chain of Custody Page 1 of 3

Pace Analytical®
National Center for Testing & Innovation

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

SDG # 1200909

G242

Acctnum: PESENVSWA

Template: T164084

Prelogin: P758809

PM: 110 - Brian Ford

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPHGX 40mlAmb/MeOH5ml/Syr	VOCs 8260C 40mlAmb/MeOH5ml/Syr	dry weight 2ozClr-NoPres	trip NWTPHGX 40mlAmb-HCl-Blk	trip VOCs V8260LLC 40mlAmb-HCl-Blk	NWTPH-DX				Remarks	Sample # (lab only)
B-268-1	Grab	SS	2'	3/17/20	0755	3	X	X	X								-01
B-269-1.5		SS	1.5'		0855	3	X	X	X								02
B-270-2		SS	2'		0915	4	X	X	X			X					03
B-271-1		SS	1'		0955	3	X	X	X								04
B-272-1		SS	1'		1040	3	X	X	X								05
B-272-6		SS	6'		1055	3	X	X	X								06
B-273-1		SS	1'		1130	3	X	X	X								07
B-273-3		SS	3'		1140	3	X	X	X								08
B-273-6 (MS/MSD)		SS	6'		1142	3	X	X	X								09
B-274-1		SS	1		1245	3	X	X	X								10

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

Remarks: 2/2 coolers STANDARD TAT

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking # 1663 5748 2597

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

	Date:	Time:		
Relinquished by : (Signature)	3/18/20	1335	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: NR 13 °C 17+3=20 Bottles Received: 61
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 3/19/20 Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

PES Environmental, Inc.- WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

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

Pres Chk

Report to: Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;bhaldeman@pesenv.com;sm

Project Description: American Linen

City/State Collected: SEATTLE, WA

Please Circle: PT MT CT ET

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

Client Project # 1413. 001.05.202

Lab Project # PESENVSWA-ALP

Collected by (print): R. McLAUGHLIN

Site/Facility ID # American Linen

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ~~X~~ ~~Five Day~~ (FM)
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPHGX 40mlAmb/MeOH5ml/Syr	VOCs 8260C 40mlAmb/MeOH5ml/Syr	dry weight 2ozClr-NoPres	trip NWTPHGX 40mlAmb-HCl-Blk	trip VOCs V8260LLC 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
B-274-3	Grab	SS	3'	3/19/20	1250	3	X	X	X				11
B-274-6		SS	6'		1253	3							12
B-275-1		SS	1		1320	3							13
B-275-6		SS	6		1330	3							14
B-275-9		SS	9		1340	3							15
B-275-10		~~SS~~ GW	10'		1342	3							16
B-276-1		~~SS~~ GW	1'		1422	3							17
B-276-7		SS	7'		1435	3							18
B-276-11		SS	11'		1442	3							19
B-970-6	↓	SS	6'	X	1530	3	X	X	X				20

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

Remarks: STANDARD TAT
2/2 coolers

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking #

Relinquished by : (Signature) RT McLaughlin — Date: 3/18/20 — Time: 1335

Received by: (Signature)

Trip Blank Received: Yes / No — HCl / MeoH — TBR

Relinquished by : (Signature)

Date: Time:

Received by: (Signature)

Temp: 1.8 °C — Bottles Received: 61

1.7+3=2.0

If preservation required by Login: Date/Time

Relinquished by : (Signature)

Date: Time:

Received for lab by: (Signature) Carol Kemp — Date: 3/19/20 — Time: 8:30

Hold:

Condition: NCF / OK

Sample Receipt Checklist

COC Seal Present/Intact:	NP Y N
COC Signed/Accurate:	Y N
Bottles arrive intact:	Y N
Correct bottles used:	Y N
Sufficient volume sent:	Y N
If Applicable	
VOA Zero Headspace:	Y N
Preservation Correct/Checked:	Y N
RAD Screen <0.5 mR/hr:	Y N

Chain of Custody Page 2 of 3

Pace Analytical® National Center for Testing & Innovation

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

SDG # 1200909

Table #

Acctnum: PESENVSWA

Template: T164084

Prelogin: P758809

PM: 110 - Brian Ford

PB:

Shipped Via:

PES Environmental, Inc.- WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

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

Pres Chk

Report to: Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;bhaldeman@pesenv.com;sm

Project Description: American Linen

City/State Collected: Seattle WA

Please Circle: PT MT CT ET

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

Client Project # 1413. 001.05.202

Lab Project # PESENVSWA-ALP

Collected by (print): R.McLaughlin

Collected by (signature):

Site/Facility ID # American Linen

P.O. #

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPHGX 40mlAmb/MeOH5ml/Syr	VOCs 8260C 40mlAmb/MeOH5ml/Syr	dry weight 2ozClr-NoPres	trip NWTPHGX 40mlAmb-HCl-Blk	trip VOCs V8260LLC 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
TB-031720	—	SS	—	3/17/20	1500	1				X	X		21
		SS											
		SS											
		SS											
		SS											
		SS											
		SS											
		SS											
		SS											
		SS											

Chain of Custody Page 3 of 3

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

SDG # 120909

Table #

Acctnum: PESENVSWA

Template: T164084

Prelogin: P758809

PM: 110 - Brian Ford

PB:

Shipped Via:

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

Remarks:
2/2 coolers
STANDARD TAT

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	3/18/20	1335			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	
				1.7+.3=2.0 6	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: Condition: NCF / OK
			Carol Kemp	3/19/20 8:30	

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

April 09, 2020

PES Environmental, Inc.- WA

Sample Delivery Group:	L1204945
Samples Received:	04/02/2020
Project Number:	1413.001.02.501E
Description:	American Linen

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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MW-160-040120 L1204945-01 GW

Collected by: BLH/SPK/RTM | Collected date/time: 04/01/20 10:00 | Received date/time: 04/02/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1455529	1	04/06/20 02:39	04/06/20 02:39	DGR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1454414	1	04/02/20 14:48	04/02/20 14:48	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1455135	1	04/03/20 17:07	04/03/20 17:07	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1454310	1	04/02/20 17:28	04/02/20 22:14	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1454847	1	04/03/20 17:00	04/03/20 17:00	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454571	1	04/03/20 10:27	04/03/20 10:27	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1455710	1	04/05/20 21:13	04/05/20 21:13	ACG	Mt. Juliet, TN

MW-181-040120 L1204945-02 GW

Collected by: BLH/SPK/RTM | Collected date/time: 04/01/20 10:00 | Received date/time: 04/02/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1455529	1	04/06/20 02:47	04/06/20 02:47	DGR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1454414	1	04/02/20 20:32	04/02/20 20:32	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1454414	5	04/02/20 15:41	04/02/20 15:41	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1455135	1	04/03/20 18:20	04/03/20 18:20	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1454310	1	04/02/20 17:28	04/02/20 22:18	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1454847	25	04/03/20 20:56	04/03/20 20:56	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454571	1	04/03/20 10:30	04/03/20 10:30	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454997	10	04/03/20 12:23	04/03/20 12:23	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1455710	500	04/05/20 23:12	04/05/20 23:12	ACG	Mt. Juliet, TN

MW-177-040120 L1204945-03 GW

Collected by: BLH/SPK/RTM | Collected date/time: 04/01/20 10:45 | Received date/time: 04/02/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1455529	1	04/06/20 02:54	04/06/20 02:54	DGR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1454414	1	04/02/20 20:45	04/02/20 20:45	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1454414	5	04/02/20 15:54	04/02/20 15:54	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1455135	1	04/03/20 18:35	04/03/20 18:35	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1454310	1	04/02/20 17:28	04/02/20 22:21	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1454847	50	04/03/20 21:18	04/03/20 21:18	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454571	1	04/03/20 10:37	04/03/20 10:37	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454997	10	04/03/20 12:26	04/03/20 12:26	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1455710	5000	04/05/20 23:32	04/05/20 23:32	ACG	Mt. Juliet, TN

MW-184-040120 L1204945-04 GW

Collected by: BLH/SPK/RTM | Collected date/time: 04/01/20 11:45 | Received date/time: 04/02/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1455529	1	04/06/20 03:01	04/06/20 03:01	DGR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1454414	1	04/02/20 16:07	04/02/20 16:07	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1455135	1	04/03/20 18:47	04/03/20 18:47	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1454310	1	04/02/20 17:28	04/02/20 22:25	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1454847	1	04/03/20 17:21	04/03/20 17:21	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454571	1	04/03/20 10:44	04/03/20 10:44	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1456142	10	04/06/20 13:45	04/06/20 13:45	BMB	Mt. Juliet, TN

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

W-MW-02-040120 L1204945-05 GW

Collected by: BLH/SPK/RTM | Collected date/time: 04/01/20 12:35 | Received date/time: 04/02/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1455985	1	04/06/20 22:51	04/06/20 22:51	DGR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1454414	1	04/02/20 16:20	04/02/20 16:20	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1455135	2	04/03/20 19:01	04/03/20 19:01	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1454757	1	04/02/20 22:44	04/03/20 11:42	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1454847	1	04/03/20 17:43	04/03/20 17:43	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454571	1	04/03/20 10:47	04/03/20 10:47	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454997	10	04/03/20 12:28	04/03/20 12:28	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1455710	1	04/05/20 21:33	04/05/20 21:33	ACG	Mt. Juliet, TN

MW-180-040120 L1204945-06 GW

Collected by: BLH/SPK/RTM | Collected date/time: 04/01/20 12:55 | Received date/time: 04/02/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1455529	1	04/06/20 03:24	04/06/20 03:24	DGR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1454414	1	04/02/20 16:33	04/02/20 16:33	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1455135	1	04/03/20 19:29	04/03/20 19:29	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1454757	1	04/02/20 22:44	04/03/20 11:46	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1454847	1	04/03/20 18:04	04/03/20 18:04	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454571	1	04/03/20 10:59	04/03/20 10:59	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454997	10	04/03/20 12:31	04/03/20 12:31	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1455710	5	04/06/20 00:12	04/06/20 00:12	ACG	Mt. Juliet, TN

MW-182-040120 L1204945-07 GW

Collected by: BLH/SPK/RTM | Collected date/time: 04/01/20 13:30 | Received date/time: 04/02/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1455985	1	04/06/20 23:00	04/06/20 23:00	DGR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1454414	1	04/02/20 20:58	04/02/20 20:58	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1454414	10	04/02/20 21:11	04/02/20 21:11	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1455135	1	04/03/20 19:45	04/03/20 19:45	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1454757	1	04/02/20 22:44	04/03/20 11:49	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1454847	1	04/03/20 18:26	04/03/20 18:26	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454571	1	04/03/20 11:03	04/03/20 11:03	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454997	10	04/03/20 12:35	04/03/20 12:35	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1456142	50	04/06/20 14:04	04/06/20 14:04	BMB	Mt. Juliet, TN

MW104-040120 L1204945-08 GW

Collected by: BLH/SPK/RTM | Collected date/time: 04/01/20 14:20 | Received date/time: 04/02/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1455985	1	04/06/20 23:08	04/06/20 23:08	DGR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1454414	1	04/02/20 16:59	04/02/20 16:59	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1455135	1	04/03/20 19:57	04/03/20 19:57	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1454757	1	04/02/20 22:44	04/03/20 12:03	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1454847	1	04/03/20 18:47	04/03/20 18:47	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1454571	1	04/03/20 11:12	04/03/20 11:12	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1455710	1	04/05/20 21:53	04/05/20 21:53	ACG	Mt. Juliet, TN

SCL-MW105-040120 L1204945-09 GW

Collected by: BLH/SPK/RTM
Collected date/time: 04/01/20 15:40
Received date/time: 04/02/20 08:30

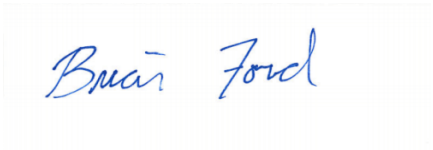
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1455710	1	04/05/20 22:13	04/05/20 22:13	ACG	Mt. Juliet, TN

TB-040120 L1204945-10 GW

Collected by: BLH/SPK/RTM
Collected date/time: 04/01/20 16:00
Received date/time: 04/02/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1454847	1	04/03/20 14:29	04/03/20 14:29	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1455710	1	04/05/20 16:54	04/05/20 16:54	ACG	Mt. Juliet, TN

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



Brian Ford
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	182000		2710	20000	1	04/06/2020 02:39	WG1455529

Sample Narrative:

L1204945-01 WG1455529: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	7590		51.9	1000	1	04/02/2020 14:48	WG1454414
Nitrate	24.9	J	22.7	100	1	04/02/2020 14:48	WG1454414
Sulfate	3290	J	77.4	5000	1	04/02/2020 14:48	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3410		102	1000	1	04/03/2020 17:07	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	20700		15.0	100	1	04/02/2020 22:14	WG1454310
Manganese	569		0.250	5.00	1	04/02/2020 22:14	WG1454310

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/03/2020 17:00	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.5*			*78.0-120*		*04/03/2020 17:00*	WG1454847

Sample Narrative:

L1204945-01 WG1454847: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	621		0.287	0.678	1	04/03/2020 10:27	WG1454571
Ethane	2.24		0.296	1.29	1	04/03/2020 10:27	WG1454571
Ethene	U		0.422	1.27	1	04/03/2020 10:27	WG1454571

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	5.85	J	1.05	25.0	1	04/05/2020 21:13	WG1455710
Acrylonitrile	U		0.873	5.00	1	04/05/2020 21:13	WG1455710
Benzene	U		0.0896	0.500	1	04/05/2020 21:13	WG1455710
Bromobenzene	U		0.133	0.500	1	04/05/2020 21:13	WG1455710
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 21:13	WG1455710
Bromochloromethane	U		0.145	0.500	1	04/05/2020 21:13	WG1455710
Bromoform	U	J0	0.186	0.500	1	04/05/2020 21:13	WG1455710
Bromomethane	U	J0	0.157	2.50	1	04/05/2020 21:13	WG1455710
n-Butylbenzene	U		0.143	0.500	1	04/05/2020 21:13	WG1455710
sec-Butylbenzene	U		0.134	0.500	1	04/05/2020 21:13	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 21:13	WG1455710
Carbon disulfide	U		0.101	0.500	1	04/05/2020 21:13	WG1455710
Carbon tetrachloride	U		0.159	0.500	1	04/05/2020 21:13	WG1455710
Chlorobenzene	U		0.140	0.500	1	04/05/2020 21:13	WG1455710
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 21:13	WG1455710
Chloroethane	U		0.141	2.50	1	04/05/2020 21:13	WG1455710
Chloroform	U		0.0860	0.500	1	04/05/2020 21:13	WG1455710
Chloromethane	U	J0	0.153	1.25	1	04/05/2020 21:13	WG1455710
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 21:13	WG1455710
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 21:13	WG1455710
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	04/05/2020 21:13	WG1455710
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 21:13	WG1455710
Dibromomethane	U		0.117	0.500	1	04/05/2020 21:13	WG1455710
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 21:13	WG1455710
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 21:13	WG1455710
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 21:13	WG1455710
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 21:13	WG1455710
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 21:13	WG1455710
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 21:13	WG1455710
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2020 21:13	WG1455710
cis-1,2-Dichloroethene	2.09		0.0933	0.500	1	04/05/2020 21:13	WG1455710
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2020 21:13	WG1455710
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 21:13	WG1455710
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 21:13	WG1455710
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 21:13	WG1455710
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 21:13	WG1455710
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 21:13	WG1455710
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	04/05/2020 21:13	WG1455710
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 21:13	WG1455710
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 21:13	WG1455710
Ethylbenzene	U		0.158	0.500	1	04/05/2020 21:13	WG1455710
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 21:13	WG1455710
2-Hexanone	U		0.757	5.00	1	04/05/2020 21:13	WG1455710
n-Hexane	U		0.305	5.00	1	04/05/2020 21:13	WG1455710
Iodomethane	U	J0	0.377	10.0	1	04/05/2020 21:13	WG1455710
Isopropylbenzene	U		0.126	0.500	1	04/05/2020 21:13	WG1455710
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2020 21:13	WG1455710
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 21:13	WG1455710
Methylene Chloride	U		1.07	2.50	1	04/05/2020 21:13	WG1455710
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 21:13	WG1455710
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 21:13	WG1455710
Naphthalene	U	J0	0.174	2.50	1	04/05/2020 21:13	WG1455710
n-Propylbenzene	U		0.162	0.500	1	04/05/2020 21:13	WG1455710
Styrene	U		0.117	0.500	1	04/05/2020 21:13	WG1455710
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 21:13	WG1455710
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 21:13	WG1455710
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 21:13	WG1455710
Tetrachloroethene	U		0.199	0.500	1	04/05/2020 21:13	WG1455710
Toluene	U		0.412	0.500	1	04/05/2020 21:13	WG1455710
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	04/05/2020 21:13	WG1455710
1,2,4-Trichlorobenzene	U	J0	0.355	0.500	1	04/05/2020 21:13	WG1455710
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 21:13	WG1455710
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 21:13	WG1455710
Trichloroethene	3.18		0.153	0.500	1	04/05/2020 21:13	WG1455710
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 21:13	WG1455710
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 21:13	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2020 21:13	WG1455710
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2020 21:13	WG1455710
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2020 21:13	WG1455710
Vinyl acetate	U	J0	0.645	5.00	1	04/05/2020 21:13	WG1455710
Vinyl chloride	U		0.118	0.500	1	04/05/2020 21:13	WG1455710
Xylenes, Total	U		0.316	1.50	1	04/05/2020 21:13	WG1455710
(S) Toluene-d8	*97.3*			*80.0-120*		*04/05/2020 21:13*	WG1455710
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*04/05/2020 21:13*	WG1455710
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/05/2020 21:13*	WG1455710

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	553000		2710	20000	1	04/06/2020 02:47	WG1455529

Sample Narrative:
L1204945-02 WG1455529: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	185000		260	5000	5	04/02/2020 15:41	WG1454414
Nitrate	27.4	J	22.7	100	1	04/02/2020 20:32	WG1454414
Sulfate	337	B J	77.4	5000	1	04/02/2020 20:32	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	22400		102	1000	1	04/03/2020 18:20	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	9120		15.0	100	1	04/02/2020 22:18	WG1454310
Manganese	1450		0.250	5.00	1	04/02/2020 22:18	WG1454310

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	12200		790	2500	25	04/03/2020 20:56	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.6*			*78.0-120*		*04/03/2020 20:56*	WG1454847

Sample Narrative:
L1204945-02 WG1454847: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	17700		2.87	6.78	10	04/03/2020 12:23	WG1454997
Ethane	24.3		0.296	1.29	1	04/03/2020 10:30	WG1454571
Ethene	2620		0.422	1.27	1	04/03/2020 10:30	WG1454571

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	647	J	525	12500	500	04/05/2020 23:12	WG1455710
Acrylonitrile	U		437	2500	500	04/05/2020 23:12	WG1455710
Benzene	U		44.8	250	500	04/05/2020 23:12	WG1455710
Bromobenzene	U		66.5	250	500	04/05/2020 23:12	WG1455710
Bromodichloromethane	U		40.0	250	500	04/05/2020 23:12	WG1455710
Bromochloromethane	U		72.5	250	500	04/05/2020 23:12	WG1455710
Bromoform	U	J0	93.0	250	500	04/05/2020 23:12	WG1455710
Bromomethane	U	J0	78.5	1250	500	04/05/2020 23:12	WG1455710
n-Butylbenzene	U		71.5	250	500	04/05/2020 23:12	WG1455710
sec-Butylbenzene	U		67.0	250	500	04/05/2020 23:12	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		91.5	250	500	04/05/2020 23:12	WG1455710
Carbon disulfide	U		50.5	250	500	04/05/2020 23:12	WG1455710
Carbon tetrachloride	U		79.5	250	500	04/05/2020 23:12	WG1455710
Chlorobenzene	U		70.0	250	500	04/05/2020 23:12	WG1455710
Chlorodibromomethane	U		64.0	250	500	04/05/2020 23:12	WG1455710
Chloroethane	U		70.5	1250	500	04/05/2020 23:12	WG1455710
Chloroform	U		43.0	250	500	04/05/2020 23:12	WG1455710
Chloromethane	U	J0	76.5	625	500	04/05/2020 23:12	WG1455710
2-Chlorotoluene	U		55.5	250	500	04/05/2020 23:12	WG1455710
4-Chlorotoluene	U		48.6	250	500	04/05/2020 23:12	WG1455710
1,2-Dibromo-3-Chloropropane	U	J0	163	1250	500	04/05/2020 23:12	WG1455710
1,2-Dibromoethane	U		96.5	250	500	04/05/2020 23:12	WG1455710
Dibromomethane	U		58.5	250	500	04/05/2020 23:12	WG1455710
1,2-Dichlorobenzene	U		50.5	250	500	04/05/2020 23:12	WG1455710
1,3-Dichlorobenzene	U		65.0	250	500	04/05/2020 23:12	WG1455710
1,4-Dichlorobenzene	U		60.5	250	500	04/05/2020 23:12	WG1455710
Dichlorodifluoromethane	U		63.5	1250	500	04/05/2020 23:12	WG1455710
1,1-Dichloroethane	U		57.0	250	500	04/05/2020 23:12	WG1455710
1,2-Dichloroethane	U		54.0	250	500	04/05/2020 23:12	WG1455710
1,1-Dichloroethene	U		94.0	250	500	04/05/2020 23:12	WG1455710
cis-1,2-Dichloroethene	24300		46.7	250	500	04/05/2020 23:12	WG1455710
trans-1,2-Dichloroethene	120	J	76.0	250	500	04/05/2020 23:12	WG1455710
1,2-Dichloropropane	U		95.0	250	500	04/05/2020 23:12	WG1455710
1,1-Dichloropropene	U		64.0	250	500	04/05/2020 23:12	WG1455710
1,3-Dichloropropane	U		73.5	500	500	04/05/2020 23:12	WG1455710
cis-1,3-Dichloropropene	U		48.8	250	500	04/05/2020 23:12	WG1455710
trans-1,3-Dichloropropene	U		111	250	500	04/05/2020 23:12	WG1455710
trans-1,4-Dichloro-2-butene	U	J0	129	2500	500	04/05/2020 23:12	WG1455710
2,2-Dichloropropane	U		46.5	250	500	04/05/2020 23:12	WG1455710
Di-isopropyl ether	U		46.2	250	500	04/05/2020 23:12	WG1455710
Ethylbenzene	U		79.0	250	500	04/05/2020 23:12	WG1455710
Hexachloro-1,3-butadiene	U		78.5	500	500	04/05/2020 23:12	WG1455710
2-Hexanone	U		379	2500	500	04/05/2020 23:12	WG1455710
n-Hexane	U		153	2500	500	04/05/2020 23:12	WG1455710
Iodomethane	U	J0	189	5000	500	04/05/2020 23:12	WG1455710
Isopropylbenzene	U		63.0	250	500	04/05/2020 23:12	WG1455710
p-Isopropyltoluene	U		69.0	250	500	04/05/2020 23:12	WG1455710
2-Butanone (MEK)	U		640	2500	500	04/05/2020 23:12	WG1455710
Methylene Chloride	U		535	1250	500	04/05/2020 23:12	WG1455710
4-Methyl-2-pentanone (MIBK)	U		412	2500	500	04/05/2020 23:12	WG1455710
Methyl tert-butyl ether	U		51.0	250	500	04/05/2020 23:12	WG1455710
Naphthalene	U	J0	87.0	1250	500	04/05/2020 23:12	WG1455710
n-Propylbenzene	U		81.0	250	500	04/05/2020 23:12	WG1455710
Styrene	U		58.5	250	500	04/05/2020 23:12	WG1455710
1,1,1,2-Tetrachloroethane	U		60.0	250	500	04/05/2020 23:12	WG1455710
1,1,2,2-Tetrachloroethane	U		65.0	250	500	04/05/2020 23:12	WG1455710
1,1,2-Trichlorotrifluoroethane	U		82.0	250	500	04/05/2020 23:12	WG1455710
Tetrachloroethene	U		99.5	250	500	04/05/2020 23:12	WG1455710
Toluene	U		206	250	500	04/05/2020 23:12	WG1455710
1,2,3-Trichlorobenzene	U	J0	82.0	250	500	04/05/2020 23:12	WG1455710
1,2,4-Trichlorobenzene	U	J0	178	250	500	04/05/2020 23:12	WG1455710
1,1,1-Trichloroethane	U		47.0	250	500	04/05/2020 23:12	WG1455710
1,1,2-Trichloroethane	U		93.0	250	500	04/05/2020 23:12	WG1455710
Trichloroethene	U		76.5	250	500	04/05/2020 23:12	WG1455710
Trichlorofluoromethane	U		65.0	1250	500	04/05/2020 23:12	WG1455710
1,2,3-Trichloropropane	U		123	1250	500	04/05/2020 23:12	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trimethylbenzene	U		61.5	250	500	04/05/2020 23:12	WG1455710
1,2,3-Trimethylbenzene	U		36.9	250	500	04/05/2020 23:12	WG1455710
1,3,5-Trimethylbenzene	U		62.0	250	500	04/05/2020 23:12	WG1455710
Vinyl acetate	U	J0	322	2500	500	04/05/2020 23:12	WG1455710
Vinyl chloride	10000		59.0	250	500	04/05/2020 23:12	WG1455710
Xylenes, Total	U		158	750	500	04/05/2020 23:12	WG1455710
(S) Toluene-d8	*99.7*			*80.0-120*		*04/05/2020 23:12*	WG1455710
(S) 4-Bromofluorobenzene	*99.5*			*77.0-126*		*04/05/2020 23:12*	WG1455710
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/05/2020 23:12*	WG1455710

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	588000		2710	20000	1	04/06/2020 02:54	WG1455529

Sample Narrative:
L1204945-03 WG1455529: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	282000		260	5000	5	04/02/2020 15:54	WG1454414
Nitrate	U		22.7	100	1	04/02/2020 20:45	WG1454414
Sulfate	60700		77.4	5000	1	04/02/2020 20:45	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	26700		102	1000	1	04/03/2020 18:35	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	19800		15.0	100	1	04/02/2020 22:21	WG1454310
Manganese	3210		0.250	5.00	1	04/02/2020 22:21	WG1454310

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	77100		1580	5000	50	04/03/2020 21:18	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*78.0-120*		*04/03/2020 21:18*	WG1454847

Sample Narrative:
L1204945-03 WG1454847: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	21300		2.87	6.78	10	04/03/2020 12:26	WG1454997
Ethane	122		0.296	1.29	1	04/03/2020 10:37	WG1454571
Ethene	2410		0.422	1.27	1	04/03/2020 10:37	WG1454571

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	5380	J	5250	125000	5000	04/05/2020 23:32	WG1455710
Acrylonitrile	U		4370	25000	5000	04/05/2020 23:32	WG1455710
Benzene	U		448	2500	5000	04/05/2020 23:32	WG1455710
Bromobenzene	U		665	2500	5000	04/05/2020 23:32	WG1455710
Bromodichloromethane	U		400	2500	5000	04/05/2020 23:32	WG1455710
Bromochloromethane	U		725	2500	5000	04/05/2020 23:32	WG1455710
Bromoform	U	J0	930	2500	5000	04/05/2020 23:32	WG1455710
Bromomethane	U	J0	785	12500	5000	04/05/2020 23:32	WG1455710
n-Butylbenzene	U		715	2500	5000	04/05/2020 23:32	WG1455710
sec-Butylbenzene	U		670	2500	5000	04/05/2020 23:32	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		915	2500	5000	04/05/2020 23:32	WG1455710
Carbon disulfide	U		505	2500	5000	04/05/2020 23:32	WG1455710
Carbon tetrachloride	U		795	2500	5000	04/05/2020 23:32	WG1455710
Chlorobenzene	U		700	2500	5000	04/05/2020 23:32	WG1455710
Chlorodibromomethane	U		640	2500	5000	04/05/2020 23:32	WG1455710
Chloroethane	U		705	12500	5000	04/05/2020 23:32	WG1455710
Chloroform	U		430	2500	5000	04/05/2020 23:32	WG1455710
Chloromethane	U	J0	765	6250	5000	04/05/2020 23:32	WG1455710
2-Chlorotoluene	U		555	2500	5000	04/05/2020 23:32	WG1455710
4-Chlorotoluene	U		486	2500	5000	04/05/2020 23:32	WG1455710
1,2-Dibromo-3-Chloropropane	U	J0	1630	12500	5000	04/05/2020 23:32	WG1455710
1,2-Dibromoethane	U		965	2500	5000	04/05/2020 23:32	WG1455710
Dibromomethane	U		585	2500	5000	04/05/2020 23:32	WG1455710
1,2-Dichlorobenzene	U		505	2500	5000	04/05/2020 23:32	WG1455710
1,3-Dichlorobenzene	U		650	2500	5000	04/05/2020 23:32	WG1455710
1,4-Dichlorobenzene	U		605	2500	5000	04/05/2020 23:32	WG1455710
Dichlorodifluoromethane	U		635	12500	5000	04/05/2020 23:32	WG1455710
1,1-Dichloroethane	U		570	2500	5000	04/05/2020 23:32	WG1455710
1,2-Dichloroethane	U		540	2500	5000	04/05/2020 23:32	WG1455710
1,1-Dichloroethene	U		940	2500	5000	04/05/2020 23:32	WG1455710
cis-1,2-Dichloroethene	123000		467	2500	5000	04/05/2020 23:32	WG1455710
trans-1,2-Dichloroethene	U		760	2500	5000	04/05/2020 23:32	WG1455710
1,2-Dichloropropane	U		950	2500	5000	04/05/2020 23:32	WG1455710
1,1-Dichloropropene	U		640	2500	5000	04/05/2020 23:32	WG1455710
1,3-Dichloropropane	U		735	5000	5000	04/05/2020 23:32	WG1455710
cis-1,3-Dichloropropene	U		488	2500	5000	04/05/2020 23:32	WG1455710
trans-1,3-Dichloropropene	U		1110	2500	5000	04/05/2020 23:32	WG1455710
trans-1,4-Dichloro-2-butene	U	J0	1290	25000	5000	04/05/2020 23:32	WG1455710
2,2-Dichloropropane	U		465	2500	5000	04/05/2020 23:32	WG1455710
Di-isopropyl ether	U		462	2500	5000	04/05/2020 23:32	WG1455710
Ethylbenzene	U		790	2500	5000	04/05/2020 23:32	WG1455710
Hexachloro-1,3-butadiene	U		785	5000	5000	04/05/2020 23:32	WG1455710
2-Hexanone	U		3780	25000	5000	04/05/2020 23:32	WG1455710
n-Hexane	U		1530	25000	5000	04/05/2020 23:32	WG1455710
Iodomethane	U	J0	1890	50000	5000	04/05/2020 23:32	WG1455710
Isopropylbenzene	U		630	2500	5000	04/05/2020 23:32	WG1455710
p-Isopropyltoluene	U		690	2500	5000	04/05/2020 23:32	WG1455710
2-Butanone (MEK)	U		6400	25000	5000	04/05/2020 23:32	WG1455710
Methylene Chloride	U		5350	12500	5000	04/05/2020 23:32	WG1455710
4-Methyl-2-pentanone (MIBK)	U		4110	25000	5000	04/05/2020 23:32	WG1455710
Methyl tert-butyl ether	U		510	2500	5000	04/05/2020 23:32	WG1455710
Naphthalene	U	J0	870	12500	5000	04/05/2020 23:32	WG1455710
n-Propylbenzene	U		810	2500	5000	04/05/2020 23:32	WG1455710
Styrene	U		585	2500	5000	04/05/2020 23:32	WG1455710
1,1,1,2-Tetrachloroethane	U		600	2500	5000	04/05/2020 23:32	WG1455710
1,1,2,2-Tetrachloroethane	U		650	2500	5000	04/05/2020 23:32	WG1455710
1,1,2-Trichlorotrifluoroethane	U		820	2500	5000	04/05/2020 23:32	WG1455710
Tetrachloroethene	27900		995	2500	5000	04/05/2020 23:32	WG1455710
Toluene	U		2060	2500	5000	04/05/2020 23:32	WG1455710
1,2,3-Trichlorobenzene	U	J0	820	2500	5000	04/05/2020 23:32	WG1455710
1,2,4-Trichlorobenzene	U	J0	1780	2500	5000	04/05/2020 23:32	WG1455710
1,1,1-Trichloroethane	U		470	2500	5000	04/05/2020 23:32	WG1455710
1,1,2-Trichloroethane	U		930	2500	5000	04/05/2020 23:32	WG1455710
Trichloroethene	6980		765	2500	5000	04/05/2020 23:32	WG1455710
Trichlorofluoromethane	U		650	12500	5000	04/05/2020 23:32	WG1455710
1,2,3-Trichloropropane	U		1230	12500	5000	04/05/2020 23:32	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trimethylbenzene	U		615	2500	5000	04/05/2020 23:32	WG1455710
1,2,3-Trimethylbenzene	U		370	2500	5000	04/05/2020 23:32	WG1455710
1,3,5-Trimethylbenzene	U		620	2500	5000	04/05/2020 23:32	WG1455710
Vinyl acetate	U	J0	3220	25000	5000	04/05/2020 23:32	WG1455710
Vinyl chloride	9860		590	2500	5000	04/05/2020 23:32	WG1455710
Xylenes, Total	U		1580	7500	5000	04/05/2020 23:32	WG1455710
(S) Toluene-d8	*100*			*80.0-120*		*04/05/2020 23:32*	WG1455710
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*04/05/2020 23:32*	WG1455710
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*04/05/2020 23:32*	WG1455710

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	152000		2710	20000	1	04/06/2020 03:01	WG1455529

Sample Narrative:

L1204945-04 WG1455529: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	8680		51.9	1000	1	04/02/2020 16:07	WG1454414
Nitrate	27.7	J	22.7	100	1	04/02/2020 16:07	WG1454414
Sulfate	6060		77.4	5000	1	04/02/2020 16:07	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1520	B	102	1000	1	04/03/2020 18:47	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4900		15.0	100	1	04/02/2020 22:25	WG1454310
Manganese	364		0.250	5.00	1	04/02/2020 22:25	WG1454310

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	212	B	31.6	100	1	04/03/2020 17:21	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.5*			*78.0-120*		*04/03/2020 17:21*	WG1454847

Sample Narrative:

L1204945-04 WG1454847: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	9.82		0.287	0.678	1	04/03/2020 10:44	WG1454571
Ethane	U		0.296	1.29	1	04/03/2020 10:44	WG1454571
Ethene	5.11		0.422	1.27	1	04/03/2020 10:44	WG1454571

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	10.5	250	10	04/06/2020 13:45	WG1456142
Acrylonitrile	U	J4	8.73	50.0	10	04/06/2020 13:45	WG1456142
Benzene	U		0.896	5.00	10	04/06/2020 13:45	WG1456142
Bromobenzene	U		1.33	5.00	10	04/06/2020 13:45	WG1456142
Bromodichloromethane	U		0.800	5.00	10	04/06/2020 13:45	WG1456142
Bromochloromethane	U		1.45	5.00	10	04/06/2020 13:45	WG1456142
Bromoform	U		1.86	5.00	10	04/06/2020 13:45	WG1456142
Bromomethane	U		1.57	25.0	10	04/06/2020 13:45	WG1456142
n-Butylbenzene	U		1.43	5.00	10	04/06/2020 13:45	WG1456142
sec-Butylbenzene	U		1.34	5.00	10	04/06/2020 13:45	WG1456142

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		1.83	5.00	10	04/06/2020 13:45	WG1456142
Carbon disulfide	U		1.01	5.00	10	04/06/2020 13:45	WG1456142
Carbon tetrachloride	U		1.59	5.00	10	04/06/2020 13:45	WG1456142
Chlorobenzene	U		1.40	5.00	10	04/06/2020 13:45	WG1456142
Chlorodibromomethane	U		1.28	5.00	10	04/06/2020 13:45	WG1456142
Chloroethane	U		1.41	25.0	10	04/06/2020 13:45	WG1456142
Chloroform	U		0.860	5.00	10	04/06/2020 13:45	WG1456142
Chloromethane	U		1.53	12.5	10	04/06/2020 13:45	WG1456142
2-Chlorotoluene	U		1.11	5.00	10	04/06/2020 13:45	WG1456142
4-Chlorotoluene	U		0.972	5.00	10	04/06/2020 13:45	WG1456142
1,2-Dibromo-3-Chloropropane	U		3.25	25.0	10	04/06/2020 13:45	WG1456142
1,2-Dibromoethane	U		1.93	5.00	10	04/06/2020 13:45	WG1456142
Dibromomethane	U		1.17	5.00	10	04/06/2020 13:45	WG1456142
1,2-Dichlorobenzene	U		1.01	5.00	10	04/06/2020 13:45	WG1456142
1,3-Dichlorobenzene	U		1.30	5.00	10	04/06/2020 13:45	WG1456142
1,4-Dichlorobenzene	U		1.21	5.00	10	04/06/2020 13:45	WG1456142
Dichlorodifluoromethane	U		1.27	25.0	10	04/06/2020 13:45	WG1456142
1,1-Dichloroethane	U		1.14	5.00	10	04/06/2020 13:45	WG1456142
1,2-Dichloroethane	U		1.08	5.00	10	04/06/2020 13:45	WG1456142
1,1-Dichloroethene	U		1.88	5.00	10	04/06/2020 13:45	WG1456142
cis-1,2-Dichloroethene	370		0.933	5.00	10	04/06/2020 13:45	WG1456142
trans-1,2-Dichloroethene	U		1.52	5.00	10	04/06/2020 13:45	WG1456142
1,2-Dichloropropane	U		1.90	5.00	10	04/06/2020 13:45	WG1456142
1,1-Dichloropropene	U		1.28	5.00	10	04/06/2020 13:45	WG1456142
1,3-Dichloropropane	U		1.47	10.0	10	04/06/2020 13:45	WG1456142
cis-1,3-Dichloropropene	U		0.976	5.00	10	04/06/2020 13:45	WG1456142
trans-1,3-Dichloropropene	U		2.22	5.00	10	04/06/2020 13:45	WG1456142
trans-1,4-Dichloro-2-butene	U		2.57	50.0	10	04/06/2020 13:45	WG1456142
2,2-Dichloropropane	U		0.929	5.00	10	04/06/2020 13:45	WG1456142
Di-isopropyl ether	U		0.924	5.00	10	04/06/2020 13:45	WG1456142
Ethylbenzene	U		1.58	5.00	10	04/06/2020 13:45	WG1456142
Hexachloro-1,3-butadiene	U		1.57	10.0	10	04/06/2020 13:45	WG1456142
2-Hexanone	U		7.57	50.0	10	04/06/2020 13:45	WG1456142
n-Hexane	U	J4	3.05	50.0	10	04/06/2020 13:45	WG1456142
Iodomethane	U		3.77	100	10	04/06/2020 13:45	WG1456142
Isopropylbenzene	U		1.26	5.00	10	04/06/2020 13:45	WG1456142
p-Isopropyltoluene	U		1.38	5.00	10	04/06/2020 13:45	WG1456142
2-Butanone (MEK)	U		12.8	50.0	10	04/06/2020 13:45	WG1456142
Methylene Chloride	U		10.7	25.0	10	04/06/2020 13:45	WG1456142
4-Methyl-2-pentanone (MIBK)	U		8.23	50.0	10	04/06/2020 13:45	WG1456142
Methyl tert-butyl ether	U		1.02	5.00	10	04/06/2020 13:45	WG1456142
Naphthalene	U		1.74	25.0	10	04/06/2020 13:45	WG1456142
n-Propylbenzene	U		1.62	5.00	10	04/06/2020 13:45	WG1456142
Styrene	U		1.17	5.00	10	04/06/2020 13:45	WG1456142
1,1,1,2-Tetrachloroethane	U		1.20	5.00	10	04/06/2020 13:45	WG1456142
1,1,2,2-Tetrachloroethane	U		1.30	5.00	10	04/06/2020 13:45	WG1456142
1,1,2-Trichlorotrifluoroethane	U		1.64	5.00	10	04/06/2020 13:45	WG1456142
Tetrachloroethene	U		1.99	5.00	10	04/06/2020 13:45	WG1456142
Toluene	U		4.12	5.00	10	04/06/2020 13:45	WG1456142
1,2,3-Trichlorobenzene	U		1.64	5.00	10	04/06/2020 13:45	WG1456142
1,2,4-Trichlorobenzene	U		3.55	5.00	10	04/06/2020 13:45	WG1456142
1,1,1-Trichloroethane	U		0.940	5.00	10	04/06/2020 13:45	WG1456142
1,1,2-Trichloroethane	U		1.86	5.00	10	04/06/2020 13:45	WG1456142
Trichloroethene	U		1.53	5.00	10	04/06/2020 13:45	WG1456142
Trichlorofluoromethane	U		1.30	25.0	10	04/06/2020 13:45	WG1456142
1,2,3-Trichloropropane	U		2.47	25.0	10	04/06/2020 13:45	WG1456142

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trimethylbenzene	U		1.23	5.00	10	04/06/2020 13:45	WG1456142
1,2,3-Trimethylbenzene	U		0.739	5.00	10	04/06/2020 13:45	WG1456142
1,3,5-Trimethylbenzene	U		1.24	5.00	10	04/06/2020 13:45	WG1456142
Vinyl acetate	U		6.45	50.0	10	04/06/2020 13:45	WG1456142
Vinyl chloride	U		1.18	5.00	10	04/06/2020 13:45	WG1456142
Xylenes, Total	U		3.16	15.0	10	04/06/2020 13:45	WG1456142
(S) Toluene-d8	*110*			*80.0-120*		*04/06/2020 13:45*	WG1456142
(S) 4-Bromofluorobenzene	*93.6*			*77.0-126*		*04/06/2020 13:45*	WG1456142
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/06/2020 13:45*	WG1456142

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	1140000		2710	20000	1	04/06/2020 22:51	WG1455985

Sample Narrative:

L1204945-05 WG1455985: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	82400		51.9	1000	1	04/02/2020 16:20	WG1454414
Nitrate	26.3	J	22.7	100	1	04/02/2020 16:20	WG1454414
Sulfate	280	B J	77.4	5000	1	04/02/2020 16:20	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	33700		204	2000	2	04/03/2020 19:01	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	16000		15.0	100	1	04/03/2020 11:42	WG1454757
Manganese	3300		0.250	5.00	1	04/03/2020 11:42	WG1454757

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/03/2020 17:43	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.5*			*78.0-120*		*04/03/2020 17:43*	WG1454847

Sample Narrative:

L1204945-05 WG1454847: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	22800		2.87	6.78	10	04/03/2020 12:28	WG1454997
Ethane	79.6		0.296	1.29	1	04/03/2020 10:47	WG1454571
Ethene	U		0.422	1.27	1	04/03/2020 10:47	WG1454571

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/05/2020 21:33	WG1455710
Acrylonitrile	U		0.873	5.00	1	04/05/2020 21:33	WG1455710
Benzene	U		0.0896	0.500	1	04/05/2020 21:33	WG1455710
Bromobenzene	U		0.133	0.500	1	04/05/2020 21:33	WG1455710
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 21:33	WG1455710
Bromochloromethane	U		0.145	0.500	1	04/05/2020 21:33	WG1455710
Bromoform	U	J0	0.186	0.500	1	04/05/2020 21:33	WG1455710
Bromomethane	U	J0	0.157	2.50	1	04/05/2020 21:33	WG1455710
n-Butylbenzene	U		0.143	0.500	1	04/05/2020 21:33	WG1455710
sec-Butylbenzene	U		0.134	0.500	1	04/05/2020 21:33	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 21:33	WG1455710
Carbon disulfide	U		0.101	0.500	1	04/05/2020 21:33	WG1455710
Carbon tetrachloride	U		0.159	0.500	1	04/05/2020 21:33	WG1455710
Chlorobenzene	U		0.140	0.500	1	04/05/2020 21:33	WG1455710
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 21:33	WG1455710
Chloroethane	U		0.141	2.50	1	04/05/2020 21:33	WG1455710
Chloroform	U		0.0860	0.500	1	04/05/2020 21:33	WG1455710
Chloromethane	U	J0	0.153	1.25	1	04/05/2020 21:33	WG1455710
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 21:33	WG1455710
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 21:33	WG1455710
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	04/05/2020 21:33	WG1455710
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 21:33	WG1455710
Dibromomethane	U		0.117	0.500	1	04/05/2020 21:33	WG1455710
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 21:33	WG1455710
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 21:33	WG1455710
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 21:33	WG1455710
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 21:33	WG1455710
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 21:33	WG1455710
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 21:33	WG1455710
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2020 21:33	WG1455710
cis-1,2-Dichloroethene	1.44		0.0933	0.500	1	04/05/2020 21:33	WG1455710
trans-1,2-Dichloroethene	0.166	J	0.152	0.500	1	04/05/2020 21:33	WG1455710
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 21:33	WG1455710
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 21:33	WG1455710
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 21:33	WG1455710
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 21:33	WG1455710
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 21:33	WG1455710
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	04/05/2020 21:33	WG1455710
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 21:33	WG1455710
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 21:33	WG1455710
Ethylbenzene	U		0.158	0.500	1	04/05/2020 21:33	WG1455710
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 21:33	WG1455710
2-Hexanone	U		0.757	5.00	1	04/05/2020 21:33	WG1455710
n-Hexane	U		0.305	5.00	1	04/05/2020 21:33	WG1455710
Iodomethane	U	J0	0.377	10.0	1	04/05/2020 21:33	WG1455710
Isopropylbenzene	U		0.126	0.500	1	04/05/2020 21:33	WG1455710
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2020 21:33	WG1455710
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 21:33	WG1455710
Methylene Chloride	U		1.07	2.50	1	04/05/2020 21:33	WG1455710
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 21:33	WG1455710
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 21:33	WG1455710
Naphthalene	U	J0	0.174	2.50	1	04/05/2020 21:33	WG1455710
n-Propylbenzene	U		0.162	0.500	1	04/05/2020 21:33	WG1455710
Styrene	U		0.117	0.500	1	04/05/2020 21:33	WG1455710
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 21:33	WG1455710
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 21:33	WG1455710
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 21:33	WG1455710
Tetrachloroethene	U		0.199	0.500	1	04/05/2020 21:33	WG1455710
Toluene	2.51		0.412	0.500	1	04/05/2020 21:33	WG1455710
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	04/05/2020 21:33	WG1455710
1,2,4-Trichlorobenzene	U	J0	0.355	0.500	1	04/05/2020 21:33	WG1455710
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 21:33	WG1455710
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 21:33	WG1455710
Trichloroethene	U		0.153	0.500	1	04/05/2020 21:33	WG1455710
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 21:33	WG1455710
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 21:33	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2020 21:33	WG1455710
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2020 21:33	WG1455710
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2020 21:33	WG1455710
Vinyl acetate	U	J0	0.645	5.00	1	04/05/2020 21:33	WG1455710
Vinyl chloride	1.42		0.118	0.500	1	04/05/2020 21:33	WG1455710
Xylenes, Total	U		0.316	1.50	1	04/05/2020 21:33	WG1455710
(S) Toluene-d8	*99.1*			*80.0-120*		*04/05/2020 21:33*	WG1455710
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*04/05/2020 21:33*	WG1455710
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/05/2020 21:33*	WG1455710

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	489000		2710	20000	1	04/06/2020 03:24	WG1455529

Sample Narrative:

L1204945-06 WG1455529: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	34600		51.9	1000	1	04/02/2020 16:33	WG1454414
Nitrate	28.7	J	22.7	100	1	04/02/2020 16:33	WG1454414
Sulfate	68300		77.4	5000	1	04/02/2020 16:33	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	40900		102	1000	1	04/03/2020 19:29	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	19600		15.0	100	1	04/03/2020 11:46	WG1454757
Manganese	5000		0.250	5.00	1	04/03/2020 11:46	WG1454757

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	69.1	B J	31.6	100	1	04/03/2020 18:04	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.4*			*78.0-120*		*04/03/2020 18:04*	WG1454847

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	12700		2.87	6.78	10	04/03/2020 12:31	WG1454997
Ethane	2.65		0.296	1.29	1	04/03/2020 10:59	WG1454571
Ethene	U		0.422	1.27	1	04/03/2020 10:59	WG1454571

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	9.35	J	5.25	125	5	04/06/2020 00:12	WG1455710
Acrylonitrile	U		4.37	25.0	5	04/06/2020 00:12	WG1455710
Benzene	U		0.448	2.50	5	04/06/2020 00:12	WG1455710
Bromobenzene	U		0.665	2.50	5	04/06/2020 00:12	WG1455710
Bromodichloromethane	U		0.400	2.50	5	04/06/2020 00:12	WG1455710
Bromochloromethane	U		0.725	2.50	5	04/06/2020 00:12	WG1455710
Bromoform	U	J0	0.930	2.50	5	04/06/2020 00:12	WG1455710
Bromomethane	U	J0	0.785	12.5	5	04/06/2020 00:12	WG1455710
n-Butylbenzene	U		0.715	2.50	5	04/06/2020 00:12	WG1455710
sec-Butylbenzene	U		0.670	2.50	5	04/06/2020 00:12	WG1455710
tert-Butylbenzene	U		0.915	2.50	5	04/06/2020 00:12	WG1455710
Carbon disulfide	U		0.505	2.50	5	04/06/2020 00:12	WG1455710
Carbon tetrachloride	U		0.795	2.50	5	04/06/2020 00:12	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.700	2.50	5	04/06/2020 00:12	WG1455710
Chlorodibromomethane	U		0.640	2.50	5	04/06/2020 00:12	WG1455710
Chloroethane	U		0.705	12.5	5	04/06/2020 00:12	WG1455710
Chloroform	U		0.430	2.50	5	04/06/2020 00:12	WG1455710
Chloromethane	U	J0	0.765	6.25	5	04/06/2020 00:12	WG1455710
2-Chlorotoluene	U		0.555	2.50	5	04/06/2020 00:12	WG1455710
4-Chlorotoluene	U		0.486	2.50	5	04/06/2020 00:12	WG1455710
1,2-Dibromo-3-Chloropropane	U	J0	1.63	12.5	5	04/06/2020 00:12	WG1455710
1,2-Dibromoethane	U		0.965	2.50	5	04/06/2020 00:12	WG1455710
Dibromomethane	U		0.585	2.50	5	04/06/2020 00:12	WG1455710
1,2-Dichlorobenzene	U		0.505	2.50	5	04/06/2020 00:12	WG1455710
1,3-Dichlorobenzene	U		0.650	2.50	5	04/06/2020 00:12	WG1455710
1,4-Dichlorobenzene	U		0.605	2.50	5	04/06/2020 00:12	WG1455710
Dichlorodifluoromethane	U		0.635	12.5	5	04/06/2020 00:12	WG1455710
1,1-Dichloroethane	U		0.570	2.50	5	04/06/2020 00:12	WG1455710
1,2-Dichloroethane	U		0.540	2.50	5	04/06/2020 00:12	WG1455710
1,1-Dichloroethene	U		0.940	2.50	5	04/06/2020 00:12	WG1455710
cis-1,2-Dichloroethene	89.9		0.467	2.50	5	04/06/2020 00:12	WG1455710
trans-1,2-Dichloroethene	U		0.760	2.50	5	04/06/2020 00:12	WG1455710
1,2-Dichloropropane	U		0.950	2.50	5	04/06/2020 00:12	WG1455710
1,1-Dichloropropene	U		0.640	2.50	5	04/06/2020 00:12	WG1455710
1,3-Dichloropropane	U		0.735	5.00	5	04/06/2020 00:12	WG1455710
cis-1,3-Dichloropropene	U		0.488	2.50	5	04/06/2020 00:12	WG1455710
trans-1,3-Dichloropropene	U		1.11	2.50	5	04/06/2020 00:12	WG1455710
trans-1,4-Dichloro-2-butene	U	J0	1.29	25.0	5	04/06/2020 00:12	WG1455710
2,2-Dichloropropane	U		0.465	2.50	5	04/06/2020 00:12	WG1455710
Di-isopropyl ether	U		0.462	2.50	5	04/06/2020 00:12	WG1455710
Ethylbenzene	U		0.790	2.50	5	04/06/2020 00:12	WG1455710
Hexachloro-1,3-butadiene	U		0.785	5.00	5	04/06/2020 00:12	WG1455710
2-Hexanone	U		3.78	25.0	5	04/06/2020 00:12	WG1455710
n-Hexane	U		1.53	25.0	5	04/06/2020 00:12	WG1455710
Iodomethane	U	J0	1.89	50.0	5	04/06/2020 00:12	WG1455710
Isopropylbenzene	U		0.630	2.50	5	04/06/2020 00:12	WG1455710
p-Isopropyltoluene	U		0.690	2.50	5	04/06/2020 00:12	WG1455710
2-Butanone (MEK)	24.0	J	6.40	25.0	5	04/06/2020 00:12	WG1455710
Methylene Chloride	U		5.35	12.5	5	04/06/2020 00:12	WG1455710
4-Methyl-2-pentanone (MIBK)	U		4.12	25.0	5	04/06/2020 00:12	WG1455710
Methyl tert-butyl ether	U		0.510	2.50	5	04/06/2020 00:12	WG1455710
Naphthalene	U	J0	0.870	12.5	5	04/06/2020 00:12	WG1455710
n-Propylbenzene	U		0.810	2.50	5	04/06/2020 00:12	WG1455710
Styrene	U		0.585	2.50	5	04/06/2020 00:12	WG1455710
1,1,1,2-Tetrachloroethane	U		0.600	2.50	5	04/06/2020 00:12	WG1455710
1,1,2,2-Tetrachloroethane	U		0.650	2.50	5	04/06/2020 00:12	WG1455710
1,1,2-Trichlorotrifluoroethane	U		0.820	2.50	5	04/06/2020 00:12	WG1455710
Tetrachloroethene	U		0.995	2.50	5	04/06/2020 00:12	WG1455710
Toluene	U		2.06	2.50	5	04/06/2020 00:12	WG1455710
1,2,3-Trichlorobenzene	U	J0	0.820	2.50	5	04/06/2020 00:12	WG1455710
1,2,4-Trichlorobenzene	U	J0	1.78	2.50	5	04/06/2020 00:12	WG1455710
1,1,1-Trichloroethane	U		0.470	2.50	5	04/06/2020 00:12	WG1455710
1,1,2-Trichloroethane	U		0.930	2.50	5	04/06/2020 00:12	WG1455710
Trichloroethene	U		0.765	2.50	5	04/06/2020 00:12	WG1455710
Trichlorofluoromethane	U		0.650	12.5	5	04/06/2020 00:12	WG1455710
1,2,3-Trichloropropane	U		1.23	12.5	5	04/06/2020 00:12	WG1455710
1,2,4-Trimethylbenzene	U		0.615	2.50	5	04/06/2020 00:12	WG1455710
1,2,3-Trimethylbenzene	U		0.369	2.50	5	04/06/2020 00:12	WG1455710
1,3,5-Trimethylbenzene	U		0.620	2.50	5	04/06/2020 00:12	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	J0	3.22	25.0	5	04/06/2020 00:12	WG1455710
Vinyl chloride	22.9		0.590	2.50	5	04/06/2020 00:12	WG1455710
Xylenes, Total	U		1.58	7.50	5	04/06/2020 00:12	WG1455710
(S) Toluene-d8	*98.4*			*80.0-120*		*04/06/2020 00:12*	WG1455710
(S) 4-Bromofluorobenzene	*99.2*			*77.0-126*		*04/06/2020 00:12*	WG1455710
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*04/06/2020 00:12*	WG1455710

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	1290000		2710	20000	1	04/06/2020 23:00	WG1455985

Sample Narrative:

L1204945-07 WG1455985: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	137000		519	10000	10	04/02/2020 21:11	WG1454414
Nitrate	U		22.7	100	1	04/02/2020 20:58	WG1454414
Sulfate	22300		77.4	5000	1	04/02/2020 20:58	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	75700		102	1000	1	04/03/2020 19:45	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	61400		15.0	100	1	04/03/2020 11:49	WG1454757
Manganese	6800		0.250	5.00	1	04/03/2020 11:49	WG1454757

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	1760		31.6	100	1	04/03/2020 18:26	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*78.0-120*		*04/03/2020 18:26*	WG1454847

Sample Narrative:

L1204945-07 WG1454847: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	16800		2.87	6.78	10	04/03/2020 12:35	WG1454997
Ethane	337		0.296	1.29	1	04/03/2020 11:03	WG1454571
Ethene	2400		0.422	1.27	1	04/03/2020 11:03	WG1454571

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	52.5	1250	50	04/06/2020 14:04	WG1456142
Acrylonitrile	U	J4	43.7	250	50	04/06/2020 14:04	WG1456142
Benzene	U		4.48	25.0	50	04/06/2020 14:04	WG1456142
Bromobenzene	U		6.65	25.0	50	04/06/2020 14:04	WG1456142
Bromodichloromethane	U		4.00	25.0	50	04/06/2020 14:04	WG1456142
Bromochloromethane	U		7.25	25.0	50	04/06/2020 14:04	WG1456142
Bromoform	U		9.30	25.0	50	04/06/2020 14:04	WG1456142
Bromomethane	U		7.85	125	50	04/06/2020 14:04	WG1456142
n-Butylbenzene	U		7.15	25.0	50	04/06/2020 14:04	WG1456142
sec-Butylbenzene	U		6.70	25.0	50	04/06/2020 14:04	WG1456142

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		9.15	25.0	50	04/06/2020 14:04	WG1456142
Carbon disulfide	U		5.05	25.0	50	04/06/2020 14:04	WG1456142
Carbon tetrachloride	U		7.95	25.0	50	04/06/2020 14:04	WG1456142
Chlorobenzene	U		7.00	25.0	50	04/06/2020 14:04	WG1456142
Chlorodibromomethane	U		6.40	25.0	50	04/06/2020 14:04	WG1456142
Chloroethane	U		7.05	125	50	04/06/2020 14:04	WG1456142
Chloroform	U		4.30	25.0	50	04/06/2020 14:04	WG1456142
Chloromethane	U		7.65	62.5	50	04/06/2020 14:04	WG1456142
2-Chlorotoluene	U		5.55	25.0	50	04/06/2020 14:04	WG1456142
4-Chlorotoluene	U		4.86	25.0	50	04/06/2020 14:04	WG1456142
1,2-Dibromo-3-Chloropropane	U		16.3	125	50	04/06/2020 14:04	WG1456142
1,2-Dibromoethane	U		9.65	25.0	50	04/06/2020 14:04	WG1456142
Dibromomethane	U		5.85	25.0	50	04/06/2020 14:04	WG1456142
1,2-Dichlorobenzene	U		5.05	25.0	50	04/06/2020 14:04	WG1456142
1,3-Dichlorobenzene	U		6.50	25.0	50	04/06/2020 14:04	WG1456142
1,4-Dichlorobenzene	U		6.05	25.0	50	04/06/2020 14:04	WG1456142
Dichlorodifluoromethane	U		6.35	125	50	04/06/2020 14:04	WG1456142
1,1-Dichloroethane	U		5.70	25.0	50	04/06/2020 14:04	WG1456142
1,2-Dichloroethane	U		5.40	25.0	50	04/06/2020 14:04	WG1456142
1,1-Dichloroethene	U		9.40	25.0	50	04/06/2020 14:04	WG1456142
cis-1,2-Dichloroethene	2600		4.67	25.0	50	04/06/2020 14:04	WG1456142
trans-1,2-Dichloroethene	25.0	J	7.60	25.0	50	04/06/2020 14:04	WG1456142
1,2-Dichloropropane	U		9.50	25.0	50	04/06/2020 14:04	WG1456142
1,1-Dichloropropene	U		6.40	25.0	50	04/06/2020 14:04	WG1456142
1,3-Dichloropropane	U		7.35	50.0	50	04/06/2020 14:04	WG1456142
cis-1,3-Dichloropropene	U		4.88	25.0	50	04/06/2020 14:04	WG1456142
trans-1,3-Dichloropropene	U		11.1	25.0	50	04/06/2020 14:04	WG1456142
trans-1,4-Dichloro-2-butene	U		12.9	250	50	04/06/2020 14:04	WG1456142
2,2-Dichloropropane	U		4.65	25.0	50	04/06/2020 14:04	WG1456142
Di-isopropyl ether	U		4.62	25.0	50	04/06/2020 14:04	WG1456142
Ethylbenzene	U		7.90	25.0	50	04/06/2020 14:04	WG1456142
Hexachloro-1,3-butadiene	U		7.85	50.0	50	04/06/2020 14:04	WG1456142
2-Hexanone	U		37.9	250	50	04/06/2020 14:04	WG1456142
n-Hexane	U	J4	15.3	250	50	04/06/2020 14:04	WG1456142
Iodomethane	U		18.9	500	50	04/06/2020 14:04	WG1456142
Isopropylbenzene	U		6.30	25.0	50	04/06/2020 14:04	WG1456142
p-Isopropyltoluene	U		6.90	25.0	50	04/06/2020 14:04	WG1456142
2-Butanone (MEK)	U		64.0	250	50	04/06/2020 14:04	WG1456142
Methylene Chloride	U		53.5	125	50	04/06/2020 14:04	WG1456142
4-Methyl-2-pentanone (MIBK)	U		41.2	250	50	04/06/2020 14:04	WG1456142
Methyl tert-butyl ether	U		5.10	25.0	50	04/06/2020 14:04	WG1456142
Naphthalene	U		8.70	125	50	04/06/2020 14:04	WG1456142
n-Propylbenzene	U		8.10	25.0	50	04/06/2020 14:04	WG1456142
Styrene	U		5.85	25.0	50	04/06/2020 14:04	WG1456142
1,1,1,2-Tetrachloroethane	U		6.00	25.0	50	04/06/2020 14:04	WG1456142
1,1,2,2-Tetrachloroethane	U		6.50	25.0	50	04/06/2020 14:04	WG1456142
1,1,2-Trichlorotrifluoroethane	U		8.20	25.0	50	04/06/2020 14:04	WG1456142
Tetrachloroethene	1480		9.95	25.0	50	04/06/2020 14:04	WG1456142
Toluene	U		20.6	25.0	50	04/06/2020 14:04	WG1456142
1,2,3-Trichlorobenzene	U		8.20	25.0	50	04/06/2020 14:04	WG1456142
1,2,4-Trichlorobenzene	U		17.8	25.0	50	04/06/2020 14:04	WG1456142
1,1,1-Trichloroethane	U		4.70	25.0	50	04/06/2020 14:04	WG1456142
1,1,2-Trichloroethane	U		9.30	25.0	50	04/06/2020 14:04	WG1456142
Trichloroethene	169		7.65	25.0	50	04/06/2020 14:04	WG1456142
Trichlorofluoromethane	U		6.50	125	50	04/06/2020 14:04	WG1456142
1,2,3-Trichloropropane	U		12.3	125	50	04/06/2020 14:04	WG1456142

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trimethylbenzene	U		6.15	25.0	50	04/06/2020 14:04	WG1456142
1,2,3-Trimethylbenzene	U		3.69	25.0	50	04/06/2020 14:04	WG1456142
1,3,5-Trimethylbenzene	U		6.20	25.0	50	04/06/2020 14:04	WG1456142
Vinyl acetate	U		32.3	250	50	04/06/2020 14:04	WG1456142
Vinyl chloride	2040		5.90	25.0	50	04/06/2020 14:04	WG1456142
Xylenes, Total	U		15.8	75.0	50	04/06/2020 14:04	WG1456142
(S) Toluene-d8	*108*			*80.0-120*		*04/06/2020 14:04*	WG1456142
(S) 4-Bromofluorobenzene	*91.3*			*77.0-126*		*04/06/2020 14:04*	WG1456142
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*04/06/2020 14:04*	WG1456142

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	196000		2710	20000	1	04/06/2020 23:08	WG1455985

Sample Narrative:

L1204945-08 WG1455985: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	11600		51.9	1000	1	04/02/2020 16:59	WG1454414
Nitrate	U		22.7	100	1	04/02/2020 16:59	WG1454414
Sulfate	5720		77.4	5000	1	04/02/2020 16:59	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2750	B	102	1000	1	04/03/2020 19:57	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2760		15.0	100	1	04/03/2020 12:03	WG1454757
Manganese	393		0.250	5.00	1	04/03/2020 12:03	WG1454757

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	92.4	B J	31.6	100	1	04/03/2020 18:47	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*78.0-120*		*04/03/2020 18:47*	WG1454847

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	40.1		0.287	0.678	1	04/03/2020 11:12	WG1454571
Ethane	U		0.296	1.29	1	04/03/2020 11:12	WG1454571
Ethene	U		0.422	1.27	1	04/03/2020 11:12	WG1454571

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/05/2020 21:53	WG1455710
Acrylonitrile	U		0.873	5.00	1	04/05/2020 21:53	WG1455710
Benzene	U		0.0896	0.500	1	04/05/2020 21:53	WG1455710
Bromobenzene	U		0.133	0.500	1	04/05/2020 21:53	WG1455710
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 21:53	WG1455710
Bromochloromethane	U		0.145	0.500	1	04/05/2020 21:53	WG1455710
Bromoform	U	J0	0.186	0.500	1	04/05/2020 21:53	WG1455710
Bromomethane	U	J0	0.157	2.50	1	04/05/2020 21:53	WG1455710
n-Butylbenzene	U		0.143	0.500	1	04/05/2020 21:53	WG1455710
sec-Butylbenzene	U		0.134	0.500	1	04/05/2020 21:53	WG1455710
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 21:53	WG1455710
Carbon disulfide	U		0.101	0.500	1	04/05/2020 21:53	WG1455710
Carbon tetrachloride	U		0.159	0.500	1	04/05/2020 21:53	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/05/2020 21:53	WG1455710
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 21:53	WG1455710
Chloroethane	U		0.141	2.50	1	04/05/2020 21:53	WG1455710
Chloroform	U		0.0860	0.500	1	04/05/2020 21:53	WG1455710
Chloromethane	U	J0	0.153	1.25	1	04/05/2020 21:53	WG1455710
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 21:53	WG1455710
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 21:53	WG1455710
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	04/05/2020 21:53	WG1455710
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 21:53	WG1455710
Dibromomethane	U		0.117	0.500	1	04/05/2020 21:53	WG1455710
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 21:53	WG1455710
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 21:53	WG1455710
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 21:53	WG1455710
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 21:53	WG1455710
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 21:53	WG1455710
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 21:53	WG1455710
1,1-Dichloroethene	6.47		0.188	0.500	1	04/05/2020 21:53	WG1455710
cis-1,2-Dichloroethene	21.1		0.0933	0.500	1	04/05/2020 21:53	WG1455710
trans-1,2-Dichloroethene	2.50		0.152	0.500	1	04/05/2020 21:53	WG1455710
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 21:53	WG1455710
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 21:53	WG1455710
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 21:53	WG1455710
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 21:53	WG1455710
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 21:53	WG1455710
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	04/05/2020 21:53	WG1455710
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 21:53	WG1455710
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 21:53	WG1455710
Ethylbenzene	U		0.158	0.500	1	04/05/2020 21:53	WG1455710
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 21:53	WG1455710
2-Hexanone	U		0.757	5.00	1	04/05/2020 21:53	WG1455710
n-Hexane	U		0.305	5.00	1	04/05/2020 21:53	WG1455710
Iodomethane	U	J0	0.377	10.0	1	04/05/2020 21:53	WG1455710
Isopropylbenzene	U		0.126	0.500	1	04/05/2020 21:53	WG1455710
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2020 21:53	WG1455710
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 21:53	WG1455710
Methylene Chloride	U		1.07	2.50	1	04/05/2020 21:53	WG1455710
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 21:53	WG1455710
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 21:53	WG1455710
Naphthalene	U	J0	0.174	2.50	1	04/05/2020 21:53	WG1455710
n-Propylbenzene	U		0.162	0.500	1	04/05/2020 21:53	WG1455710
Styrene	U		0.117	0.500	1	04/05/2020 21:53	WG1455710
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 21:53	WG1455710
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 21:53	WG1455710
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 21:53	WG1455710
Tetrachloroethene	53.1		0.199	0.500	1	04/05/2020 21:53	WG1455710
Toluene	U		0.412	0.500	1	04/05/2020 21:53	WG1455710
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	04/05/2020 21:53	WG1455710
1,2,4-Trichlorobenzene	U	J0	0.355	0.500	1	04/05/2020 21:53	WG1455710
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 21:53	WG1455710
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 21:53	WG1455710
Trichloroethene	108		0.153	0.500	1	04/05/2020 21:53	WG1455710
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 21:53	WG1455710
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 21:53	WG1455710
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2020 21:53	WG1455710
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2020 21:53	WG1455710
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2020 21:53	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	J0	0.645	5.00	1	04/05/2020 21:53	WG1455710
Vinyl chloride	4.63		0.118	0.500	1	04/05/2020 21:53	WG1455710
Xylenes, Total	U		0.316	1.50	1	04/05/2020 21:53	WG1455710
(S) Toluene-d8	*99.7*			*80.0-120*		*04/05/2020 21:53*	WG1455710
(S) 4-Bromofluorobenzene	*97.9*			*77.0-126*		*04/05/2020 21:53*	WG1455710
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*04/05/2020 21:53*	WG1455710

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/05/2020 22:13	WG1455710
Acrylonitrile	U		0.873	5.00	1	04/05/2020 22:13	WG1455710
Benzene	95.1		0.0896	0.500	1	04/05/2020 22:13	WG1455710
Bromobenzene	U		0.133	0.500	1	04/05/2020 22:13	WG1455710
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 22:13	WG1455710
Bromochloromethane	U		0.145	0.500	1	04/05/2020 22:13	WG1455710
Bromoform	U	J0	0.186	0.500	1	04/05/2020 22:13	WG1455710
Bromomethane	U	J0	0.157	2.50	1	04/05/2020 22:13	WG1455710
n-Butylbenzene	3.02		0.143	0.500	1	04/05/2020 22:13	WG1455710
sec-Butylbenzene	3.00		0.134	0.500	1	04/05/2020 22:13	WG1455710
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 22:13	WG1455710
Carbon disulfide	U		0.101	0.500	1	04/05/2020 22:13	WG1455710
Carbon tetrachloride	U		0.159	0.500	1	04/05/2020 22:13	WG1455710
Chlorobenzene	U		0.140	0.500	1	04/05/2020 22:13	WG1455710
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 22:13	WG1455710
Chloroethane	U		0.141	2.50	1	04/05/2020 22:13	WG1455710
Chloroform	U		0.0860	0.500	1	04/05/2020 22:13	WG1455710
Chloromethane	U	J0	0.153	1.25	1	04/05/2020 22:13	WG1455710
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 22:13	WG1455710
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 22:13	WG1455710
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	04/05/2020 22:13	WG1455710
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 22:13	WG1455710
Dibromomethane	U		0.117	0.500	1	04/05/2020 22:13	WG1455710
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 22:13	WG1455710
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 22:13	WG1455710
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 22:13	WG1455710
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 22:13	WG1455710
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 22:13	WG1455710
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 22:13	WG1455710
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2020 22:13	WG1455710
cis-1,2-Dichloroethene	0.550		0.0933	0.500	1	04/05/2020 22:13	WG1455710
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2020 22:13	WG1455710
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 22:13	WG1455710
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 22:13	WG1455710
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 22:13	WG1455710
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 22:13	WG1455710
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 22:13	WG1455710
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	04/05/2020 22:13	WG1455710
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 22:13	WG1455710
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 22:13	WG1455710
Ethylbenzene	47.4		0.158	0.500	1	04/05/2020 22:13	WG1455710
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 22:13	WG1455710
2-Hexanone	U		0.757	5.00	1	04/05/2020 22:13	WG1455710
n-Hexane	24.0		0.305	5.00	1	04/05/2020 22:13	WG1455710
Iodomethane	U	J0	0.377	10.0	1	04/05/2020 22:13	WG1455710
Isopropylbenzene	72.5		0.126	0.500	1	04/05/2020 22:13	WG1455710
p-Isopropyltoluene	0.721		0.138	0.500	1	04/05/2020 22:13	WG1455710
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 22:13	WG1455710
Methylene Chloride	U		1.07	2.50	1	04/05/2020 22:13	WG1455710
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 22:13	WG1455710
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 22:13	WG1455710
Naphthalene	2.74	B J0	0.174	2.50	1	04/05/2020 22:13	WG1455710
n-Propylbenzene	128		0.162	0.500	1	04/05/2020 22:13	WG1455710
Styrene	U		0.117	0.500	1	04/05/2020 22:13	WG1455710
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 22:13	WG1455710
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 22:13	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 22:13	WG1455710
Tetrachloroethene	U		0.199	0.500	1	04/05/2020 22:13	WG1455710
Toluene	11.3		0.412	0.500	1	04/05/2020 22:13	WG1455710
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	04/05/2020 22:13	WG1455710
1,2,4-Trichlorobenzene	U	J0	0.355	0.500	1	04/05/2020 22:13	WG1455710
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 22:13	WG1455710
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 22:13	WG1455710
Trichloroethene	U		0.153	0.500	1	04/05/2020 22:13	WG1455710
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 22:13	WG1455710
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 22:13	WG1455710
1,2,4-Trimethylbenzene	0.329	B J	0.123	0.500	1	04/05/2020 22:13	WG1455710
1,2,3-Trimethylbenzene	8.88		0.0739	0.500	1	04/05/2020 22:13	WG1455710
1,3,5-Trimethylbenzene	2.50		0.124	0.500	1	04/05/2020 22:13	WG1455710
Vinyl acetate	U	J0	0.645	5.00	1	04/05/2020 22:13	WG1455710
Vinyl chloride	U		0.118	0.500	1	04/05/2020 22:13	WG1455710
Xylenes, Total	23.4		0.316	1.50	1	04/05/2020 22:13	WG1455710
(S) Toluene-d8	*98.1*			*80.0-120*		*04/05/2020 22:13*	WG1455710
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*04/05/2020 22:13*	WG1455710
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*04/05/2020 22:13*	WG1455710

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	40.2	B J	31.6	100	1	04/03/2020 14:29	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.1*			*78.0-120*		*04/03/2020 14:29*	WG1454847

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.45	J	1.05	25.0	1	04/05/2020 16:54	WG1455710
Acrylonitrile	U		0.873	5.00	1	04/05/2020 16:54	WG1455710
Benzene	U		0.0896	0.500	1	04/05/2020 16:54	WG1455710
Bromobenzene	U		0.133	0.500	1	04/05/2020 16:54	WG1455710
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 16:54	WG1455710
Bromochloromethane	U		0.145	0.500	1	04/05/2020 16:54	WG1455710
Bromoform	U	J0	0.186	0.500	1	04/05/2020 16:54	WG1455710
Bromomethane	U	J0	0.157	2.50	1	04/05/2020 16:54	WG1455710
n-Butylbenzene	U		0.143	0.500	1	04/05/2020 16:54	WG1455710
sec-Butylbenzene	U		0.134	0.500	1	04/05/2020 16:54	WG1455710
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 16:54	WG1455710
Carbon disulfide	U		0.101	0.500	1	04/05/2020 16:54	WG1455710
Carbon tetrachloride	U		0.159	0.500	1	04/05/2020 16:54	WG1455710
Chlorobenzene	U		0.140	0.500	1	04/05/2020 16:54	WG1455710
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 16:54	WG1455710
Chloroethane	U		0.141	2.50	1	04/05/2020 16:54	WG1455710
Chloroform	U		0.0860	0.500	1	04/05/2020 16:54	WG1455710
Chloromethane	U	J0	0.153	1.25	1	04/05/2020 16:54	WG1455710
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 16:54	WG1455710
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 16:54	WG1455710
1,2-Dibromo-3-Chloropropane	U	J0	0.325	2.50	1	04/05/2020 16:54	WG1455710
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 16:54	WG1455710
Dibromomethane	U		0.117	0.500	1	04/05/2020 16:54	WG1455710
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 16:54	WG1455710
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 16:54	WG1455710
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 16:54	WG1455710
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 16:54	WG1455710
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 16:54	WG1455710
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 16:54	WG1455710
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2020 16:54	WG1455710
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/05/2020 16:54	WG1455710
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2020 16:54	WG1455710
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 16:54	WG1455710
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 16:54	WG1455710
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 16:54	WG1455710
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 16:54	WG1455710
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 16:54	WG1455710
trans-1,4-Dichloro-2-butene	U	J0	0.257	5.00	1	04/05/2020 16:54	WG1455710
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 16:54	WG1455710
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 16:54	WG1455710
Ethylbenzene	U		0.158	0.500	1	04/05/2020 16:54	WG1455710
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 16:54	WG1455710
2-Hexanone	U		0.757	5.00	1	04/05/2020 16:54	WG1455710
n-Hexane	U		0.305	5.00	1	04/05/2020 16:54	WG1455710
Iodomethane	U	J0	0.377	10.0	1	04/05/2020 16:54	WG1455710
Isopropylbenzene	U		0.126	0.500	1	04/05/2020 16:54	WG1455710
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2020 16:54	WG1455710
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 16:54	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	04/05/2020 16:54	WG1455710
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 16:54	WG1455710
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 16:54	WG1455710
Naphthalene	U	J0	0.174	2.50	1	04/05/2020 16:54	WG1455710
n-Propylbenzene	U		0.162	0.500	1	04/05/2020 16:54	WG1455710
Styrene	U		0.117	0.500	1	04/05/2020 16:54	WG1455710
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 16:54	WG1455710
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 16:54	WG1455710
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 16:54	WG1455710
Tetrachloroethene	U		0.199	0.500	1	04/05/2020 16:54	WG1455710
Toluene	U		0.412	0.500	1	04/05/2020 16:54	WG1455710
1,2,3-Trichlorobenzene	U	J0	0.164	0.500	1	04/05/2020 16:54	WG1455710
1,2,4-Trichlorobenzene	U	J0	0.355	0.500	1	04/05/2020 16:54	WG1455710
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 16:54	WG1455710
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 16:54	WG1455710
Trichloroethene	U		0.153	0.500	1	04/05/2020 16:54	WG1455710
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 16:54	WG1455710
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 16:54	WG1455710
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2020 16:54	WG1455710
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2020 16:54	WG1455710
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2020 16:54	WG1455710
Vinyl acetate	U	J0	0.645	5.00	1	04/05/2020 16:54	WG1455710
Vinyl chloride	U		0.118	0.500	1	04/05/2020 16:54	WG1455710
Xylenes, Total	U		0.316	1.50	1	04/05/2020 16:54	WG1455710
(S) Toluene-d8	*98.7*			*80.0-120*		*04/05/2020 16:54*	WG1455710
(S) 4-Bromofluorobenzene	*98.5*			*77.0-126*		*04/05/2020 16:54*	WG1455710
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*04/05/2020 16:54*	WG1455710

Method Blank (MB)

(MB) R3516097-1 04/06/20 01:58

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	3420	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1204932-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1204932-04 04/06/20 02:08 • (DUP) R3516097-2 04/06/20 02:16

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	507000	506000	1	0.288		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1205569-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1205569-08 04/06/20 03:40 • (DUP) R3516097-4 04/06/20 03:49

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	253000	230000	1	9.13		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3516097-3 04/06/20 03:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	113000	113	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3516133-1 04/06/20 18:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	4060	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1205393-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1205393-01 04/06/20 19:16 • (DUP) R3516133-2 04/06/20 19:24

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	247000	244000	1	0.964		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1205842-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1205842-13 04/06/20 22:10 • (DUP) R3516133-4 04/06/20 22:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	272000	272000	1	0.110		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3516133-3 04/06/20 20:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	100000	100	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3515307-1 04/02/20 09:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	176	J	51.9	1000
Nitrate	U		22.7	100
Sulfate	290	J	77.4	5000

L1204857-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1204857-08 04/02/20 12:51 • (DUP) R3515307-3 04/02/20 13:04

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1750000	1750000	1	0.108	E	15
Nitrate	76.6	74.5	1	2.78	J	15

L1204945-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1204945-01 04/02/20 14:48 • (DUP) R3515307-6 04/02/20 15:28

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	7590	7680	1	1.22		15
Nitrate	24.9	25.8	1	3.55	J	15
Sulfate	3290	3310	1	0.655	J	15

L1204857-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1204857-08 04/02/20 19:14 • (DUP) R3515307-7 04/02/20 19:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	163000	164000	5	0.703		15

Laboratory Control Sample (LCS)

(LCS) R3515307-2 04/02/20 10:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	38600	96.5	80.0-120	
Nitrate	8000	7870	98.4	80.0-120	
Sulfate	40000	39300	98.2	80.0-120	

L1204862-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1204862-01 04/02/20 13:17 • (MS) R3515307-4 04/02/20 13:30 • (MSD) R3515307-5 04/02/20 13:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	19200	70800	70600	103	103	1	80.0-120			0.155	15
Nitrate	5000	3330	8670	8590	107	105	1	80.0-120			0.930	15
Sulfate	50000	48500	101000	100000	105	104	1	80.0-120	E	E	0.386	15

L1204945-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1204945-08 04/02/20 16:59 • (MS) R3515307-8 04/02/20 19:53

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	11600	62000	101	1	80.0-120	
Nitrate	5000	U	4900	98.1	1	80.0-120	
Sulfate	50000	5720	57300	103	1	80.0-120	

Method Blank (MB)

(MB) R3516228-1 04/03/20 12:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	288	J	102	1000

L1204945-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1204945-05 04/03/20 19:01 • (DUP) R3516228-5 04/03/20 19:15

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	33700	33900	2	0.474		20

L1204945-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1204945-08 04/03/20 19:57 • (DUP) R3516228-6 04/03/20 20:09

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	2750	2770	1	0.906		20

Laboratory Control Sample (LCS)

(LCS) R3516228-2 04/03/20 12:49

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC	75000	72400	96.5	85.0-115	

L1204878-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1204878-01 04/03/20 16:10 • (MS) R3516228-3 04/03/20 16:25 • (MSD) R3516228-4 04/03/20 16:40

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	751	48600	48800	95.6	96.0	1	80.0-120			0.391	20

L1205071-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1205071-01 04/03/20 21:51 • (MS) R3516228-7 04/03/20 22:06 • (MSD) R3516228-8 04/03/20 22:21

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50000	2440	50900	52600	96.9	100	1	80.0-120			3.17	20

Method Blank (MB)

(MB) R3515150-1 04/02/20 21:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		15.0	100
Manganese	0.329	J	0.250	5.00

Laboratory Control Sample (LCS)

(LCS) R3515150-2 04/02/20 21:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	5000	4970	99.4	80.0-120	
Manganese	50.0	50.6	101	80.0-120	

L1204817-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1204817-06 04/02/20 21:20 • (MS) R3515150-4 04/02/20 21:27 • (MSD) R3515150-5 04/02/20 21:30

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	5000	398	5120	5300	94.4	98.0	1	75.0-125			3.46	20
Manganese	50.0	207	246	256	78.3	96.9	1	75.0-125			3.71	20

Method Blank (MB)

(MB) R3515275-1 04/03/20 11:20

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	29.0	J	15.0	100
Manganese	0.813	J	0.250	5.00

Laboratory Control Sample (LCS)

(LCS) R3515275-2 04/03/20 11:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	5000	5020	100	80.0-120	
Manganese	50.0	50.4	101	80.0-120	

L1204870-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1204870-01 04/03/20 11:26 • (MS) R3515275-4 04/03/20 11:33 • (MSD) R3515275-5 04/03/20 11:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	5000	5140	9730	9950	91.9	96.3	1	75.0-125			2.23	20
Manganese	50.0	1750	1770	1740	46.5	0.000	1	75.0-125	V	V	1.75	20

Method Blank (MB)

(MB) R3516322-2 04/03/20 13:47

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	40.6	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*97.3*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3516322-1 04/03/20 12:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5160	93.8	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*104*	*78.0-120*	

Method Blank (MB)

(MB) R3515272-2 04/03/20 10:19

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

L1204908-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1204908-01 04/03/20 10:25 • (DUP) R3515272-3 04/03/20 12:03

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	30.3	32.9	1	8.23		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3515272-1 04/03/20 10:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Methane	67.8	64.2	94.7	85.0-115	
Ethane	129	124	96.1	85.0-115	
Ethene	127	119	93.7	85.0-115	

Method Blank (MB)

(MB) R3515323-2 04/03/20 12:21

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1205145-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1205145-02 04/03/20 12:41 • (DUP) R3515323-3 04/03/20 13:35

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	131	123	1	6.30		20

Laboratory Control Sample (LCS)

(LCS) R3515323-1 04/03/20 12:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Methane	67.8	69.7	103	85.0-115	

Method Blank (MB)

(MB) R3515791-2 04/05/20 14:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3515791-2 04/05/20 14:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.327	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	0.402	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	0.281	J	0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*102*			*80.0-120*
(S) 4-Bromofluorobenzene	*103*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3515791-1 04/05/20 13:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	23.8	95.2	19.0-160	
Acrylonitrile	25.0	25.5	102	55.0-149	
Benzene	5.00	4.49	89.8	70.0-123	
Bromobenzene	5.00	4.72	94.4	73.0-121	
Bromodichloromethane	5.00	4.98	99.6	75.0-120	
Bromochloromethane	5.00	4.60	92.0	76.0-122	
Bromoform	5.00	3.80	76.0	68.0-132	
Bromomethane	5.00	2.85	57.0	10.0-160	
n-Butylbenzene	5.00	4.39	87.8	73.0-125	
sec-Butylbenzene	5.00	4.46	89.2	75.0-125	
tert-Butylbenzene	5.00	4.69	93.8	76.0-124	
Carbon disulfide	5.00	4.54	90.8	61.0-128	
Carbon tetrachloride	5.00	4.88	97.6	68.0-126	
Chlorobenzene	5.00	4.40	88.0	80.0-121	
Chlorodibromomethane	5.00	4.29	85.8	77.0-125	
Chloroethane	5.00	4.46	89.2	47.0-150	
Chloroform	5.00	4.71	94.2	73.0-120	
Chloromethane	5.00	3.76	75.2	41.0-142	
2-Chlorotoluene	5.00	4.74	94.8	76.0-123	
4-Chlorotoluene	5.00	4.63	92.6	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	3.49	69.8	58.0-134	
1,2-Dibromoethane	5.00	4.27	85.4	80.0-122	
Dibromomethane	5.00	4.81	96.2	80.0-120	
1,2-Dichlorobenzene	5.00	4.38	87.6	79.0-121	
1,3-Dichlorobenzene	5.00	4.58	91.6	79.0-120	
1,4-Dichlorobenzene	5.00	4.78	95.6	79.0-120	
Dichlorodifluoromethane	5.00	6.44	129	51.0-149	
1,1-Dichloroethane	5.00	5.23	105	70.0-126	
1,2-Dichloroethane	5.00	5.21	104	70.0-128	
1,1-Dichloroethene	5.00	4.81	96.2	71.0-124	
cis-1,2-Dichloroethene	5.00	4.65	93.0	73.0-120	
trans-1,2-Dichloroethene	5.00	4.63	92.6	73.0-120	
1,2-Dichloropropane	5.00	5.07	101	77.0-125	
1,1-Dichloropropene	5.00	4.83	96.6	74.0-126	
1,3-Dichloropropane	5.00	4.52	90.4	80.0-120	
cis-1,3-Dichloropropene	5.00	4.40	88.0	80.0-123	
trans-1,3-Dichloropropene	5.00	4.30	86.0	78.0-124	
trans-1,4-Dichloro-2-butene	5.00	2.77	55.4	33.0-144	
2,2-Dichloropropane	5.00	4.44	88.8	58.0-130	
Di-isopropyl ether	5.00	4.78	95.6	58.0-138	

Laboratory Control Sample (LCS)

(LCS) R3515791-1 04/05/20 13:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	5.00	4.41	88.2	79.0-123	
Hexachloro-1,3-butadiene	5.00	5.19	104	54.0-138	
2-Hexanone	25.0	23.0	92.0	67.0-149	
n-Hexane	5.00	4.81	96.2	57.0-133	
Iodomethane	25.0	14.0	56.0	33.0-147	
Isopropylbenzene	5.00	4.33	86.6	76.0-127	
p-Isopropyltoluene	5.00	4.66	93.2	76.0-125	
2-Butanone (MEK)	25.0	23.5	94.0	44.0-160	
Methylene Chloride	5.00	4.75	95.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	22.5	90.0	68.0-142	
Methyl tert-butyl ether	5.00	4.96	99.2	68.0-125	
Naphthalene	5.00	3.34	66.8	54.0-135	
n-Propylbenzene	5.00	4.45	89.0	77.0-124	
Styrene	5.00	4.07	81.4	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	4.13	82.6	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	4.64	92.8	65.0-130	
1,1,2-Trichlorotrifluoroethane	5.00	4.91	98.2	69.0-132	
Tetrachloroethene	5.00	4.68	93.6	72.0-132	
Toluene	5.00	4.37	87.4	79.0-120	
1,2,3-Trichlorobenzene	5.00	3.76	75.2	50.0-138	
1,2,4-Trichlorobenzene	5.00	4.14	82.8	57.0-137	
1,1,1-Trichloroethane	5.00	5.21	104	73.0-124	
1,1,2-Trichloroethane	5.00	4.32	86.4	80.0-120	
Trichloroethene	5.00	4.55	91.0	78.0-124	
Trichlorofluoromethane	5.00	5.15	103	59.0-147	
1,2,3-Trichloropropane	5.00	4.93	98.6	73.0-130	
1,2,4-Trimethylbenzene	5.00	4.59	91.8	76.0-121	
1,2,3-Trimethylbenzene	5.00	4.68	93.6	77.0-120	
1,3,5-Trimethylbenzene	5.00	4.55	91.0	76.0-122	
Vinyl acetate	25.0	23.4	93.6	11.0-160	
Vinyl chloride	5.00	4.98	99.6	67.0-131	
Xylenes, Total	15.0	13.0	86.7	79.0-123	
(S) Toluene-d8			*99.2*	*80.0-120*	
(S) 4-Bromofluorobenzene			*102*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*107*	*70.0-130*	

Method Blank (MB)

(MB) R3515904-5 04/06/20 09:36

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Method Blank (MB)

(MB) R3515904-5 04/06/20 09:36

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	*107*			*80.0-120*
(S) 4-Bromofluorobenzene	*91.3*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

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

(LCS) R3515904-1 04/06/20 07:23 • (LCSD) R3515904-2 04/06/20 07:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	38.7	46.9	155	188	19.0-160		J4	19.2	27
Acrylonitrile	25.0	41.1	44.5	164	178	55.0-149	J4	J4	7.94	20
Benzene	5.00	4.80	4.49	96.0	89.8	70.0-123			6.67	20
Bromobenzene	5.00	4.46	4.52	89.2	90.4	73.0-121			1.34	20
Bromodichloromethane	5.00	4.54	4.58	90.8	91.6	75.0-120			0.877	20
Bromochloromethane	5.00	4.90	5.13	98.0	103	76.0-122			4.59	20
Bromoform	5.00	4.79	5.01	95.8	100	68.0-132			4.49	20
Bromomethane	5.00	4.94	4.60	98.8	92.0	10.0-160			7.13	25
n-Butylbenzene	5.00	5.18	4.89	104	97.8	73.0-125			5.76	20
sec-Butylbenzene	5.00	4.49	4.27	89.8	85.4	75.0-125			5.02	20
tert-Butylbenzene	5.00	4.30	4.15	86.0	83.0	76.0-124			3.55	20
Carbon disulfide	5.00	4.37	3.99	87.4	79.8	61.0-128			9.09	20
Carbon tetrachloride	5.00	4.87	4.62	97.4	92.4	68.0-126			5.27	20
Chlorobenzene	5.00	5.04	4.82	101	96.4	80.0-121			4.46	20
Chlorodibromomethane	5.00	4.92	5.01	98.4	100	77.0-125			1.81	20
Chloroethane	5.00	4.17	3.84	83.4	76.8	47.0-150			8.24	20
Chloroform	5.00	4.67	4.71	93.4	94.2	73.0-120			0.853	20
Chloromethane	5.00	5.44	5.65	109	113	41.0-142			3.79	20
2-Chlorotoluene	5.00	4.41	4.26	88.2	85.2	76.0-123			3.46	20
4-Chlorotoluene	5.00	4.53	4.42	90.6	88.4	75.0-122			2.46	20
1,2-Dibromo-3-Chloropropane	5.00	4.99	4.93	99.8	98.6	58.0-134			1.21	20
1,2-Dibromoethane	5.00	5.25	5.32	105	106	80.0-122			1.32	20
Dibromomethane	5.00	4.80	5.05	96.0	101	80.0-120			5.08	20
1,2-Dichlorobenzene	5.00	4.91	5.05	98.2	101	79.0-121			2.81	20
1,3-Dichlorobenzene	5.00	4.85	4.84	97.0	96.8	79.0-120			0.206	20
1,4-Dichlorobenzene	5.00	5.05	5.00	101	100	79.0-120			0.995	20
Dichlorodifluoromethane	5.00	6.51	5.91	130	118	51.0-149			9.66	20
1,1-Dichloroethane	5.00	4.94	4.83	98.8	96.6	70.0-126			2.25	20
1,2-Dichloroethane	5.00	5.08	5.37	102	107	70.0-128			5.55	20
1,1-Dichloroethene	5.00	4.79	4.27	95.8	85.4	71.0-124			11.5	20
cis-1,2-Dichloroethene	5.00	4.68	4.72	93.6	94.4	73.0-120			0.851	20
trans-1,2-Dichloroethene	5.00	4.70	4.41	94.0	88.2	73.0-120			6.37	20
1,2-Dichloropropane	5.00	5.50	5.37	110	107	77.0-125			2.39	20
1,1-Dichloropropene	5.00	5.10	4.73	102	94.6	74.0-126			7.53	20
1,3-Dichloropropane	5.00	5.26	5.31	105	106	80.0-120			0.946	20
cis-1,3-Dichloropropene	5.00	4.77	4.66	95.4	93.2	80.0-123			2.33	20
trans-1,3-Dichloropropene	5.00	5.08	4.93	102	98.6	78.0-124			3.00	20
trans-1,4-Dichloro-2-butene	5.00	5.04	5.14	101	103	33.0-144			1.96	20
2,2-Dichloropropane	5.00	4.10	3.93	82.0	78.6	58.0-130			4.23	20
Di-isopropyl ether	5.00	5.36	5.18	107	104	58.0-138			3.42	20

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

(LCS) R3515904-1 04/06/20 07:23 • (LCSD) R3515904-2 04/06/20 07:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	5.00	4.90	4.56	98.0	91.2	79.0-123			7.19	20
Hexachloro-1,3-butadiene	5.00	4.40	4.23	88.0	84.6	54.0-138			3.94	20
2-Hexanone	25.0	31.0	31.7	124	127	67.0-149			2.23	20
n-Hexane	5.00	6.75	6.03	135	121	57.0-133	J4		11.3	20
Iodomethane	25.0	22.7	21.5	90.8	86.0	33.0-147			5.43	26
Isopropylbenzene	5.00	4.68	4.42	93.6	88.4	76.0-127			5.71	20
p-Isopropyltoluene	5.00	4.62	4.30	92.4	86.0	76.0-125			7.17	20
2-Butanone (MEK)	25.0	34.5	37.0	138	148	44.0-160			6.99	20
Methylene Chloride	5.00	5.18	5.02	104	100	67.0-120			3.14	20
4-Methyl-2-pentanone (MIBK)	25.0	31.9	32.7	128	131	68.0-142			2.48	20
Methyl tert-butyl ether	5.00	4.47	4.52	89.4	90.4	68.0-125			1.11	20
Naphthalene	5.00	4.07	4.10	81.4	82.0	54.0-135			0.734	20
n-Propylbenzene	5.00	4.48	4.35	89.6	87.0	77.0-124			2.94	20
Styrene	5.00	4.51	4.51	90.2	90.2	73.0-130			0.000	20
1,1,1,2-Tetrachloroethane	5.00	4.59	4.63	91.8	92.6	75.0-125			0.868	20
1,1,2,2-Tetrachloroethane	5.00	4.63	4.90	92.6	98.0	65.0-130			5.67	20
1,1,2-Trichlorotrifluoroethane	5.00	5.45	5.04	109	101	69.0-132			7.82	20
Tetrachloroethene	5.00	5.23	5.06	105	101	72.0-132			3.30	20
Toluene	5.00	5.03	4.80	101	96.0	79.0-120			4.68	20
1,2,3-Trichlorobenzene	5.00	4.05	4.16	81.0	83.2	50.0-138			2.68	20
1,2,4-Trichlorobenzene	5.00	4.29	4.21	85.8	84.2	57.0-137			1.88	20
1,1,1-Trichloroethane	5.00	4.61	4.12	92.2	82.4	73.0-124			11.2	20
1,1,2-Trichloroethane	5.00	5.28	5.28	106	106	80.0-120			0.000	20
Trichloroethene	5.00	4.97	4.49	99.4	89.8	78.0-124			10.1	20
Trichlorofluoromethane	5.00	5.23	4.77	105	95.4	59.0-147			9.20	20
1,2,3-Trichloropropane	5.00	4.94	5.29	98.8	106	73.0-130			6.84	20
1,2,4-Trimethylbenzene	5.00	4.35	4.16	87.0	83.2	76.0-121			4.47	20
1,2,3-Trimethylbenzene	5.00	4.84	4.72	96.8	94.4	77.0-120			2.51	20
1,3,5-Trimethylbenzene	5.00	4.28	4.18	85.6	83.6	76.0-122			2.36	20
Vinyl acetate	25.0	34.1	36.6	136	146	11.0-160			7.07	20
Vinyl chloride	5.00	5.58	4.99	112	99.8	67.0-131			11.2	20
Xylenes, Total	15.0	14.5	13.8	96.7	92.0	79.0-123			4.95	20
(S) Toluene-d8				*105*	*103*	*80.0-120*				
(S) 4-Bromofluorobenzene				*93.1*	*92.4*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*109*	*115*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
J4	The associated batch QC was outside the established quality control range for accuracy.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

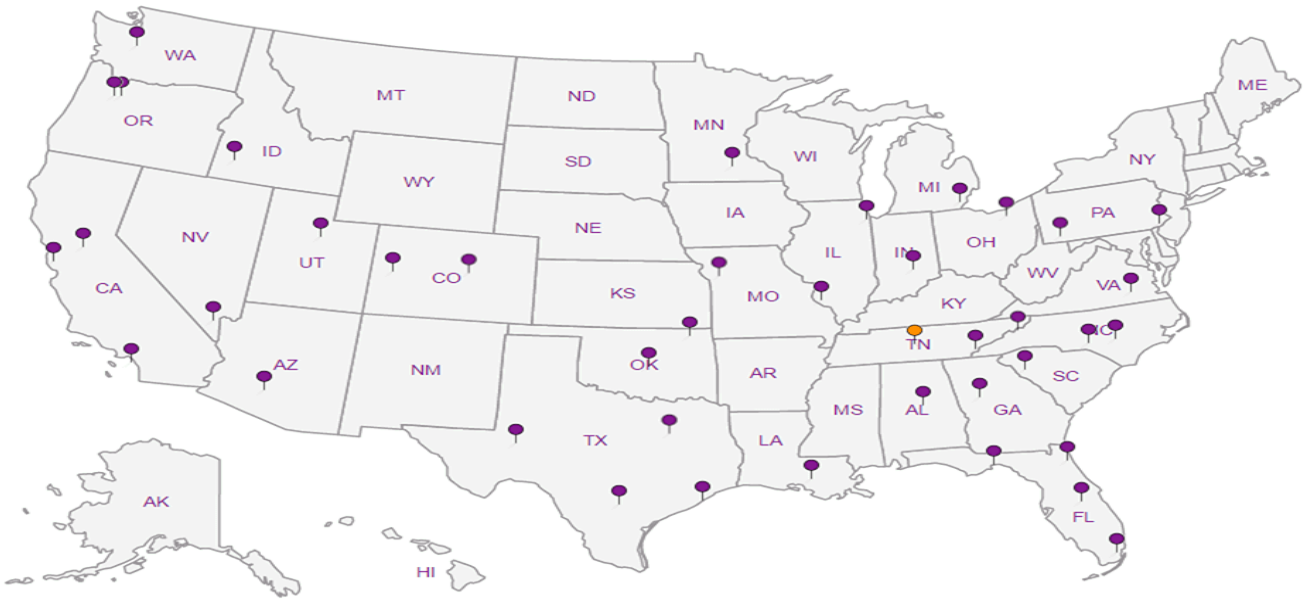
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

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



CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: **PES Environmental, Inc.**	Billing Information: **Attn: Accounts Payable 1215 4th Ave STE 1350, Seattle, WA 98161**
Address: **1215 4th Ave STE 1350, Seattle, WA 98161**	
Report To: **Bill Haldeman/Brian O'Neal**	Email To: **bhaldeman@pesenv.com; boneal@pesenv.com**
Copy To: **Kim Vik, Shannon McKernan, Karsten Springstead**	Site Collection Info/Address: **700 Dexter Ave N**
Customer Project Name/Number: American Linen **1413.001.02.501E**	State: **WA** / County/City: **King/Seattle** Time Zone Collected: [x]PT [ ]MT [ ]CT [ ]ET
Phone: 206-529-3980 Email: **agilvezan@pesenv.com**	Site/Facility ID #: **1413.001.02.501E**
Collected By (print): BLH/SPK/RTM	Purchase Order # : **1413.001.02.501E** Quote #: **PESENVSWA-ALP**
Collected By (signature):	Turnaround Date Required: STAT
Sample Disposal: [✓] Dispose as appropriate [ ] Return [ ] Archive: ____ [ ] Hold: ____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Compliance Monitoring? [x] Yes [ ] No

DW PWS ID #:

DW Location Code:

Immediately Packed on Ice: [x] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [✓] No

Analysis: ____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other ____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID (BLH)	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	*NO3, SO4, Cl* 125mlHDPE-NoPres	Alkalinity 125mlHDPE-NoPres	EEM (RSK175LL) 40mlAmb-HCl	TOC 250mlAmb-HCl or 250mlHDPE-HCl (2)	Total Fe, Mn 6020 250mlHDPE-HNO3 (2)	VOCs (8260)	GRO (NWTPH-Gx)				Lab Sample # / Comments
~~MW-160-040120~~																			1204445
MW-160-040120	GW	Grab	4-1-20	1000				12	X	X	X	X	X	X	X				-01
MW-181-040120	GW	Grab		1000				12	X	X	X	X	X	X	X				02
MW-177-040120	GW	Grab		1045				12	X	X	X	X	X	X	X				03
MW-184-040120	GW	Grab		1145				12	X	X	X	X	X	X	X				04
W-MW-02-040120	GW	Grab		1235				12	X	X	X	X	X	X	X				05
MW-180-040120	GW	Grab		1255				12	X	X	X	X	X	X	X				06
MW-182-040120	GW	Grab		1330				12	X	X	X	X	X	X	X				07
MW104-040120	GW	Grab		1420				12	X	X	X	X	X	X	X				08
~~SG~~-MW105-040120	GW	Grab		1540				3						X					09
TB-040120	GW	Grab		1600				2						X	X				10

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	✓	N	NA
Bottles Intact	✓	N	NA
Correct Bottles	✓	N	NA
Sufficient Volume	✓	N	NA
Samples Received on Ice	✓	N	NA
VOA - Headspace Acceptable	✓	N	NA
USDA Regulated Soils	Y	N	~~NA~~
Samples in Holding Time	✓	N	NA
Residual Chlorine Present	Y	N	~~NA~~
Cl Strips: ____			
Sample pH Acceptable	Y	N	~~NA~~
pH Strips: ____			
Sulfide Present	Y	N	~~NA~~
Lead Acetate Strips: ____			

LAB USE ONLY:

Customer Remarks / Special Conditions / Possible Hazards:

Tier 2 QA/QC

Email copy only ok

Bill PES

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

LAB Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#: WP92

Cooler 1 Temp Upon Receipt: 1.8 oC

Cooler 1 Therm Corr. Factor: .2 oC

Cooler 1 Corrected Temp: 2.0 oC

Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	4/1/20 @ 1630	Carol Kemp	4/2/20 8:30
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

G136

Acctnum:

Template:

Prelogin:

PM:

PB:

RAD SCREEN: <0.5 mR/hr

Trip Blank Received: (Y) N NA

(HCl) MeOH TSP Other

2

Non Conformance(s): YES / (NO)

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