APPENDIX E

Report for:

Tim Crump, Kristi Destouet
TGE Resources, Inc
8048 Northcourt Road
Houston, TX 77040

Regarding: Project: R13411.07; Federal Way, WA
EML ID: 2417869

Approved by:

Approved Signatory
Gregorio Delgado

Dates of Analysis:
Asbestos PLM: 06-05-2020

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 600122-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: TGE Resources, Inc
C/O: Tim Crump, Kristi Destouet
Re: R13411.07; Federal Way, WA

Date of Sampling: 06-04-2020
Date of Receipt: 06-05-2020
Date of Report: 06-05-2020

ASBESTOS PLM REPORT

Total Samples Submitted:	25
Total Samples Analyzed:	25
Total Samples with Layer Asbestos Content > 1%:	1

Location: 01, Federal Way- White Drywall Material

Lab ID-Version‡: 11530486-1

Sample Layers	Asbestos Content
White Drywall	ND
Sample Composite Homogeneity:	Good

Location: 02, Federal Way- White Drywall Material

Lab ID-Version‡: 11530487-1

Sample Layers	Asbestos Content
White Drywall	ND
Sample Composite Homogeneity:	Good

Location: 03, Federal Way- White Drywall Material

Lab ID-Version‡: 11530488-1

Sample Layers	Asbestos Content
White Drywall	ND
Sample Composite Homogeneity:	Good

Location: 04, Federal Way- Pliable Strip

Lab ID-Version‡: 11530489-1

Sample Layers	Asbestos Content
Tan Non-Fibrous Material	ND
Sample Composite Homogeneity:	Good

Location: 05, Federal Way- Pliable Strip

Lab ID-Version‡: 11530490-1

Sample Layers	Asbestos Content
Semi-Transparent Non-Fibrous Material	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. Eurofins EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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C/O: Tim Crump, Kristi Destouet
Re: R13411.07; Federal Way, WA

Date of Sampling: 06-04-2020
Date of Receipt: 06-05-2020
Date of Report: 06-05-2020

ASBESTOS PLM REPORT

Location: 06, Federal Way- Blue Painted Material/Black Tar

Lab ID-Version‡: 11530491-1

Sample Layers	Asbestos Content
Black Tar with Multilayered Paint	ND
Sample Composite Homogeneity:	Poor

Location: 07, Federal Way- Blue Painted Material/Black Tar

Lab ID-Version‡: 11530492-1

Sample Layers	Asbestos Content
Black Tar with Multilayered Paint	ND
Sample Composite Homogeneity:	Poor

Location: 08, Federal Way- Blue Painted Material/Black Tar

Lab ID-Version‡: 11530493-1

Sample Layers	Asbestos Content
Black Tar with Multilayered Paint	ND
Sample Composite Homogeneity:	Poor

Location: 09, Federal Way- CMU Mortar

Lab ID-Version‡: 11530494-1

Sample Layers	Asbestos Content
Dark Gray Mortar	ND
Sample Composite Homogeneity:	Good

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Client: TGE Resources, Inc
C/O: Tim Crump, Kristi Destouet
Re: R13411.07; Federal Way, WA

Date of Sampling: 06-04-2020
Date of Receipt: 06-05-2020
Date of Report: 06-05-2020

ASBESTOS PLM REPORT

Location: 10, Federal Way- Brick Mortar

Lab ID-Version‡: 11530495-1

Sample Layers	Asbestos Content
Dark Gray Mortar	ND
Sample Composite Homogeneity:	Good

Location: 11, Federal Way- Red Chimney Block

Lab ID-Version‡: 11530496-1

Sample Layers	Asbestos Content
Red Brick	ND
Sample Composite Homogeneity:	Good

Location: 12, Federal Way- Red Painted Wood

Lab ID-Version‡: 11530497-1

Sample Layers	Asbestos Content
Brown Wood with Red Paint	ND
Composite Non-Asbestos Content:	80% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 13, Federal Way- White Painted Wood

Lab ID-Version‡: 11530498-1

Sample Layers	Asbestos Content
Brown Wood with White Paint	ND
Composite Non-Asbestos Content:	80% Cellulose
Sample Composite Homogeneity:	Moderate

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C/O: Tim Crump, Kristi Destouet
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Date of Sampling: 06-04-2020
Date of Receipt: 06-05-2020
Date of Report: 06-05-2020

ASBESTOS PLM REPORT

Location: 14, Federal Way- Layered Material

Lab ID-Version‡: 11530499-1

Sample Layers	Asbestos Content
White Non-Fibrous Material	ND
Gray/Black Non-Fibrous Material	ND
White Non-Fibrous Material	ND
Sample Composite Homogeneity:	Poor

Location: 15, Federal Way- Layered Material

Lab ID-Version‡: 11530500-1

Sample Layers	Asbestos Content
White Non-Fibrous Material	ND
Cream Non-Fibrous Material	ND
Sample Composite Homogeneity:	Poor

Location: 16, Federal Way- Layered Material

Lab ID-Version‡: 11530501-1

Sample Layers	Asbestos Content
White Non-Fibrous Material	ND
Cream Non-Fibrous Material	ND
Sample Composite Homogeneity:	Poor

Location: 17, Federal Way- Insulation

Lab ID-Version‡: 11530502-1

Sample Layers	Asbestos Content
Brown Insulation	ND
Composite Non-Asbestos Content:	90% Glass Fibers
Sample Composite Homogeneity:	Good

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C/O: Tim Crump, Kristi Destouet
Re: R13411.07; Federal Way, WA

Date of Sampling: 06-04-2020
Date of Receipt: 06-05-2020
Date of Report: 06-05-2020

ASBESTOS PLM REPORT

Location: 18, Federal Way- Insulation

Lab ID-Version‡: 11530503-1

Sample Layers	Asbestos Content
Brown Insulation	ND
Composite Non-Asbestos Content:	90% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 19, Federal Way- Insulation

Lab ID-Version‡: 11530504-1

Sample Layers	Asbestos Content
Brown Insulation	ND
Composite Non-Asbestos Content:	90% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 20, Federal Way- Chimney Contents

Lab ID-Version‡: 11530505-1

Sample Layers	Asbestos Content
Gray Compound	ND
Sample Composite Homogeneity:	Good

Location: 21, Federal Way/N. Side (4')- Soil Material

Lab ID-Version‡: 11530506-1

Sample Layers	Asbestos Content
Dark Brown Soil	2% Amosite
White Fibrous Material	90% Amosite
Composite Non-Asbestos Content:	5% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Poor

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C/O: Tim Crump, Kristi Destouet
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Date of Sampling: 06-04-2020
Date of Receipt: 06-05-2020
Date of Report: 06-05-2020

ASBESTOS PLM REPORT

Location: 22, Federal Way/W. Side (4')- Soil Material

Lab ID-Version‡: 11530507-1

Sample Layers	Asbestos Content
Dark Brown Soil	ND
Composite Non-Asbestos Content:	5% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 23, Federal Way/S. Side (4')- Soil Material

Lab ID-Version‡: 11530508-1

Sample Layers	Asbestos Content
Dark Brown Soil	ND
Composite Non-Asbestos Content:	5% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 24, Federal Way/E. Side (4')- Soil Material

Lab ID-Version‡: 11530509-1

Sample Layers	Asbestos Content
Dark Brown Soil	ND
Composite Non-Asbestos Content:	5% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 25, Federal Way/Base (7.5')- Soil Material

Lab ID-Version‡: 11530510-1

Sample Layers	Asbestos Content
Dark Brown Soil	< 1% Chrysotile
Composite Non-Asbestos Content:	5% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Poor

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ANALYTICAL REPORT

September 06, 2017

TGE Resources

Sample Delivery Group:	L931900
Samples Received:	08/25/2017
Project Number:	R13411.02
Description:	Future Star Lake Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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SAMPLE SUMMARY

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

SB-1 (5-6) L931900-01 Solid

Collected by	Collected date/time	Received date/time
T. Crump	08/24/17 12:30	08/25/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1013720	1	08/25/17 15:30	08/25/17 15:51	JD
Wet Chemistry by Method 9045D	WG1014303	1	08/28/17 11:24	08/28/17 11:54	TH
Mercury by Method 7471A	WG1014160	1	08/28/17 06:52	08/28/17 10:52	ABL
Metals (ICP) by Method 6010B	WG1013813	1	08/26/17 08:29	08/28/17 00:30	ST
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1013846	1.1	08/24/17 12:30	08/26/17 06:11	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1013822	1	08/24/17 12:30	08/26/17 20:37	ACG
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1013795	1	08/26/17 00:53	08/26/17 18:19	TH

SB-2 (2-3) L931900-02 Solid

Collected by	Collected date/time	Received date/time
T. Crump	08/24/17 10:30	08/25/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1013720	1	08/25/17 15:30	08/25/17 15:51	JD
Mercury by Method 7471A	WG1014160	1	08/28/17 06:52	08/28/17 10:59	ABL
Metals (ICP) by Method 6010B	WG1013813	1	08/26/17 08:29	08/28/17 00:33	ST
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1013846	1.01	08/24/17 10:30	08/26/17 06:33	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1013822	1.05	08/24/17 10:30	08/26/17 20:59	ACG
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1013795	1	08/26/17 00:53	08/26/17 17:27	TH

SB-3 (3-4) L931900-03 Solid

Collected by	Collected date/time	Received date/time
T. Crump	08/24/17 15:30	08/25/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1013720	1	08/25/17 15:30	08/25/17 15:51	JD
Mercury by Method 7471A	WG1014160	1	08/28/17 06:52	08/28/17 11:02	ABL
Metals (ICP) by Method 6010B	WG1013813	1	08/26/17 08:29	08/28/17 00:35	ST
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1013846	1.12	08/24/17 15:30	08/26/17 06:55	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1013822	1.04	08/24/17 15:30	08/26/17 21:20	ACG
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1013795	1	08/26/17 00:53	08/26/17 17:45	TH
Chlorinated Acid Herbicides (GC) by Method 8151	WG1015484	3	09/04/17 08:28	09/06/17 16:00	KLM
OP Pesticides by Method 8141	WG1013831	1	08/26/17 07:38	08/28/17 14:19	HMH
Pesticides (GC) by Method 8081	WG1013809	1	08/26/17 15:23	08/28/17 13:21	VKS

SB-4 (2-3) L931900-04 Solid

Collected by	Collected date/time	Received date/time
T. Crump	08/24/17 11:30	08/25/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1013720	1	08/25/17 15:30	08/25/17 15:51	JD
Mercury by Method 7471A	WG1014160	1	08/28/17 06:52	08/28/17 11:04	ABL
Metals (ICP) by Method 6010B	WG1013813	1	08/26/17 08:29	08/28/17 00:38	ST
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1013846	1	08/24/17 11:30	08/26/17 07:17	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1013822	1	08/24/17 11:30	08/26/17 21:41	ACG
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1013795	1	08/26/17 00:53	08/26/17 18:02	TH

TVMP-1 L931900-05 Air

Collected by	Collected date/time	Received date/time
T. Crump	08/24/17 14:25	08/25/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1013960	2	08/26/17 15:12	08/26/17 15:12	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1014295	25	08/28/17 14:17	08/28/17 14:17	MBF

SAMPLE SUMMARY

TVMP-2 L931900-06 Air

Collected by	Collected date/time	Received date/time
T. Crump	08/24/17 13:30	08/25/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1013960	2	08/26/17 15:58	08/26/17 15:58	MBF
Volatile Organic Compounds (MS) by Method TO-15	WG1014295	25	08/28/17 15:03	08/28/17 15:03	MBF

SB-5 (11-12) L931900-07 Solid

Collected by	Collected date/time	Received date/time
T. Crump	08/24/17 16:45	08/25/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1013720	1	08/25/17 15:30	08/25/17 15:51	JD
Mercury by Method 7471A	WG1014160	1	08/28/17 06:52	08/28/17 11:07	ABL
Metals (ICP) by Method 6010B	WG1013813	1	08/26/17 08:29	08/28/17 00:40	ST
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1013846	1.23	08/24/17 16:45	08/26/17 07:40	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1013822	1	08/24/17 16:45	08/26/17 22:02	ACG
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1013795	10	08/26/17 00:53	08/26/17 19:10	TH

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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.

Mark W. Beasley
Technical Service Representative

RG-366/TRRP-13
Revised May 2010

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  - a. Items consistent with NELAC Chapter 5,
  - b. dilution factors,
  - c. preparation methods,
  - d. cleanup methods, and
  - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
  - a. Calculated recovery (%R), and
  - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  - a. LCS spiking amounts,
  - b. Calculated %R for each analyte, and
  - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a. Samples associated with the MS/MSD clearly identified,
  - b. MS/MSD spiking amounts,
  - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d. Calculated %Rs and relative percent differences (RPDs), and
  - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  - a. The amount of analyte measured in the duplicate,
  - b. The calculated RPD, and
  - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Technical Service Representative

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: ESC Lab Sciences	LRC Date: 09/06/2017 17:39
Project Name: Future Star Lake Hospital	Laboratory Job Number: L931900-01, 02, 03, 04, 05, 06 and 07
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1013846, WG1013813, WG1013822, WG1013720, WG1013795, WG1013809, WG1014160, WG1013960, WG1013831, WG1014295, WG1015484 and WG1014303

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?		X			1
		Other than those results < MQL, were all other raw values bracketed by calibration standards?		X			2
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			3
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			4
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?		X			5
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			6
		Were MS/MSD RPDs within laboratory QC limits?		X			7
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

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4. NR = Not reviewed;
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Laboratory Review Checklist: Supporting Data

Laboratory Name: ESC Lab Sciences	LRC Date: 09/06/2017 17:39
Project Name: Future Star Lake Hospital	Laboratory Job Number: L931900-01, 02, 03, 04, 05, 06 and 07
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1013846, WG1013813, WG1013822, WG1013720, WG1013795, WG1013809, WG1014160, WG1013960, WG1013831, WG1014295, WG1015484 and WG1014303

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Exception Reports

Laboratory Name: ESC Lab Sciences	LRC Date: 09/06/2017 17:39
Project Name: Future Star Lake Hospital	Laboratory Job Number: L931900-01, 02, 03, 04, 05, 06 and 07
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1013846, WG1013813, WG1013822, WG1013720, WG1013795, WG1013809, WG1014160, WG1013960, WG1013831, WG1014295, WG1015484 and WG1014303

ER #[1]	**Description**
1	9045D / WG1014303 L931900-01 and 3: Prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.
2	WG1015484 R3247236-3 and 2: The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
3	TO-15 WG1013960 1,4-Bromofluorobenzene L931900-05: Percent Recovery is outside of established control limits.
4	8151 WG1015484 MCPA, MCPP: Percent Recovery is outside of established control limits. 8260C WG1013822 Bromobenzene, 4-Chlorotoluene, 1,2-Dichloroethane: Percent Recovery is outside of established control limits.
5	8151 WG1015484 2,4,5-T: Relative Percent Difference is outside of established control limits.
6	NWTPHDX-NO SGT WG1013795 Residual Range Organics (RRO): Percent Recovery is outside of established control limits. 8260C WG1013822 Benzene, Bromobenzene, Bromodichloromethane, Bromoform, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chlorodibromomethane, Chloroform, 2-Chlorotoluene, 4-Chlorotoluene, 1,2-Dibromo-3-Chloropropane, 1,2-Dibromoethane, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,2-Dichloropropane, 1,1-Dichloropropene, 1,3-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 2,2-Dichloropropane, Di-isopropyl ether, Ethylbenzene, Hexachloro-1,3-butadiene, Isopropylbenzene, p-Isopropyltoluene, Methylene Chloride, Methyl tert-butyl ether, Naphthalene, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,1,2-Trichlorotrifluoroethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, Trichlorofluoromethane, 1,2,3-Trichloropropane, 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Vinyl chloride, Xylenes, Total: Percent Recovery is outside of established control limits.
7	8260C WG1013822 Acetone, Acrylonitrile, Benzene, Bromobenzene, Bromodichloromethane, Bromoform, Bromomethane, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chlorodibromomethane, Chloroethane, Chloroform, Chloromethane, 2-Chlorotoluene, 4-Chlorotoluene, 1,2-Dibromo-3-Chloropropane, 1,2-Dibromoethane, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,2-Dichloropropane, 1,1-Dichloropropene, 1,3-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 2,2-Dichloropropane, Di-isopropyl ether, Ethylbenzene, Hexachloro-1,3-butadiene, Isopropylbenzene, p-Isopropyltoluene, 2-Butanone (MEK), Methylene Chloride, 4-Methyl-2-pentanone (MIBK), Methyl tert-butyl ether, Naphthalene, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,1,2-Trichlorotrifluoroethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, Trichlorofluoromethane, 1,2,3-Trichloropropane, 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Vinyl chloride, Xylenes, Total: Relative Percent Difference is outside of established control limits. NWTPHGX WG1013846 Gasoline Range Organics-NWTPH: Relative Percent Difference is outside of established control limits.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.5		1	08/25/2017 15:51	WG1013720

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	3.87	T8	1	08/28/2017 11:54	WG1014303

Sample Narrative:

L931900-01 WG1014303: 3.87 at 20.0c

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.00842	J	0.00293	0.0200	0.0209	1	08/28/2017 10:52	WG1014160

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.44	J	0.681	2.00	2.09	1	08/28/2017 00:30	WG1013813
Barium	47.5		0.178	0.500	0.524	1	08/28/2017 00:30	WG1013813
Cadmium	U		0.0733	0.500	0.524	1	08/28/2017 00:30	WG1013813
Chromium	20.7		0.147	1.00	1.05	1	08/28/2017 00:30	WG1013813
Lead	2.45		0.199	0.500	0.524	1	08/28/2017 00:30	WG1013813
Selenium	U		0.775	2.00	2.09	1	08/28/2017 00:30	WG1013813
Silver	U		0.293	1.00	1.05	1	08/28/2017 00:30	WG1013813

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	0.0422	J	0.0391	0.100	0.115	1.1	08/26/2017 06:11	WG1013846
(S) a,a,a-Trifluorotoluene(FID)	*99.5*				*77.0-120*		*08/26/2017 06:11*	WG1013846

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0359	J	0.0105	0.0500	0.0524	1	08/26/2017 20:37	WG1013822
Acrylonitrile	U		0.00187	0.0100	0.0105	1	08/26/2017 20:37	WG1013822
Benzene	U		0.000283	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Bromobenzene	U	J4	0.000297	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Bromodichloromethane	U		0.000266	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Bromoform	U		0.000444	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Bromomethane	U		0.00140	0.00500	0.00524	1	08/26/2017 20:37	WG1013822
n-Butylbenzene	U		0.000270	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
sec-Butylbenzene	U		0.000211	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
tert-Butylbenzene	U		0.000216	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Carbon tetrachloride	U		0.000344	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Chlorobenzene	U		0.000222	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Chlorodibromomethane	U		0.000391	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Chloroethane	U		0.000991	0.00500	0.00524	1	08/26/2017 20:37	WG1013822
Chloroform	U		0.000240	0.00500	0.00524	1	08/26/2017 20:37	WG1013822
Chloromethane	U		0.000393	0.00250	0.00262	1	08/26/2017 20:37	WG1013822
2-Chlorotoluene	U		0.000315	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
4-Chlorotoluene	U	J4	0.000251	0.00100	0.00105	1	08/26/2017 20:37	WG1013822

SB-1 (5-6)

Collected date/time: 08/24/17 12:30

SAMPLE RESULTS - 01

L931900

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.00110	0.00500	0.00524	1	08/26/2017 20:37	WG1013822
1,2-Dibromoethane	U		0.000359	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Dibromomethane	U		0.000400	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,2-Dichlorobenzene	U		0.000319	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,3-Dichlorobenzene	U		0.000250	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,4-Dichlorobenzene	U		0.000237	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Dichlorodifluoromethane	U		0.000747	0.00500	0.00524	1	08/26/2017 20:37	WG1013822
1,1-Dichloroethane	U		0.000208	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,2-Dichloroethane	U	J4	0.000278	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,1-Dichloroethene	U		0.000317	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
cis-1,2-Dichloroethene	U		0.000246	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
trans-1,2-Dichloroethene	U		0.000277	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,2-Dichloropropane	U		0.000375	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,1-Dichloropropene	U		0.000332	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,3-Dichloropropane	U		0.000217	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
cis-1,3-Dichloropropene	U		0.000274	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
trans-1,3-Dichloropropene	U		0.000280	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
2,2-Dichloropropane	U		0.000292	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Di-isopropyl ether	U		0.000260	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Ethylbenzene	U		0.000311	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Hexachloro-1,3-butadiene	U		0.000358	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Isopropylbenzene	U		0.000255	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
p-Isopropyltoluene	U		0.000214	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
2-Butanone (MEK)	0.00640	J	0.00490	0.0100	0.0105	1	08/26/2017 20:37	WG1013822
Methylene Chloride	U		0.00105	0.00500	0.00524	1	08/26/2017 20:37	WG1013822
4-Methyl-2-pentanone (MIBK)	U		0.00197	0.0100	0.0105	1	08/26/2017 20:37	WG1013822
Methyl tert-butyl ether	U		0.000222	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Naphthalene	U		0.00105	0.00500	0.00524	1	08/26/2017 20:37	WG1013822
n-Propylbenzene	U		0.000216	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Styrene	U		0.000245	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,1,1,2-Tetrachloroethane	U		0.000277	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,1,2,2-Tetrachloroethane	U		0.000382	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,1,2-Trichlorotrifluoroethane	U		0.000382	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Tetrachloroethene	U		0.000289	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Toluene	U		0.000455	0.00500	0.00524	1	08/26/2017 20:37	WG1013822
1,2,3-Trichlorobenzene	U		0.000320	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,2,4-Trichlorobenzene	U		0.000406	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,1,1-Trichloroethane	U		0.000300	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,1,2-Trichloroethane	U		0.000290	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Trichloroethene	U		0.000292	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Trichlorofluoromethane	U		0.000400	0.00500	0.00524	1	08/26/2017 20:37	WG1013822
1,2,3-Trichloropropane	U		0.000776	0.00250	0.00262	1	08/26/2017 20:37	WG1013822
1,2,4-Trimethylbenzene	U		0.000221	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,2,3-Trimethylbenzene	U		0.000301	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Vinyl chloride	U		0.000305	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
1,3,5-Trimethylbenzene	U		0.000279	0.00100	0.00105	1	08/26/2017 20:37	WG1013822
Xylenes, Total	U		0.000731	0.00300	0.00314	1	08/26/2017 20:37	WG1013822
(S) Toluene-d8	*93.6*				*80.0-120*		*08/26/2017 20:37*	WG1013822
(S) Dibromofluoromethane	*119*				*74.0-131*		*08/26/2017 20:37*	WG1013822
(S) 4-Bromofluorobenzene	*105*				*64.0-132*		*08/26/2017 20:37*	WG1013822

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	16.9		1.40	4.00	4.19	1	08/26/2017 18:19	WG1013795
Residual Range Organics (RRO)	170	V	3.49	10.0	10.5	1	08/26/2017 18:19	WG1013795

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) o-Terphenyl	*80.0*				*18.0-148*		*08/26/2017 18:19*	WG1013795

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.1		1	08/25/2017 15:51	WG1013720

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0802		0.00325	0.0200	0.0232	1	08/28/2017 10:59	WG1014160

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	14.0		0.755	2.00	2.32	1	08/28/2017 00:33	WG1013813
Barium	119		0.197	0.500	0.581	1	08/28/2017 00:33	WG1013813
Cadmium	0.317	J	0.0813	0.500	0.581	1	08/28/2017 00:33	WG1013813
Chromium	21.3		0.163	1.00	1.16	1	08/28/2017 00:33	WG1013813
Lead	34.2		0.221	0.500	0.581	1	08/28/2017 00:33	WG1013813
Selenium	U		0.859	2.00	2.32	1	08/28/2017 00:33	WG1013813
Silver	U		0.325	1.00	1.16	1	08/28/2017 00:33	WG1013813

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	0.0439	J	0.0398	0.100	0.117	1.01	08/26/2017 06:33	WG1013846
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*08/26/2017 06:33*	WG1013846

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.326		0.0122	0.0500	0.0610	1.05	08/26/2017 20:59	WG1013822
Acrylonitrile	U		0.00218	0.0100	0.0122	1.05	08/26/2017 20:59	WG1013822
Benzene	U		0.000329	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Bromobenzene	U	J4	0.000346	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Bromodichloromethane	U		0.000310	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Bromoform	U		0.000517	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Bromomethane	U		0.00163	0.00500	0.00610	1.05	08/26/2017 20:59	WG1013822
n-Butylbenzene	U		0.000315	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
sec-Butylbenzene	U		0.000245	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
tert-Butylbenzene	U		0.000251	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Carbon tetrachloride	U		0.000400	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Chlorobenzene	U		0.000258	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Chlorodibromomethane	U		0.000455	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Chloroethane	U		0.00115	0.00500	0.00610	1.05	08/26/2017 20:59	WG1013822
Chloroform	U		0.000279	0.00500	0.00610	1.05	08/26/2017 20:59	WG1013822
Chloromethane	U		0.000457	0.00250	0.00305	1.05	08/26/2017 20:59	WG1013822
2-Chlorotoluene	U		0.000367	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
4-Chlorotoluene	U	J4	0.000293	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,2-Dibromo-3-Chloropropane	U		0.00128	0.00500	0.00610	1.05	08/26/2017 20:59	WG1013822
1,2-Dibromoethane	U		0.000418	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Dibromomethane	U		0.000466	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,2-Dichlorobenzene	U		0.000372	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,3-Dichlorobenzene	U		0.000291	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,4-Dichlorobenzene	U		0.000276	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Dichlorodifluoromethane	U		0.000869	0.00500	0.00610	1.05	08/26/2017 20:59	WG1013822
1,1-Dichloroethane	U		0.000243	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,2-Dichloroethane	U	J4	0.000323	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822

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

SB-2 (2-3)

Collected date/time: 08/24/17 10:30

SAMPLE RESULTS - 02

L931900

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000369	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
cis-1,2-Dichloroethene	U		0.000286	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
trans-1,2-Dichloroethene	U		0.000322	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,2-Dichloropropane	U		0.000436	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,1-Dichloropropene	U		0.000386	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,3-Dichloropropane	U		0.000252	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
cis-1,3-Dichloropropene	U		0.000319	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
trans-1,3-Dichloropropene	U		0.000325	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
2,2-Dichloropropane	U		0.000340	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Di-isopropyl ether	U		0.000302	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Ethylbenzene	U		0.000362	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Hexachloro-1,3-butadiene	U		0.000417	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Isopropylbenzene	U		0.000296	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
p-Isopropyltoluene	U		0.000249	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
2-Butanone (MEK)	0.0129		0.00571	0.0100	0.0122	1.05	08/26/2017 20:59	WG1013822
Methylene Chloride	U		0.00122	0.00500	0.00610	1.05	08/26/2017 20:59	WG1013822
4-Methyl-2-pentanone (MIBK)	U		0.00229	0.0100	0.0122	1.05	08/26/2017 20:59	WG1013822
Methyl tert-butyl ether	U		0.000258	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Naphthalene	U		0.00122	0.00500	0.00610	1.05	08/26/2017 20:59	WG1013822
n-Propylbenzene	U		0.000251	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Styrene	U		0.000285	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,1,1,2-Tetrachloroethane	U		0.000322	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,1,2,2-Tetrachloroethane	U		0.000445	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,1,2-Trichlorotrifluoroethane	U		0.000445	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Tetrachloroethene	U		0.000336	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Toluene	U		0.000529	0.00500	0.00610	1.05	08/26/2017 20:59	WG1013822
1,2,3-Trichlorobenzene	U		0.000373	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,2,4-Trichlorobenzene	U		0.000473	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,1,1-Trichloroethane	U		0.000349	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,1,2-Trichloroethane	U		0.000338	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Trichloroethene	U		0.000340	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Trichlorofluoromethane	U		0.000466	0.00500	0.00610	1.05	08/26/2017 20:59	WG1013822
1,2,3-Trichloropropane	U		0.000903	0.00250	0.00305	1.05	08/26/2017 20:59	WG1013822
1,2,4-Trimethylbenzene	U		0.000257	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,2,3-Trimethylbenzene	U		0.000350	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Vinyl chloride	U		0.000355	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
1,3,5-Trimethylbenzene	U		0.000324	0.00100	0.00122	1.05	08/26/2017 20:59	WG1013822
Xylenes, Total	U		0.000851	0.00300	0.00366	1.05	08/26/2017 20:59	WG1013822
(S) Toluene-d8	*94.5*				*80.0-120*		*08/26/2017 20:59*	WG1013822
(S) Dibromofluoromethane	*116*				*74.0-131*		*08/26/2017 20:59*	WG1013822
(S) 4-Bromofluorobenzene	*101*				*64.0-132*		*08/26/2017 20:59*	WG1013822

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	6.37		1.55	4.00	4.64	1	08/26/2017 17:27	WG1013795
Residual Range Organics (RRO)	45.1		3.87	10.0	11.6	1	08/26/2017 17:27	WG1013795
(S) o-Terphenyl	*61.1*				*18.0-148*		*08/26/2017 17:27*	WG1013795

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.5		1	08/25/2017 15:51	WG1013720

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0285		0.00316	0.0200	0.0226	1	08/28/2017 11:02	WG1014160

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.40		0.734	2.00	2.26	1	08/28/2017 00:35	WG1013813
Barium	126		0.192	0.500	0.565	1	08/28/2017 00:35	WG1013813
Cadmium	0.132	J	0.0791	0.500	0.565	1	08/28/2017 00:35	WG1013813
Chromium	27.5		0.158	1.00	1.13	1	08/28/2017 00:35	WG1013813
Lead	13.2		0.215	0.500	0.565	1	08/28/2017 00:35	WG1013813
Selenium	U		0.836	2.00	2.26	1	08/28/2017 00:35	WG1013813
Silver	U		0.316	1.00	1.13	1	08/28/2017 00:35	WG1013813

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0429	0.100	0.127	1.12	08/26/2017 06:55	WG1013846
(S) a,a,a-Trifluorotoluene(FID)	*98.5*				*77.0-120*		*08/26/2017 06:55*	WG1013846

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.121		0.0118	0.0500	0.0588	1.04	08/26/2017 21:20	WG1013822
Acrylonitrile	U		0.00210	0.0100	0.0118	1.04	08/26/2017 21:20	WG1013822
Benzene	0.000351	J	0.000317	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Bromobenzene	U	J4	0.000334	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Bromodichloromethane	U		0.000298	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Bromoform	U		0.000498	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Bromomethane	U		0.00157	0.00500	0.00588	1.04	08/26/2017 21:20	WG1013822
n-Butylbenzene	U		0.000303	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
sec-Butylbenzene	U		0.000236	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
tert-Butylbenzene	U		0.000242	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Carbon tetrachloride	U		0.000385	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Chlorobenzene	U		0.000249	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Chlorodibromomethane	U		0.000438	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Chloroethane	U		0.00111	0.00500	0.00588	1.04	08/26/2017 21:20	WG1013822
Chloroform	U		0.000269	0.00500	0.00588	1.04	08/26/2017 21:20	WG1013822
Chloromethane	U		0.000441	0.00250	0.00294	1.04	08/26/2017 21:20	WG1013822
2-Chlorotoluene	U		0.000354	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
4-Chlorotoluene	U	J4	0.000282	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,2-Dibromo-3-Chloropropane	U		0.00123	0.00500	0.00588	1.04	08/26/2017 21:20	WG1013822
1,2-Dibromoethane	U		0.000403	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Dibromomethane	U		0.000449	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,2-Dichlorobenzene	U		0.000358	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,3-Dichlorobenzene	U		0.000281	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,4-Dichlorobenzene	U		0.000266	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Dichlorodifluoromethane	U		0.000838	0.00500	0.00588	1.04	08/26/2017 21:20	WG1013822
1,1-Dichloroethane	U		0.000234	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,2-Dichloroethane	U	J4	0.000311	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000356	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
cis-1,2-Dichloroethene	U		0.000276	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
trans-1,2-Dichloroethene	U		0.000310	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,2-Dichloropropane	U		0.000421	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,1-Dichloropropene	U		0.000373	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,3-Dichloropropane	U		0.000243	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
cis-1,3-Dichloropropene	U		0.000308	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
trans-1,3-Dichloropropene	U		0.000314	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
2,2-Dichloropropane	U		0.000328	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Di-isopropyl ether	U		0.000291	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Ethylbenzene	U		0.000349	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Hexachloro-1,3-butadiene	U		0.000402	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Isopropylbenzene	U		0.000286	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
p-Isopropyltoluene	U		0.000240	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
2-Butanone (MEK)	0.0162		0.00550	0.0100	0.0118	1.04	08/26/2017 21:20	WG1013822
Methylene Chloride	U		0.00118	0.00500	0.00588	1.04	08/26/2017 21:20	WG1013822
4-Methyl-2-pentanone (MIBK)	U		0.00221	0.0100	0.0118	1.04	08/26/2017 21:20	WG1013822
Methyl tert-butyl ether	U		0.000249	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Naphthalene	U		0.00118	0.00500	0.00588	1.04	08/26/2017 21:20	WG1013822
n-Propylbenzene	U		0.000242	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Styrene	U		0.000275	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,1,1,2-Tetrachloroethane	U		0.000310	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,1,2,2-Tetrachloroethane	U		0.000429	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,1,2-Trichlorotrifluoroethane	U		0.000429	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Tetrachloroethene	U		0.000324	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Toluene	U		0.000510	0.00500	0.00588	1.04	08/26/2017 21:20	WG1013822
1,2,3-Trichlorobenzene	U		0.000360	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,2,4-Trichlorobenzene	U		0.000456	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,1,1-Trichloroethane	U		0.000336	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,1,2-Trichloroethane	U		0.000326	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Trichloroethene	U		0.000328	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Trichlorofluoromethane	U		0.000449	0.00500	0.00588	1.04	08/26/2017 21:20	WG1013822
1,2,3-Trichloropropane	U		0.000871	0.00250	0.00294	1.04	08/26/2017 21:20	WG1013822
1,2,4-Trimethylbenzene	U		0.000248	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,2,3-Trimethylbenzene	U		0.000337	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Vinyl chloride	U		0.000342	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
1,3,5-Trimethylbenzene	U		0.000313	0.00100	0.00118	1.04	08/26/2017 21:20	WG1013822
Xylenes, Total	U		0.000820	0.00300	0.00353	1.04	08/26/2017 21:20	WG1013822
(S) Toluene-d8	*94.7*				*80.0-120*		*08/26/2017 21:20*	WG1013822
(S) Dibromofluoromethane	*115*				*74.0-131*		*08/26/2017 21:20*	WG1013822
(S) 4-Bromofluorobenzene	*104*				*64.0-132*		*08/26/2017 21:20*	WG1013822

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	11.3		1.51	4.00	4.52	1	08/26/2017 17:45	WG1013795
Residual Range Organics (RRO)	51.1		3.77	10.0	11.3	1	08/26/2017 17:45	WG1013795
(S) o-Terphenyl	*88.6*				*18.0-148*		*08/26/2017 17:45*	WG1013795

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

Chlorinated Acid Herbicides (GC) by Method 8151

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-D	U		0.0238	0.0700	0.237	3	09/06/2017 16:00	WG1015484
Dalapon	U		0.0383	0.0700	0.237	3	09/06/2017 16:00	WG1015484
2,4-DB	U		0.101	0.0700	0.237	3	09/06/2017 16:00	WG1015484
Dicamba	U		0.0532	0.0700	0.237	3	09/06/2017 16:00	WG1015484
Dichloroprop	U		0.0830	0.0700	0.237	3	09/06/2017 16:00	WG1015484
Dinoseb	U		0.0236	0.0700	0.237	3	09/06/2017 16:00	WG1015484
MCPA	U	J4	1.50	6.50	22.0	3	09/06/2017 16:00	WG1015484
MCPP	U	J4	1.24	6.50	22.0	3	09/06/2017 16:00	WG1015484
2,4,5-T	U	J3	0.0289	0.0700	0.237	3	09/06/2017 16:00	WG1015484
2,4,5-TP (Silvex)	U		0.0363	0.0700	0.237	3	09/06/2017 16:00	WG1015484
(S) 2,4-Dichlorophenyl Acetic Acid	*83.4*				*22.0-132*		*09/06/2017 16:00*	WG1015484

OP Pesticides by Method 8141

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Azinphos-Methyl	U		0.00427	0.100	0.113	1	08/28/2017 14:19	WG1013831
Bolstar (Sulprofos)	U		0.00626	0.100	0.113	1	08/28/2017 14:19	WG1013831
Chlorpyrifos	U		0.0104	0.100	0.113	1	08/28/2017 14:19	WG1013831
Coumaphos	U		0.00768	0.100	0.113	1	08/28/2017 14:19	WG1013831
Demeton,-O and -S	U		0.00383	0.0700	0.0791	1	08/28/2017 14:19	WG1013831
Diazinon	U		0.00505	0.100	0.113	1	08/28/2017 14:19	WG1013831
Dichlorvos	U		0.0109	0.100	0.113	1	08/28/2017 14:19	WG1013831
Dimethoate	U		0.0224	0.100	0.113	1	08/28/2017 14:19	WG1013831
Disulfoton	U		0.00563	0.100	0.113	1	08/28/2017 14:19	WG1013831
EPN	U		0.00579	0.100	0.113	1	08/28/2017 14:19	WG1013831
Ethoprop	U		0.00525	0.100	0.113	1	08/28/2017 14:19	WG1013831
Ethyl Parathion	U		0.00645	0.100	0.113	1	08/28/2017 14:19	WG1013831
Fensulfothion	U		0.0191	0.100	0.113	1	08/28/2017 14:19	WG1013831
Fenthion	U		0.00687	0.100	0.113	1	08/28/2017 14:19	WG1013831
Malathion	U		0.00791	0.100	0.113	1	08/28/2017 14:19	WG1013831
Merphos	U		0.00609	0.100	0.113	1	08/28/2017 14:19	WG1013831
Methyl parathion	U		0.00756	0.100	0.113	1	08/28/2017 14:19	WG1013831
Mevinphos	U		0.0115	0.100	0.113	1	08/28/2017 14:19	WG1013831
Naled	U		0.00472	0.100	0.113	1	08/28/2017 14:19	WG1013831
Phorate	U		0.00532	0.100	0.113	1	08/28/2017 14:19	WG1013831
Ronnel	U		0.00494	0.100	0.113	1	08/28/2017 14:19	WG1013831
Stirophos	U		0.00607	0.100	0.113	1	08/28/2017 14:19	WG1013831
Sulfotep	U		0.00436	0.100	0.113	1	08/28/2017 14:19	WG1013831
TEPP	U		0.177	1.00	1.13	1	08/28/2017 14:19	WG1013831
Tokuthion (Protothiofos)	U		0.00682	0.100	0.113	1	08/28/2017 14:19	WG1013831
Trichloronate	U		0.00750	0.100	0.113	1	08/28/2017 14:19	WG1013831
(S) Triphenyl Phosphate	*70.9*				*44.0-120*		*08/28/2017 14:19*	WG1013831

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00153	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Alpha BHC	U		0.00154	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Beta BHC	U		0.00181	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Delta BHC	U		0.00162	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Gamma BHC	U		0.00164	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Chlordane	U		0.0441	0.200	0.226	1	08/28/2017 13:21	WG1013809
4,4-DDD	U		0.00176	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
4,4-DDE	U		0.00174	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
4,4-DDT	U		0.00226	0.0200	0.0226	1	08/28/2017 13:21	WG1013809

SB-3 (3-4)

Collected date/time: 08/24/17 15:30

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Dieldrin	U		0.00172	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Endosulfan I	U		0.00168	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Endosulfan II	U		0.00181	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Endosulfan sulfate	U		0.00171	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Endrin	U		0.00177	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Endrin aldehyde	U		0.00146	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Endrin ketone	U		0.00186	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Hexachlorobenzene	U		0.00140	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Heptachlor	U		0.00174	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Heptachlor epoxide	U		0.00182	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Methoxychlor	U		0.00201	0.0200	0.0226	1	08/28/2017 13:21	WG1013809
Toxaphene	U		0.0407	0.400	0.452	1	08/28/2017 13:21	WG1013809
(S) Decachlorobiphenyl	*80.1*				*10.0-148*		*08/28/2017 13:21*	WG1013809
(S) Tetrachloro-m-xylene	*82.2*				*21.0-146*		*08/28/2017 13:21*	WG1013809

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

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.6		1	08/25/2017 15:51	WG1013720

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.00903	J	0.00293	0.0200	0.0209	1	08/28/2017 11:04	WG1014160

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.68		0.680	2.00	2.09	1	08/28/2017 00:38	WG1013813
Barium	50.2		0.178	0.500	0.523	1	08/28/2017 00:38	WG1013813
Cadmium	U		0.0732	0.500	0.523	1	08/28/2017 00:38	WG1013813
Chromium	22.0		0.146	1.00	1.05	1	08/28/2017 00:38	WG1013813
Lead	2.90		0.199	0.500	0.523	1	08/28/2017 00:38	WG1013813
Selenium	U		0.774	2.00	2.09	1	08/28/2017 00:38	WG1013813
Silver	U		0.293	1.00	1.05	1	08/28/2017 00:38	WG1013813

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0355	0.100	0.105	1	08/26/2017 07:17	WG1013846
(S) a,a,a-Trifluorotoluene(FID)	*98.7*				*77.0-120*		*08/26/2017 07:17*	WG1013846

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0162	J	0.0105	0.0500	0.0523	1	08/26/2017 21:41	WG1013822
Acrylonitrile	U		0.00187	0.0100	0.0105	1	08/26/2017 21:41	WG1013822
Benzene	U		0.000282	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Bromobenzene	U	J4	0.000297	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Bromodichloromethane	U		0.000266	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Bromoform	U		0.000444	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Bromomethane	U		0.00140	0.00500	0.00523	1	08/26/2017 21:41	WG1013822
n-Butylbenzene	U		0.000270	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
sec-Butylbenzene	U		0.000210	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
tert-Butylbenzene	U		0.000215	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Carbon tetrachloride	U		0.000343	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Chlorobenzene	U		0.000222	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Chlorodibromomethane	U		0.000390	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Chloroethane	U		0.000990	0.00500	0.00523	1	08/26/2017 21:41	WG1013822
Chloroform	U		0.000240	0.00500	0.00523	1	08/26/2017 21:41	WG1013822
Chloromethane	U		0.000392	0.00250	0.00261	1	08/26/2017 21:41	WG1013822
2-Chlorotoluene	U		0.000315	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
4-Chlorotoluene	U	J4	0.000251	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,2-Dibromo-3-Chloropropane	U		0.00110	0.00500	0.00523	1	08/26/2017 21:41	WG1013822
1,2-Dibromoethane	U		0.000359	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Dibromomethane	U		0.000400	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,2-Dichlorobenzene	U		0.000319	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,3-Dichlorobenzene	U		0.000250	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,4-Dichlorobenzene	U		0.000236	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Dichlorodifluoromethane	U		0.000746	0.00500	0.00523	1	08/26/2017 21:41	WG1013822
1,1-Dichloroethane	U		0.000208	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,2-Dichloroethane	U	J4	0.000277	0.00100	0.00105	1	08/26/2017 21:41	WG1013822

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000317	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
cis-1,2-Dichloroethene	U		0.000246	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
trans-1,2-Dichloroethene	U		0.000276	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,2-Dichloropropane	U		0.000374	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,1-Dichloropropene	U		0.000332	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,3-Dichloropropane	U		0.000217	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
cis-1,3-Dichloropropene	U		0.000274	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
trans-1,3-Dichloropropene	U		0.000279	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
2,2-Dichloropropane	U		0.000292	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Di-isopropyl ether	U		0.000259	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Ethylbenzene	U		0.000311	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Hexachloro-1,3-butadiene	U		0.000358	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Isopropylbenzene	U		0.000254	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
p-Isopropyltoluene	U		0.000213	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
2-Butanone (MEK)	U		0.00490	0.0100	0.0105	1	08/26/2017 21:41	WG1013822
Methylene Chloride	U		0.00105	0.00500	0.00523	1	08/26/2017 21:41	WG1013822
4-Methyl-2-pentanone (MIBK)	U		0.00197	0.0100	0.0105	1	08/26/2017 21:41	WG1013822
Methyl tert-butyl ether	U		0.000222	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Naphthalene	U		0.00105	0.00500	0.00523	1	08/26/2017 21:41	WG1013822
n-Propylbenzene	U		0.000215	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Styrene	U		0.000245	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,1,1,2-Tetrachloroethane	U		0.000276	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,1,2,2-Tetrachloroethane	U		0.000382	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,1,2-Trichlorotrifluoroethane	U		0.000382	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Tetrachloroethene	U		0.000289	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Toluene	U		0.000454	0.00500	0.00523	1	08/26/2017 21:41	WG1013822
1,2,3-Trichlorobenzene	U		0.000320	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,2,4-Trichlorobenzene	U		0.000406	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,1,1-Trichloroethane	U		0.000299	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,1,2-Trichloroethane	U		0.000290	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Trichloroethene	U		0.000292	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Trichlorofluoromethane	U		0.000400	0.00500	0.00523	1	08/26/2017 21:41	WG1013822
1,2,3-Trichloropropane	U		0.000775	0.00250	0.00261	1	08/26/2017 21:41	WG1013822
1,2,4-Trimethylbenzene	U		0.000221	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,2,3-Trimethylbenzene	U		0.000300	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Vinyl chloride	U		0.000304	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
1,3,5-Trimethylbenzene	U		0.000278	0.00100	0.00105	1	08/26/2017 21:41	WG1013822
Xylenes, Total	U		0.000730	0.00300	0.00314	1	08/26/2017 21:41	WG1013822
(S) Toluene-d8	*93.6*				*80.0-120*		*08/26/2017 21:41*	WG1013822
(S) Dibromofluoromethane	*118*				*74.0-131*		*08/26/2017 21:41*	WG1013822
(S) 4-Bromofluorobenzene	*101*				*64.0-132*		*08/26/2017 21:41*	WG1013822

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.39	4.00	4.18	1	08/26/2017 18:02	WG1013795
Residual Range Organics (RRO)	6.49	J	3.49	10.0	10.5	1	08/26/2017 18:02	WG1013795
(S) o-Terphenyl	*129*				*18.0-148*		*08/26/2017 18:02*	WG1013795

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

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	2.50	5.94	49.7	118		2	WG1013960
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1013960
Benzene	71-43-2	78.10	0.400	1.28	8.19	26.2		2	WG1013960
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1013960
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1013960
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1013960
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1013960
1,3-Butadiene	106-99-0	54.10	4.00	8.85	24.7	54.7		2	WG1013960
Carbon disulfide	75-15-0	76.10	0.400	1.24	3.10	9.65		2	WG1013960
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1013960
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1013960
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1013960
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1013960
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1013960
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1013960
Cyclohexane	110-82-7	84.20	0.400	1.38	16.1	55.5		2	WG1013960
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1013960
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1013960
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1013960
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	11.9	71.6		2	WG1013960
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1013960
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1013960
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1013960
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1013960
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	0.825	3.27		2	WG1013960
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1013960
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1013960
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1013960
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1013960
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1013960
Ethanol	64-17-5	46.10	1.26	2.38	10.4	19.7		2	WG1013960
Ethylbenzene	100-41-4	106	0.400	1.73	ND	ND		2	WG1013960
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1013960
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1013960
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	1.00	4.95		2	WG1013960
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1013960
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1013960
Heptane	142-82-5	100	0.400	1.64	14.2	58.3		2	WG1013960
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1013960
n-Hexane	110-54-3	86.20	0.400	1.41	33.9	120		2	WG1013960
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1013960
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1013960
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1013960
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	8.59	25.3		2	WG1013960
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1013960
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1013960
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1013960
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1013960
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1013960
Propene	115-07-1	42.10	10.0	17.2	653	1120		25	WG1014295
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1013960
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1013960
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG1013960
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1013960
Toluene	108-88-3	92.10	0.400	1.51	6.73	25.4		2	WG1013960
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1013960

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	0.400	2.18	ND	ND		2	WG1013960
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1013960
Trichloroethylene	79-01-6	131	0.400	2.14	0.524	2.81		2	WG1013960
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	0.699	3.43		2	WG1013960
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1013960
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1013960
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1013960
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1013960
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1013960
m&p-Xylene	1330-20-7	106	0.800	3.47	1.52	6.58		2	WG1013960
o-Xylene	95-47-6	106	0.400	1.73	0.599	2.60		2	WG1013960
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*122*				WG1014295
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*340*		J1		WG1013960

Sample Narrative:

L931900-05 WG1013960: Surrogate failure due to matrix interference.

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

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

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	2.50	5.94	11.1	26.3		2	WG1013960
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1013960
Benzene	71-43-2	78.10	0.400	1.28	2.33	7.46		2	WG1013960
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1013960
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1013960
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1013960
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1013960
1,3-Butadiene	106-99-0	54.10	4.00	8.85	11.1	24.6		2	WG1013960
Carbon disulfide	75-15-0	76.10	0.400	1.24	2.29	7.14		2	WG1013960
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1013960
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1013960
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1013960
Chloroform	67-66-3	119	0.400	1.95	7.92	38.6		2	WG1013960
Chloromethane	74-87-3	50.50	0.400	0.826	0.728	1.50		2	WG1013960
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1013960
Cyclohexane	110-82-7	84.20	0.400	1.38	1.70	5.85		2	WG1013960
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1013960
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1013960
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1013960
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	1.75	10.5		2	WG1013960
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1013960
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1013960
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1013960
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1013960
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1013960
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1013960
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1013960
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1013960
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1013960
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1013960
Ethanol	64-17-5	46.10	1.26	2.38	6.03	11.4		2	WG1013960
Ethylbenzene	100-41-4	106	0.400	1.73	ND	ND		2	WG1013960
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1013960
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1013960
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG1013960
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1013960
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1013960
Heptane	142-82-5	100	0.400	1.64	1.93	7.90		2	WG1013960
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1013960
n-Hexane	110-54-3	86.20	0.400	1.41	5.22	18.4		2	WG1013960
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1013960
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1013960
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1013960
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1013960
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1013960
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1013960
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1013960
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1013960
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1013960
Propene	115-07-1	42.10	10.0	17.2	147	253		25	WG1014295
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1013960
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1013960
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG1013960
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1013960
Toluene	108-88-3	92.10	0.400	1.51	1.67	6.27		2	WG1013960
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1013960

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	0.400	2.18	ND	ND		2	WG1013960
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1013960
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1013960
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1013960
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1013960
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	0.766	3.58		2	WG1013960
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1013960
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1013960
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1013960
m&p-Xylene	1330-20-7	106	0.800	3.47	ND	ND		2	WG1013960
o-Xylene	95-47-6	106	0.400	1.73	ND	ND		2	WG1013960
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG1013960
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*93.9*				WG1014295

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.1		1	08/25/2017 15:51	WG1013720

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.00577	J	0.00311	0.0200	0.0222	1	08/28/2017 11:07	WG1014160

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.74	J	0.721	2.00	2.22	1	08/28/2017 00:40	WG1013813
Barium	39.1		0.189	0.500	0.555	1	08/28/2017 00:40	WG1013813
Cadmium	U		0.0777	0.500	0.555	1	08/28/2017 00:40	WG1013813
Chromium	22.6		0.155	1.00	1.11	1	08/28/2017 00:40	WG1013813
Lead	2.24		0.211	0.500	0.555	1	08/28/2017 00:40	WG1013813
Selenium	U		0.821	2.00	2.22	1	08/28/2017 00:40	WG1013813
Silver	U		0.311	1.00	1.11	1	08/28/2017 00:40	WG1013813

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0463	0.100	0.137	1.23	08/26/2017 07:40	WG1013846
(S) a,a,a-Trifluorotoluene(FID)	*99.4*				*77.0-120*		*08/26/2017 07:40*	WG1013846

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0143	J	0.0111	0.0500	0.0555	1	08/26/2017 22:02	WG1013822
Acrylonitrile	U		0.00199	0.0100	0.0111	1	08/26/2017 22:02	WG1013822
Benzene	U		0.000300	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Bromobenzene	U	J4	0.000315	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Bromodichloromethane	U		0.000282	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Bromoform	U		0.000471	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Bromomethane	U		0.00149	0.00500	0.00555	1	08/26/2017 22:02	WG1013822
n-Butylbenzene	U		0.000286	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
sec-Butylbenzene	U		0.000223	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
tert-Butylbenzene	U		0.000229	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Carbon tetrachloride	U		0.000364	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Chlorobenzene	U		0.000235	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Chlorodibromomethane	U		0.000414	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Chloroethane	U		0.00105	0.00500	0.00555	1	08/26/2017 22:02	WG1013822
Chloroform	U		0.000254	0.00500	0.00555	1	08/26/2017 22:02	WG1013822
Chloromethane	U		0.000416	0.00250	0.00277	1	08/26/2017 22:02	WG1013822
2-Chlorotoluene	U		0.000334	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
4-Chlorotoluene	U	J4	0.000266	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00500	0.00555	1	08/26/2017 22:02	WG1013822
1,2-Dibromoethane	U		0.000381	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Dibromomethane	U		0.000424	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,2-Dichlorobenzene	U		0.000339	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,3-Dichlorobenzene	U		0.000265	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,4-Dichlorobenzene	U		0.000251	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Dichlorodifluoromethane	U		0.000791	0.00500	0.00555	1	08/26/2017 22:02	WG1013822
1,1-Dichloroethane	U		0.000221	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,2-Dichloroethane	U	J4	0.000294	0.00100	0.00111	1	08/26/2017 22:02	WG1013822

SB-5 (11-12)

Collected date/time: 08/24/17 16:45

SAMPLE RESULTS - 07

L931900

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000336	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
cis-1,2-Dichloroethene	U		0.000261	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
trans-1,2-Dichloroethene	U		0.000293	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,2-Dichloropropane	U		0.000397	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,1-Dichloropropene	U		0.000352	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,3-Dichloropropane	U		0.000230	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
cis-1,3-Dichloropropene	U		0.000291	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
trans-1,3-Dichloropropene	U		0.000296	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
2,2-Dichloropropane	U		0.000310	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Di-isopropyl ether	U		0.000275	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Ethylbenzene	U		0.000330	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Hexachloro-1,3-butadiene	U		0.000380	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Isopropylbenzene	U		0.000270	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
p-Isopropyltoluene	U		0.000226	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
2-Butanone (MEK)	U		0.00519	0.0100	0.0111	1	08/26/2017 22:02	WG1013822
Methylene Chloride	U		0.00111	0.00500	0.00555	1	08/26/2017 22:02	WG1013822
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0100	0.0111	1	08/26/2017 22:02	WG1013822
Methyl tert-butyl ether	U		0.000235	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Naphthalene	U		0.00111	0.00500	0.00555	1	08/26/2017 22:02	WG1013822
n-Propylbenzene	U		0.000229	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Styrene	U		0.000260	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,1,1,2-Tetrachloroethane	U		0.000293	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,1,2,2-Tetrachloroethane	U		0.000405	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,1,2-Trichlorotrifluoroethane	U		0.000405	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Tetrachloroethene	U		0.000306	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Toluene	U		0.000482	0.00500	0.00555	1	08/26/2017 22:02	WG1013822
1,2,3-Trichlorobenzene	U		0.000340	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,2,4-Trichlorobenzene	U		0.000431	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,1,1-Trichloroethane	U		0.000317	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,1,2-Trichloroethane	U		0.000307	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Trichloroethene	U		0.000310	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Trichlorofluoromethane	U		0.000424	0.00500	0.00555	1	08/26/2017 22:02	WG1013822
1,2,3-Trichloropropane	U		0.000822	0.00250	0.00277	1	08/26/2017 22:02	WG1013822
1,2,4-Trimethylbenzene	U		0.000234	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,2,3-Trimethylbenzene	U		0.000319	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Vinyl chloride	U		0.000323	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
1,3,5-Trimethylbenzene	U		0.000295	0.00100	0.00111	1	08/26/2017 22:02	WG1013822
Xylenes, Total	U		0.000775	0.00300	0.00333	1	08/26/2017 22:02	WG1013822
(S) Toluene-d8	*92.3*				*80.0-120*		*08/26/2017 22:02*	WG1013822
(S) Dibromofluoromethane	*117*				*74.0-131*		*08/26/2017 22:02*	WG1013822
(S) 4-Bromofluorobenzene	*107*				*64.0-132*		*08/26/2017 22:02*	WG1013822

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	23.1	J	14.8	4.00	44.4	10	08/26/2017 19:10	WG1013795
Residual Range Organics (RRO)	201		37.0	10.0	111	10	08/26/2017 19:10	WG1013795
(S) o-Terphenyl	*125*				*18.0-148*		*08/26/2017 19:10*	WG1013795

Method Blank (MB)

(MB) R3244904-1 08/25/17 15:51

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000800			

L931226-01 Original Sample (OS) • Duplicate (DUP)

(OS) L931226-01 08/25/17 15:51 • (DUP) R3244904-3 08/25/17 15:51

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.9	88.7	1	0.165		5

Laboratory Control Sample (LCS)

(LCS) R3244904-2 08/25/17 15:51

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

L931900-01 Original Sample (OS) • Duplicate (DUP)

(OS) L931900-01 08/28/17 11:54 • (DUP) WG1014303-3 08/28/17 11:54

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	3.87	3.87	1	0.000	T8	1

Sample Narrative:
OS: 3.87 at 20.0c
DUP: 3.87 at 20.2c

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

(LCS) WG1014303-1 08/28/17 11:54 • (LCSD) WG1014303-2 08/28/17 11:54

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	su	su	su	%	%	%			%	%
pH	10.0	10.0	10.0	100	100	98.4-102			0.000	1

Sample Narrative:
LCS: 10.00 at 19.9c
LCSD: 10.01 at 19.8c

WG1014160

Mercury by Method 7471A

QUALITY CONTROL SUMMARY

L931900-01,02,03,04,07

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

Method Blank (MB)

(MB) R3244993-1 08/28/17 10:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0028	0.0200

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

(LCS) R3244993-2 08/28/17 10:48 • (LCSD) R3244993-3 08/28/17 10:50

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 %
Mercury	0.300	0.242	0.240	81	80	80-120			1	20

L931900-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L931900-01 08/28/17 10:52 • (MS) R3244993-4 08/28/17 10:55 • (MSD) R3244993-5 08/28/17 10:57

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 %
Mercury	0.314	0.00842	0.25	0.244	77	75	1	75-125			2	20

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

Method Blank (MB)

(MB) R3244804-1 08/27/17 23:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Arsenic	U		0.65	2.00
Barium	U		0.17	0.500
Cadmium	U		0.07	0.500
Chromium	U		0.14	1.00
Lead	U		0.19	0.500
Selenium	U		0.74	2.00
Silver	U		0.28	1.00

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

(LCS) R3244804-2 08/27/17 23:32 • (LCSD) R3244804-3 08/27/17 23:35

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Arsenic	100	95.3	97.4	95	97	80-120			2	20
Barium	100	99.9	102	100	102	80-120			2	20
Cadmium	100	95.4	97.4	95	97	80-120			2	20
Chromium	100	97.4	100	97	100	80-120			3	20
Lead	100	96.3	98.6	96	99	80-120			2	20
Selenium	100	95.7	97.4	96	97	80-120			2	20
Silver	20.0	17.1	17.4	85	87	80-120			2	20

L930880-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L930880-01 08/27/17 23:37 • (MS) R3244804-6 08/27/17 23:45 • (MSD) R3244804-7 08/27/17 23:47

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	127	2.29	118	115	92	89	1	75-125			3	20
Barium	127	129	266	257	108	101	1	75-125			3	20
Cadmium	127	U	117	114	93	90	1	75-125			3	20
Chromium	127	14.9	130	126	91	88	1	75-125			3	20
Lead	127	11.4	135	131	98	94	1	75-125			3	20
Selenium	127	U	116	114	92	90	1	75-125			2	20
Silver	25.3	U	20.7	20.2	82	80	1	75-125			3	20

Method Blank (MB)

(MB) R3245006-3 08/26/17 08:35

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) R3245006-3 08/26/17 08:35

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
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	*94.5*			*60.0-140*

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

(LCS) R3245006-1 08/26/17 07:02 • (LCSD) R3245006-2 08/26/17 07:47

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	3.48	3.46	92.9	92.2	52.0-158			0.780	25
Dichlorodifluoromethane	3.75	3.70	3.61	98.8	96.3	69.0-143			2.57	25
1,2-Dichlorotetrafluoroethane	3.75	3.92	3.91	105	104	70.0-130			0.470	25
Chloromethane	3.75	3.89	3.75	104	99.9	70.0-130			3.75	25
Vinyl chloride	3.75	3.72	3.66	99.2	97.7	70.0-130			1.55	25
1,3-Butadiene	3.75	3.63	3.57	96.9	95.1	70.0-130			1.80	25

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

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

(LCS) R3245006-1 08/26/17 07:02 • (LCSD) R3245006-2 08/26/17 07:47

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromomethane	3.75	3.55	3.57	94.8	95.1	70.0-130			0.350	25
Chloroethane	3.75	3.56	3.89	95.0	104	70.0-130			8.69	25
Trichlorofluoromethane	3.75	3.93	3.88	105	103	70.0-130			1.33	25
1,1,2-Trichlorotrifluoroethane	3.75	3.90	3.90	104	104	70.0-130			0.0400	25
1,1-Dichloroethene	3.75	3.85	3.89	103	104	70.0-130			1.17	25
1,1-Dichloroethane	3.75	3.81	3.83	102	102	70.0-130			0.690	25
Acetone	3.75	3.75	3.69	100	98.5	70.0-130			1.52	25
2-Propanol	3.75	3.84	3.81	102	102	66.0-150			0.730	25
Carbon disulfide	3.75	3.88	3.89	103	104	70.0-130			0.170	25
Methylene Chloride	3.75	3.74	3.75	99.7	99.9	70.0-130			0.230	25
MTBE	3.75	3.86	3.90	103	104	70.0-130			1.19	25
trans-1,2-Dichloroethene	3.75	3.88	3.88	103	103	70.0-130			0.0600	25
n-Hexane	3.75	3.83	3.85	102	103	70.0-130			0.610	25
Vinyl acetate	3.75	3.96	4.02	106	107	70.0-130			1.54	25
Methyl Ethyl Ketone	3.75	3.85	3.84	103	103	70.0-130			0.170	25
cis-1,2-Dichloroethene	3.75	3.84	3.84	102	102	70.0-130			0.0400	25
Chloroform	3.75	3.83	3.84	102	102	70.0-130			0.230	25
Cyclohexane	3.75	3.84	3.89	102	104	70.0-130			1.28	25
1,1,1-Trichloroethane	3.75	3.85	3.87	103	103	70.0-130			0.460	25
Carbon tetrachloride	3.75	3.87	3.89	103	104	70.0-130			0.510	25
Benzene	3.75	3.85	3.87	103	103	70.0-130			0.540	25
1,2-Dichloroethane	3.75	3.84	3.84	102	102	70.0-130			0.0200	25
Heptane	3.75	3.88	3.94	103	105	70.0-130			1.54	25
Trichloroethylene	3.75	3.85	3.87	103	103	70.0-130			0.590	25
1,2-Dichloropropane	3.75	3.82	3.86	102	103	70.0-130			0.840	25
1,4-Dioxane	3.75	3.76	3.85	100	103	70.0-152			2.14	25
Bromodichloromethane	3.75	3.91	3.92	104	105	70.0-130			0.300	25
cis-1,3-Dichloropropene	3.75	3.93	3.96	105	106	70.0-130			0.670	25
4-Methyl-2-pentanone (MIBK)	3.75	3.98	4.01	106	107	70.0-142			0.920	25
Toluene	3.75	3.93	3.96	105	106	70.0-130			0.750	25
trans-1,3-Dichloropropene	3.75	3.97	3.99	106	106	70.0-130			0.570	25
1,1,2-Trichloroethane	3.75	3.86	3.88	103	104	70.0-130			0.540	25
Tetrachloroethylene	3.75	3.90	3.92	104	105	70.0-130			0.600	25
Methyl Butyl Ketone	3.75	4.12	4.13	110	110	70.0-150			0.260	25
Dibromochloromethane	3.75	3.95	3.96	105	106	70.0-130			0.200	25
1,2-Dibromoethane	3.75	3.91	3.92	104	104	70.0-130			0.200	25
Chlorobenzene	3.75	3.87	3.88	103	103	70.0-130			0.130	25
Ethylbenzene	3.75	4.03	4.03	107	108	70.0-130			0.220	25
m&p-Xylene	7.50	8.04	8.06	107	107	70.0-130			0.210	25
o-Xylene	3.75	4.03	4.03	107	107	70.0-130			0.0200	25

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

(LCS) R3245006-1 08/26/17 07:02 • (LCSD) R3245006-2 08/26/17 07:47

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Styrene	3.75	4.22	4.24	113	113	70.0-130			0.460	25
Bromoform	3.75	4.20	4.20	112	112	70.0-130			0.0700	25
1,1,2,2-Tetrachloroethane	3.75	4.01	4.05	107	108	70.0-130			0.920	25
4-Ethyltoluene	3.75	4.26	4.29	113	114	70.0-130			0.780	25
1,3,5-Trimethylbenzene	3.75	4.13	4.17	110	111	70.0-130			0.950	25
1,2,4-Trimethylbenzene	3.75	4.17	4.19	111	112	70.0-130			0.460	25
1,3-Dichlorobenzene	3.75	4.35	4.37	116	117	70.0-130			0.610	25
1,4-Dichlorobenzene	3.75	4.60	4.64	123	124	70.0-130			0.770	25
Benzyl Chloride	3.75	4.72	4.75	126	127	70.0-144			0.740	25
1,2-Dichlorobenzene	3.75	4.24	4.26	113	114	70.0-130			0.490	25
1,2,4-Trichlorobenzene	3.75	4.44	4.50	119	120	70.0-155			1.17	25
Hexachloro-1,3-butadiene	3.75	4.21	4.26	112	114	70.0-145			1.20	25
Naphthalene	3.75	4.62	4.66	123	124	70.0-155			0.830	25
Allyl Chloride	3.75	3.78	3.81	101	102	70.0-130			0.820	25
2-Chlorotoluene	3.75	4.11	4.13	110	110	70.0-130			0.600	25
Methyl Methacrylate	3.75	3.89	3.90	104	104	70.0-130			0.200	25
Tetrahydrofuran	3.75	3.79	3.85	101	103	70.0-140			1.44	25
2,2,4-Trimethylpentane	3.75	3.88	3.91	104	104	70.0-130			0.710	25
Vinyl Bromide	3.75	3.80	3.86	101	103	70.0-130			1.50	25
Isopropylbenzene	3.75	4.05	4.07	108	108	70.0-130			0.320	25
(S) 1,4-Bromofluorobenzene				*102*	*102*	*60.0-140*				

Method Blank (MB)

(MB) R3245089-3 08/28/17 09:36

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Propene	U		0.0932	0.400
(S) 1,4-Bromofluorobenzene	*95.2*			*60.0-140*

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

(LCS) R3245089-1 08/28/17 08:02 • (LCSD) R3245089-2 08/28/17 08:48

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Propene	3.75	3.99	3.99	106	106	54.0-155			0.0200	25
(S) 1,4-Bromofluorobenzene				*102*	*101*	*60.0-140*				

Method Blank (MB)

(MB) R3244718-3 08/26/17 01:21

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)	*101*			*77.0-120*

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

(LCS) R3244718-1 08/26/17 00:14 • (LCSD) R3244718-2 08/26/17 00:36

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 %
Gasoline Range Organics-NWTPH	5.50	5.04	5.39	91.6	97.9	70.0-133			6.62	20
(S) a,a,a-Trifluorotoluene(FID)				*102*	*103*	*77.0-120*				

L931282-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L931282-07 08/26/17 08:02 • (MS) R3244718-4 08/26/17 08:24 • (MSD) R3244718-5 08/26/17 08:46

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	6.55	ND	1.92	0.989	28.4	14.2	1	10.0-146		J3	63.8	30
(S) a,a,a-Trifluorotoluene(FID)					*98.4*	*91.4*		*77.0-120*				

Method Blank (MB)

(MB) R3244836-2 08/26/17 12:38

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Isopropylbenzene	U		0.000243	0.00100

Method Blank (MB)

(MB) R3244836-2 08/26/17 12:38

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	*101*			*80.0-120*
(S) Dibromofluoromethane	*106*			*74.0-131*
(S) 4-Bromofluorobenzene	*102*			*64.0-132*

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

(LCS) R3244836-1 08/26/17 11:12 • (LCSD) R3244836-3 08/26/17 13:19

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	0.125	0.183	0.159	146	128	11.0-160			13.5	23
Acrylonitrile	0.125	0.177	0.155	142	124	61.0-143			12.9	20
Benzene	0.0250	0.0297	0.0298	119	119	71.0-124			0.370	20
Bromobenzene	0.0250	0.0290	0.0302	116	121	78.0-120		J4	4.24	20
Bromodichloromethane	0.0250	0.0282	0.0277	113	111	75.0-120			1.76	20

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

(LCS) R3244836-1 08/26/17 11:12 • (LCSD) R3244836-3 08/26/17 13:19

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 %
Bromoform	0.0250	0.0302	0.0296	121	118	65.0-133			2.21	20
Bromomethane	0.0250	0.0252	0.0266	101	107	26.0-160			5.50	20
n-Butylbenzene	0.0250	0.0237	0.0234	95.0	93.4	73.0-126			1.61	20
sec-Butylbenzene	0.0250	0.0240	0.0246	96.1	98.6	75.0-121			2.59	20
tert-Butylbenzene	0.0250	0.0247	0.0252	98.9	101	74.0-122			1.99	20
Carbon tetrachloride	0.0250	0.0278	0.0285	111	114	66.0-123			2.30	20
Chlorobenzene	0.0250	0.0238	0.0245	95.2	97.9	79.0-121			2.71	20
Chlorodibromomethane	0.0250	0.0254	0.0247	101	98.8	74.0-128			2.71	20
Chloroethane	0.0250	0.0284	0.0288	113	115	51.0-147			1.50	20
Chloroform	0.0250	0.0292	0.0296	117	118	73.0-123			1.51	20
Chloromethane	0.0250	0.0318	0.0332	127	133	51.0-138			4.19	20
2-Chlorotoluene	0.0250	0.0279	0.0295	112	118	72.0-124			5.74	20
4-Chlorotoluene	0.0250	0.0283	0.0302	113	121	78.0-120		J4	6.50	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0293	0.0252	117	101	65.0-126			15.1	20
1,2-Dibromoethane	0.0250	0.0254	0.0240	102	95.9	78.0-122			5.86	20
Dibromomethane	0.0250	0.0285	0.0275	114	110	79.0-120			3.50	20
1,2-Dichlorobenzene	0.0250	0.0265	0.0262	106	105	80.0-120			1.34	20
1,3-Dichlorobenzene	0.0250	0.0252	0.0255	101	102	72.0-123			1.12	20
1,4-Dichlorobenzene	0.0250	0.0255	0.0259	102	103	77.0-120			1.40	20
Dichlorodifluoromethane	0.0250	0.0309	0.0314	124	126	49.0-155			1.63	20
1,1-Dichloroethane	0.0250	0.0312	0.0317	125	127	70.0-128			1.77	20
1,2-Dichloroethane	0.0250	0.0325	0.0316	130	127	69.0-128	J4		2.67	20
1,1-Dichloroethene	0.0250	0.0273	0.0274	109	110	63.0-131			0.520	20
cis-1,2-Dichloroethene	0.0250	0.0291	0.0298	117	119	74.0-123			2.31	20
trans-1,2-Dichloroethene	0.0250	0.0285	0.0287	114	115	72.0-122			0.870	20
1,2-Dichloropropane	0.0250	0.0295	0.0302	118	121	75.0-126			2.47	20
1,1-Dichloropropene	0.0250	0.0317	0.0316	127	126	72.0-130			0.440	20
1,3-Dichloropropane	0.0250	0.0260	0.0253	104	101	80.0-121			2.85	20
cis-1,3-Dichloropropene	0.0250	0.0276	0.0272	110	109	80.0-125			1.48	20
trans-1,3-Dichloropropene	0.0250	0.0265	0.0259	106	104	75.0-129			2.16	20
2,2-Dichloropropane	0.0250	0.0279	0.0292	112	117	60.0-129			4.38	20
Di-isopropyl ether	0.0250	0.0327	0.0323	131	129	62.0-133			1.50	20
Ethylbenzene	0.0250	0.0236	0.0238	94.2	95.0	77.0-120			0.850	20
Hexachloro-1,3-butadiene	0.0250	0.0172	0.0183	68.8	73.1	68.0-128			6.05	20
Isopropylbenzene	0.0250	0.0264	0.0277	106	111	75.0-120			4.84	20
p-Isopropyltoluene	0.0250	0.0240	0.0240	96.1	96.1	74.0-125			0.000	20
2-Butanone (MEK)	0.125	0.152	0.127	122	101	37.0-159			18.0	20
Methylene Chloride	0.0250	0.0244	0.0242	97.4	96.7	67.0-123			0.750	20
4-Methyl-2-pentanone (MIBK)	0.125	0.148	0.126	118	101	60.0-144			16.1	20
Methyl tert-butyl ether	0.0250	0.0307	0.0286	123	114	66.0-125			7.04	20

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

(LCS) R3244836-1 08/26/17 11:12 • (LCSD) R3244836-3 08/26/17 13:19

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 %
Naphthalene	0.0250	0.0222	0.0202	89.0	80.8	64.0-125			9.58	20
n-Propylbenzene	0.0250	0.0282	0.0293	113	117	78.0-120			3.63	20
Styrene	0.0250	0.0262	0.0278	105	111	78.0-124			6.02	20
1,1,1,2-Tetrachloroethane	0.0250	0.0232	0.0230	93.0	92.0	74.0-124			1.11	20
1,1,2,2-Tetrachloroethane	0.0250	0.0296	0.0288	118	115	73.0-120			2.91	20
Tetrachloroethene	0.0250	0.0222	0.0222	88.7	88.8	70.0-127			0.0500	20
Toluene	0.0250	0.0229	0.0234	91.6	93.8	77.0-120			2.34	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0288	0.0295	115	118	64.0-135			2.63	20
1,2,3-Trichlorobenzene	0.0250	0.0188	0.0183	75.4	73.1	68.0-126			3.09	20
1,2,4-Trichlorobenzene	0.0250	0.0194	0.0199	77.7	79.6	70.0-127			2.47	20
1,1,1-Trichloroethane	0.0250	0.0292	0.0296	117	118	69.0-125			1.33	20
1,1,2-Trichloroethane	0.0250	0.0239	0.0227	95.5	90.9	78.0-120			4.88	20
Trichloroethene	0.0250	0.0263	0.0264	105	105	79.0-120			0.0800	20
Trichlorofluoromethane	0.0250	0.0279	0.0282	112	113	59.0-136			1.24	20
1,2,3-Trichloropropane	0.0250	0.0283	0.0262	113	105	73.0-124			7.41	20
1,2,3-Trimethylbenzene	0.0250	0.0248	0.0249	99.1	99.4	76.0-120			0.400	20
1,2,4-Trimethylbenzene	0.0250	0.0261	0.0266	104	106	75.0-120			2.15	20
1,3,5-Trimethylbenzene	0.0250	0.0255	0.0261	102	105	75.0-120			2.53	20
Vinyl chloride	0.0250	0.0310	0.0313	124	125	63.0-134			0.940	20
Xylenes, Total	0.0750	0.0702	0.0712	93.6	94.9	77.0-120			1.41	20
(S) Toluene-d8				*96.0*	*97.4*	*80.0-120*				
(S) Dibromofluoromethane				*115*	*112*	*74.0-131*				
(S) 4-Bromofluorobenzene				*104*	*108*	*64.0-132*				

WG1013795

QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

L931900-01,02,03,04,07

Method Blank (MB)

(MB) R3244932-1 08/26/17 10:22

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Diesel Range Organics (DRO)	U		1.33	4.00
Residual Range Organics (RRO)	U		3.33	10.0
(S) o-Terphenyl	*128*			*18.0-148*

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

(LCS) R3244932-2 08/26/17 10:38 • (LCSD) R3244932-3 08/26/17 10:55

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Diesel Range Organics (DRO)	30.0	25.6	26.6	85.3	88.8	50.0-150			4.10	20
Residual Range Organics (RRO)	30.0	19.6	19.2	65.4	64.2	50.0-150			1.88	20
(S) o-Terphenyl				*94.8*	*95.0*	*18.0-148*				

L931900-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L931900-01 08/26/17 18:19 • (MS) R3244932-4 08/26/17 18:36 • (MSD) R3244932-5 08/26/17 18:53

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Diesel Range Organics (DRO)	31.4	16.9	37.3	37.1	65.1	64.4	1	50.0-150			0.600	20
Residual Range Organics (RRO)	31.4	170	127	120	0.000	0.000	1	50.0-150	V	V	6.41	20
(S) o-Terphenyl					*80.5*	*75.6*		*18.0-148*				

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

Method Blank (MB)

(MB) R3247236-1 09/06/17 15:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
2,4-D	U		0.00702	0.0700
Dalapon	U		0.0113	0.0700
2,4-DB	U		0.0297	0.0700
Dicamba	U		0.0157	0.0700
Dichloroprop	U		0.0245	0.0700
Dinoseb	U		0.00697	0.0700
MCPA	U		0.443	6.50
MCPP	U		0.367	6.50
2,4,5-T	U		0.00852	0.0700
2,4,5-TP (Silvex)	U		0.0107	0.0700
(S) 2,4-Dichlorophenyl Acetic Acid	*84.5*			*22.0-132*

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

(LCS) R3247236-2 09/06/17 15:33 • (LCSD) R3247236-3 09/06/17 15:47

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 %
2,4-D	0.167	0.146	0.143	87.6	85.6	40.0-120			2.27	20
Dalapon	0.167	0.122	0.124	73.1	74.1	15.0-120			1.29	24
2,4-DB	0.167	0.128	0.124	76.9	74.4	25.0-143			3.33	24
Dicamba	0.167	0.134	0.132	80.5	79.3	43.0-120			1.45	20
Dichloroprop	0.167	0.130	0.127	77.9	76.4	32.0-129			1.87	20
Dinoseb	0.167	0.0598	0.0541	35.9	32.4	10.0-120			10.2	37
MCPA	1.67	6.33	6.18	380	371	31.0-121	E J4	E J4	2.48	21
MCPP	1.67	6.54	6.83	393	410	28.0-133	E J4	E J4	4.31	25
2,4,5-T	0.167	0.112	0.140	67.2	84.3	41.0-120		J3	22.5	21
2,4,5-TP (Silvex)	0.167	0.117	0.112	70.2	67.0	42.0-120			4.74	20
(S) 2,4-Dichlorophenyl Acetic Acid				*82.6*	*81.8*	*22.0-132*				

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

Method Blank (MB)

(MB) R3245028-1 08/28/17 12:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Azinphos-Methyl	U		0.00378	0.100
Bolstar (Sulprofos)	U		0.00554	0.100
Chlorpyrifos	U		0.00923	0.100
Coumaphos	U		0.00680	0.100
Demeton,-O and -S	U		0.00339	0.0700
Diazinon	U		0.00447	0.100
Dichlorvos	U		0.00969	0.100
Dimethoate	U		0.0198	0.100
Disulfoton	U		0.00498	0.100
EPN	U		0.00512	0.100
Ethoprop	U		0.00465	0.100
Ethyl Parathion	U		0.00571	0.100
Fensulfothion	U		0.0169	0.100
Fenthion	U		0.00608	0.100
Malathion	U		0.00700	0.100
Merphos	U		0.00539	0.100
Methyl parathion	U		0.00669	0.100
Mevinphos	U		0.0102	0.100
Naled	U		0.00418	0.100
Phorate	U		0.00471	0.100
Ronnel	U		0.00437	0.100
Stirophos	U		0.00537	0.100
Sulfotep	U		0.00386	0.100
TEPP	U		0.157	1.00
Tokuthion (Prothothiofos)	U		0.00604	0.100
Trichloronate	U		0.00664	0.100
(S) Triphenyl Phosphate	*97.3*			*44.0-120*

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

(LCS) R3245028-2 08/28/17 13:16 • (LCSD) R3245028-3 08/28/17 13:48

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 %
Azinphos-Methyl	0.334	0.356	0.365	107	109	58.0-125			2.43	20
Bolstar (Sulprofos)	0.334	0.341	0.347	102	104	64.0-120			1.75	20
Chlorpyrifos	0.334	0.342	0.347	103	104	62.0-120			1.40	20
Coumaphos	0.334	0.356	0.362	107	108	60.0-120			1.64	20
Demeton,-O and -S	0.167	0.156	0.154	93.4	92.5	59.0-120			0.880	20
Diazinon	0.334	0.342	0.329	103	98.7	49.0-120			3.84	22

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

(LCS) R3245028-2 08/28/17 13:16 • (LCSD) R3245028-3 08/28/17 13:48

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 %
Dichlorvos	0.334	0.268	0.251	80.4	75.3	37.0-120			6.59	21
Dimethoate	0.334	0.284	0.261	85.3	78.2	46.0-127			8.66	21
Disulfoton	0.334	0.326	0.328	97.7	98.5	60.0-121			0.790	20
EPN	0.334	0.370	0.377	111	113	60.0-121			1.70	20
Ethoprop	0.334	0.342	0.337	102	101	59.0-120			1.43	20
Ethyl Parathion	0.334	0.355	0.356	106	107	62.0-120			0.200	20
Fensulfothion	0.334	0.325	0.297	97.3	89.1	58.0-123			8.80	21
Fenthion	0.334	0.354	0.356	106	107	61.0-121			0.640	20
Malathion	0.334	0.320	0.334	96.0	100	59.0-120			4.13	20
Merphos	0.334	0.319	0.318	95.5	95.2	59.0-120			0.350	20
Methyl parathion	0.334	0.359	0.362	108	109	63.0-120			0.830	20
Mevinphos	0.334	0.280	0.267	84.1	80.0	50.0-120			4.95	20
Naled	0.334	0.201	0.202	60.3	60.6	10.0-125			0.350	35
Phorate	0.334	0.335	0.321	100	96.2	60.0-120			4.25	20
Ronnel	0.334	0.337	0.339	101	102	62.0-120			0.600	20
Stirophos	0.334	0.330	0.331	99.0	99.2	62.0-120			0.160	20
Sulfotep	0.334	0.354	0.351	106	105	62.0-122			0.850	20
TEPP	3.34	0.180	0.238	5.39	7.15	1.00-135			28.0	38
Tokuthion (Prothothiofos)	0.334	0.344	0.343	103	103	63.0-120			0.450	20
Trichloronate	0.334	0.359	0.353	108	106	62.0-120			1.93	20
(S) Triphenyl Phosphate				*98.9*	*99.7*	*44.0-120*				

L931760-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L931760-01 08/28/17 14:51 • (MS) R3245028-4 08/28/17 15:22 • (MSD) R3245028-5 08/28/17 15:54

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 %
Azinphos-Methyl	0.395	ND	0.416	0.421	105	107	1	35.0-132			1.32	20
Bolstar (Sulprofos)	0.395	ND	0.367	0.370	93.0	93.7	1	45.0-120			0.730	20
Chlorpyrifos	0.395	ND	0.389	0.399	98.5	101	1	50.0-120			2.66	20
Coumaphos	0.395	ND	0.362	0.364	91.7	92.2	1	30.0-137			0.580	20
Demeton,-O and -S	0.198	ND	0.184	0.189	92.9	95.7	1	31.0-134			2.90	24
Diazinon	0.395	ND	0.402	0.414	102	105	1	45.0-120			2.90	20
Dichlorvos	0.395	ND	0.397	0.423	100	107	1	26.0-159			6.39	20
Dimethoate	0.395	ND	0.402	0.403	102	102	1	19.0-138			0.150	22
Disulfoton	0.395	ND	0.374	0.387	94.6	98.1	1	49.0-123			3.61	20
EPN	0.395	ND	0.394	0.398	99.7	101	1	44.0-122			0.990	20
Ethoprop	0.395	ND	0.408	0.417	103	106	1	47.0-120			2.20	20
Ethyl Parathion	0.395	ND	0.403	0.408	102	103	1	42.0-120			1.28	20

L931760-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L931760-01 08/28/17 14:51 • (MS) R3245028-4 08/28/17 15:22 • (MSD) R3245028-5 08/28/17 15:54

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Fensulfothion	0.395	ND	0.416	0.419	105	106	1	32.0-133			0.720	20
Fenthion	0.395	ND	0.388	0.398	98.2	101	1	48.0-120			2.65	20
Malathion	0.395	ND	0.355	0.368	89.8	93.1	1	45.0-120			3.71	20
Merphos	0.395	ND	0.354	0.351	89.7	88.8	1	28.0-120			1.01	20
Methyl parathion	0.395	ND	0.421	0.435	107	110	1	45.0-120			3.11	20
Mevinphos	0.395	ND	0.391	0.401	99.1	102	1	30.0-135			2.49	20
Naled	0.395	ND	0.186	0.153	47.1	38.8	1	10.0-122			19.5	34
Phorate	0.395	ND	0.384	0.400	97.1	101	1	50.0-120			4.24	20
Ronnel	0.395	ND	0.387	0.399	98.0	101	1	48.0-120			2.97	20
Stirophos	0.395	ND	0.377	0.376	95.5	95.1	1	39.0-120			0.410	20
Sulfotep	0.395	ND	0.399	0.409	101	104	1	51.0-120			2.65	20
TEPP	3.95	ND	3.56	3.52	90.1	89.1	1	1.00-143			1.15	34
Tokuthion (Prothothiofos)	0.395	ND	0.382	0.387	96.7	98.0	1	50.0-120			1.25	20
Trichloronate	0.395	ND	0.407	0.402	103	102	1	49.0-120			1.26	20
(S) Triphenyl Phosphate					*93.7*	*93.7*		*44.0-120*				

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

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

Method Blank (MB)

(MB) R3244970-3 08/28/17 11:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00135	0.0200
Alpha BHC	U		0.00136	0.0200
Beta BHC	U		0.00160	0.0200
Delta BHC	U		0.00143	0.0200
Gamma BHC	U		0.00145	0.0200
4,4-DDD	U		0.00156	0.0200
4,4-DDE	U		0.00154	0.0200
4,4-DDT	U		0.00200	0.0200
Dieldrin	U		0.00152	0.0200
Endosulfan I	U		0.00149	0.0200
Endosulfan II	U		0.00160	0.0200
Endosulfan sulfate	U		0.00151	0.0200
Endrin	U		0.00157	0.0200
Endrin aldehyde	U		0.00129	0.0200
Endrin ketone	U		0.00165	0.0200
Heptachlor	U		0.00154	0.0200
Heptachlor epoxide	U		0.00161	0.0200
Hexachlorobenzene	U		0.00124	0.0200
Methoxychlor	U		0.00178	0.0200
Chlordane	U		0.0390	0.200
Toxaphene	U		0.0360	0.400
(S) Decachlorobiphenyl	*85.3*			*10.0-148*
(S) Tetrachloro-m-xylene	*84.1*			*21.0-146*

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

(LCS) R3244970-1 08/28/17 11:29 • (LCSD) R3244970-2 08/28/17 11:41

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 %
Aldrin	0.0667	0.0663	0.0685	99.3	103	55.0-137			3.26	29
Alpha BHC	0.0667	0.0694	0.0719	104	108	55.0-136			3.56	28
Beta BHC	0.0667	0.0642	0.0671	96.3	101	53.0-133			4.40	28
Delta BHC	0.0667	0.0642	0.0680	96.2	102	53.0-139			5.82	29
Gamma BHC	0.0667	0.0692	0.0719	104	108	54.0-136			3.87	29
4,4-DDD	0.0667	0.0626	0.0669	93.8	100	51.0-141			6.73	29
4,4-DDE	0.0667	0.0620	0.0661	93.0	99.1	53.0-142			6.30	30
4,4-DDT	0.0667	0.0621	0.0688	93.1	103	47.0-143			10.3	30
Dieldrin	0.0667	0.0657	0.0684	98.4	103	54.0-141			4.08	29
Endosulfan I	0.0667	0.0645	0.0670	96.7	101	54.0-141			3.88	29

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

(LCS) R3244970-1 08/28/17 11:29 • (LCSD) R3244970-2 08/28/17 11:41

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 %
Endosulfan II	0.0667	0.0618	0.0647	92.6	97.0	53.0-140			4.61	28
Endosulfan sulfate	0.0667	0.0613	0.0651	91.9	97.5	52.0-141			5.93	29
Endrin	0.0667	0.0694	0.0745	104	112	52.0-137			7.13	29
Endrin aldehyde	0.0667	0.0564	0.0599	84.5	89.9	30.0-127			6.14	31
Endrin ketone	0.0667	0.0713	0.0752	107	113	51.0-139			5.25	28
Heptachlor	0.0667	0.0697	0.0733	104	110	53.0-144			5.05	29
Heptachlor epoxide	0.0667	0.0646	0.0672	96.8	101	54.0-137			4.04	28
Hexachlorobenzene	0.0667	0.0615	0.0633	92.2	94.8	50.0-135			2.86	28
Methoxychlor	0.0667	0.0656	0.0704	98.3	106	49.0-145			7.16	29
(S) Decachlorobiphenyl				*83.8*	*86.5*	*10.0-148*				
(S) Tetrachloro-m-xylene				*86.3*	*87.1*	*21.0-146*				

L931760-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L931760-04 08/28/17 15:14 • (MS) R3244970-4 08/28/17 15:27 • (MSD) R3244970-5 08/28/17 15:39

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 %
Aldrin	0.0796	ND	0.0784	0.0812	98.4	102	1	19.0-152			3.50	24
Alpha BHC	0.0796	ND	0.0832	0.0861	104	108	1	39.0-152			3.46	21
Beta BHC	0.0796	ND	0.0795	0.0821	99.9	103	1	38.0-150			3.17	20
Delta BHC	0.0796	ND	0.0710	0.0735	89.1	92.3	1	34.0-155			3.51	21
Gamma BHC	0.0796	ND	0.0826	0.0855	104	107	1	38.0-153			3.46	21
4,4-DDD	0.0796	ND	0.0793	0.0836	99.6	105	1	22.0-160			5.23	25
4,4-DDE	0.0796	ND	0.0754	0.0804	94.7	101	1	10.0-160			6.49	27
4,4-DDT	0.0796	ND	0.0787	0.0816	98.8	103	1	10.0-160			3.69	28
Dieldrin	0.0796	ND	0.0789	0.0834	99.1	105	1	30.0-158			5.54	25
Endosulfan I	0.0796	ND	0.0764	0.0796	96.0	100	1	31.0-155			4.07	25
Endosulfan II	0.0796	ND	0.0734	0.0759	92.2	95.3	1	32.0-156			3.24	25
Endosulfan sulfate	0.0796	ND	0.0744	0.0730	93.4	91.7	1	31.0-158			1.93	24
Endrin	0.0796	ND	0.0863	0.0908	108	114	1	30.0-149			5.03	25
Endrin aldehyde	0.0796	ND	0.0687	0.0701	86.2	88.1	1	20.0-157			2.08	26
Endrin ketone	0.0796	ND	0.0862	0.0876	108	110	1	32.0-154			1.69	23
Heptachlor	0.0796	ND	0.0824	0.0856	104	108	1	18.0-160			3.81	23
Heptachlor epoxide	0.0796	ND	0.0741	0.0761	93.0	95.6	1	31.0-154			2.71	25
Hexachlorobenzene	0.0796	ND	0.0725	0.0755	91.1	94.8	1	26.0-146			4.01	21
Methoxychlor	0.0796	ND	0.0842	0.0860	106	108	1	10.0-160			2.04	27
(S) Decachlorobiphenyl					*83.3*	*84.5*		*10.0-148*				
(S) Tetrachloro-m-xylene					*83.1*	*86.1*		*21.0-146*				

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.

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Sample Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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, 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.
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.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
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.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

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

ESC Lab Sciences 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.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1,4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

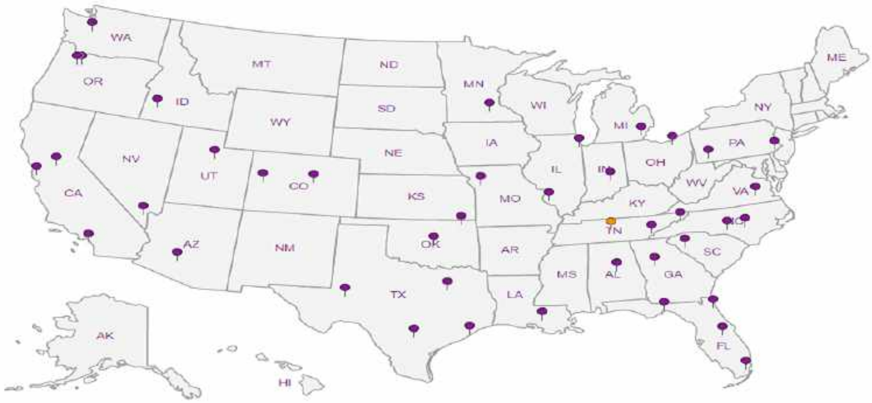
Third Party & Federal Accreditations

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

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

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 1 of 3

ESC LAB SCIENCES

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

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Star Lake Hospital**

City/State Collected:

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.02**

Lab Project # **TGERESHTX-R13411**

L # L931900

C036

Collected by (print): T. CRump

Site/Facility ID #

P.O. # **7648**

Collected by (signature):

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

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Acctnum: **TGERESHTX**
Template: **T126970**
Prelogin: **P614664**
TSR: **134 - Mark W. Beasley**
PB:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 4ozClr-NoPres	NWTPHDXNOSGT, TS 4ozClr-NoPres	SV8081,SV8141,SV8151 4ozClr-NoPres	TCLP TX12 Metals 4ozClr-NoPres	TO-15 Summa	V8260, Gx 40ml/NaHSO4/Syr/MeOH	pH 4ozClr-NoPres				Remarks	Sample # (lab only)
SB-1 (5-6)	Grab	SS	5-6	08/24/17	1230	6	X	X				X	X					-01
SB-1 (9-10)	Grab	SS	9-10	08/24/17	1235	6											Hold	
SB-1 (14-15)	Grab	SS	14-15	08/24/17	1240	6											Hold	
SB-2 (2-3)	Grab	SS	2-3	08/24/17	1030	6	X	X				X						-02
SB-2 (7-8)	Grab	SS	7-8	08/24/17	1040	6											Hold	
SB-2 (13-14)	Grab	SS	13-14	08/24/17	1035	6											Hold	
SB-3 (3-4)	Grab	SS	3-4	08/24/17	1530	7	X	X	X			X						-03
SB-3 ( )	Grab	SS		08/24/17	1545	7											Hold	
SB-3 (17-18)	Grab	SS	17-18	08/24/17	1550	7											Hold	
SB-4 (2-3)	Grab	SS	2-3	08/24/17	1130	6	X	X				X						-04

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

Remarks:****Log as two day with R2 factor****

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
__ UPS ✓ FedEx __ Courier ______

Tracking # 7466 1462 2792

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

Relinquished by : (Signature)	Date: 08/24/17	Time: 1800	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
1xTB [✓ HCL] / MeoH
TBR

Temp: 15.0 °C
Bottles Received: 114

If preservation required by Login: Date/Time

Date: 8/25/17
Time: 0845

8-162

Condition: [✓ NC] / [✓ OK] TO

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Star Lake Hospital**

City/State Collected:

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.02

Lab Project #
TGERESHTX-R13411

Collected by (print): T. CRUMP

Site/Facility ID #

P.O. #
7648

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

Quote #

Date Results Needed

Chain of Custody Page 2 of 3

ESC LAB SCIENCES

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

L# L931900

Table #

Acctnum: **TGERESHTX**
Template: **T126970**
Prelogin: **P614664**
TSR: **134 - Mark W. Beasley**
PB:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 4ozClr-NoPres	NWTPHDXNOSGT, TS 4ozClr-NoPres	SV8081,SV8141,SV8151 4ozClr-NoPres	TCLP TX12 Metals 4ozClr-NoPres	TO-15 Summa	V8260, Gx 40ml/NaHSO4/Syr/MeOH	pH 4ozClr-NoPres				Remarks	Sample # (lab only)
SB-4 (10-11)	Grab	SS	10-11	08/24/17	1150	6											Hold	
SB-4 (11-12)	Grab	SS	11-12	08/24/17	1240	6											Hold	
SB-5 (4-5)	Grab	SS	4-5	08/24/17	1650	6											Hold	
TVMP-1	Grab	Air	7-8	08/24/17	1425	1					X							-05
TVMP-2	Grab	Air	7-8	08/24/17	1330	1					X							-06
		Air																
SB-5 (11-12)	Grab	SS	11-12	08/24/17	1645	6	X	X				X						-07
SB-5 (19-20)	Grab	SS	19-20	08/24/17	1700	6											Hold	
TVMP-1 (5-6)	Grab	SS	5-6	08/24/17	1210	6											Hold	
TVMP-1 (7-8)	Grab	SS	7-8	08/24/17	1405	6											Hold	

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

Remarks:****Log as two day with R2 factor****

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ______

Tracking # 7466 1462 2792

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

Relinquished by : (Signature)
Date: 08/24/17
Time: 1800
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
HCL / MeoH
TBR

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

Temp: 1.5 °C
Bottles Received: 114

If preservation required by Login: Date/Time

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

Date: 8/25/17
Time: 0845

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

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___ Same Day ___ Five Day
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Chain of Custody Page 3 of 3

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Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 4ozClr-NoPres	NWTPHDXNOSGT, TS 4ozClr-NoPres	SV8081,SV8141,SV8151 4ozClr-NoPres	TCLP TX12 Metals 4ozClr-NoPres	TO-15 Summa	V8260, Gx 40ml/NaHS04/Syr/MeOH	pH 4ozClr-NoPres			Remarks	Sample # (lab only)
TVMP-2 (5-6)	Grab	SS	5-6	08/24/17	1310	6										Hold	
		SS															

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

Remarks:****Log as two day with R2 factor****

pH ______ Temp ______
Flow ______ Other ______

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

Tracking # 7466 1462 2792

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

Relinquished by : (Signature)	Date: 08/24/17	Time: 1800	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.5 °C Bottles Received: 1/4
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/25/17 Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

ESC Lab Sciences
Non-Conformance Form

Login #: L931900	**Client: TGERESHTX**	**Date: 8/25/17**	**Evaluated by: Troy Dunlap**

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time	X	Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Couri
	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:**
X	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: One 40ml-bi sulfate vial broken for TVMP-1 (7-8). One bi sulfate remains.

Client informed by:	☐	Call	☐	Email	☐	Voice Mail	Date: 8/25/17	Time: 1145
TSR Initials: MB	Client Contact:							

Login Instructions:

Run from unbroken vial

This E-mail and any attached files are confidential, and may be copyright protected. If you are not the addressee, any dissemination of this communication is strictly prohibited. If you have received this message in error, please contact the sender immediately and delete/destroy all information received.

ANALYTICAL REPORT

October 31, 2017

TGE Resources

Sample Delivery Group:	L946526
Samples Received:	10/26/2017
Project Number:	R13411.04
Description:	Future Star Lake Hospital
Site:	29805 PACIFIC
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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	Collected by	Collected date/time	Received date/time
TSB-1 (4.5-5.5) L946526-01 Solid	Evan Sitler	10/25/17 09:15	10/26/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1037197	1	10/31/17 08:38	10/31/17 08:48	JD
Mercury by Method 7471A	WG1036762	1	10/30/17 15:17	10/31/17 08:14	ABL
Metals (ICP) by Method 6010C	WG1036378	1	10/31/17 05:55	10/31/17 09:56	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1035971	1	10/25/17 09:15	10/26/17 23:19	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1035964	1	10/25/17 09:15	10/27/17 01:19	ACG
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1035927	1	10/27/17 06:42	10/28/17 00:31	DMG

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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.

Mark W. Beasley
Technical Service Representative

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,
b. dilution factors,
c. preparation methods,
d. cleanup methods, and
e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and
b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,
b. Calculated %R for each analyte, and
c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,
b. MS/MSD spiking amounts,
c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
d. Calculated %Rs and relative percent differences (RPDs), and
e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,
b. The calculated RPD, and
c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Technical Service Representative

Laboratory Review Checklist: Reportable Data

Laboratory Name: ESC Lab Sciences	LRC Date: 10/31/2017 15:21
Project Name: Future Star Lake Hospital	Laboratory Job Number: L946526-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1035964, WG1035971, WG1035927, WG1036762, WG1036378 and WG1037197

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?		X			1
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: ESC Lab Sciences	LRC Date: 10/31/2017 15:21
Project Name: Future Star Lake Hospital	Laboratory Job Number: L946526-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1035964, WG1035971, WG1035927, WG1036762, WG1036378 and WG1037197

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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Laboratory Review Checklist: Exception Reports

Laboratory Name: ESC Lab Sciences	LRC Date: 10/31/2017 15:21
Project Name: Future Star Lake Hospital	Laboratory Job Number: L946526-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1035964, WG1035971, WG1035927, WG1036762, WG1036378 and WG1037197

ER #[1]	**Description**
1	8260C WG1035964 Trichlorofluoromethane: Relative Percent Difference is outside of established control limits.

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4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.1		1	10/31/2017 08:48	WG1037197

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0193	J	0.00297	0.0200	0.0212	1	10/31/2017 08:14	WG1036762

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.83	J	0.691	2.00	2.12	1	10/31/2017 09:56	WG1036378
Barium	44.7		0.181	0.500	0.531	1	10/31/2017 09:56	WG1036378
Cadmium	U		0.0744	0.500	0.531	1	10/31/2017 09:56	WG1036378
Chromium	15.9		0.149	1.00	1.06	1	10/31/2017 09:56	WG1036378
Lead	1.19		0.202	0.500	0.531	1	10/31/2017 09:56	WG1036378
Selenium	U		0.786	2.00	2.12	1	10/31/2017 09:56	WG1036378
Silver	U		0.297	1.00	1.06	1	10/31/2017 09:56	WG1036378

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	0.0423	J	0.0360	0.100	0.106	1	10/26/2017 23:19	WG1035971
(S) a,a,a-Trifluorotoluene(FID)	*98.4*				*77.0-120*		*10/26/2017 23:19*	WG1035971

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0183	J	0.0106	0.0500	0.0531	1	10/27/2017 01:19	WG1035964
Acrylonitrile	U		0.00190	0.0100	0.0106	1	10/27/2017 01:19	WG1035964
Benzene	U		0.000287	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Bromobenzene	U		0.000302	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Bromodichloromethane	U		0.000270	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Bromoform	U		0.000450	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Bromomethane	U		0.00142	0.00500	0.00531	1	10/27/2017 01:19	WG1035964
n-Butylbenzene	U		0.000274	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
sec-Butylbenzene	U		0.000214	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
tert-Butylbenzene	U		0.000219	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Carbon tetrachloride	U		0.000348	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Chlorobenzene	U		0.000225	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Chlorodibromomethane	U		0.000396	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Chloroethane	U		0.00101	0.00500	0.00531	1	10/27/2017 01:19	WG1035964
Chloroform	U		0.000243	0.00500	0.00531	1	10/27/2017 01:19	WG1035964
Chloromethane	U		0.000398	0.00250	0.00266	1	10/27/2017 01:19	WG1035964
2-Chlorotoluene	U		0.000320	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
4-Chlorotoluene	U		0.000255	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,2-Dibromo-3-Chloropropane	U		0.00112	0.00500	0.00531	1	10/27/2017 01:19	WG1035964
1,2-Dibromoethane	U		0.000364	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Dibromomethane	U		0.000406	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,2-Dichlorobenzene	U		0.000324	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,3-Dichlorobenzene	U		0.000254	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,4-Dichlorobenzene	U		0.000240	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Dichlorodifluoromethane	U		0.000758	0.00500	0.00531	1	10/27/2017 01:19	WG1035964
1,1-Dichloroethane	U		0.000211	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,2-Dichloroethane	U		0.000282	0.00100	0.00106	1	10/27/2017 01:19	WG1035964

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000322	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
cis-1,2-Dichloroethene	U		0.000250	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
trans-1,2-Dichloroethene	U		0.000280	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,2-Dichloropropane	U		0.000380	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,1-Dichloropropene	U		0.000337	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,3-Dichloropropane	U		0.000220	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
cis-1,3-Dichloropropene	U		0.000278	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
trans-1,3-Dichloropropene	U		0.000284	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
2,2-Dichloropropane	U		0.000296	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Di-isopropyl ether	U		0.000263	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Ethylbenzene	U		0.000316	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Hexachloro-1,3-butadiene	U		0.000363	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Isopropylbenzene	U		0.000258	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
p-Isopropyltoluene	U		0.000217	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
2-Butanone (MEK)	0.00526	J	0.00497	0.0100	0.0106	1	10/27/2017 01:19	WG1035964
Methylene Chloride	U		0.00106	0.00500	0.00531	1	10/27/2017 01:19	WG1035964
4-Methyl-2-pentanone (MIBK)	U		0.00200	0.0100	0.0106	1	10/27/2017 01:19	WG1035964
Methyl tert-butyl ether	U		0.000225	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Naphthalene	U		0.00106	0.00500	0.00531	1	10/27/2017 01:19	WG1035964
n-Propylbenzene	U		0.000219	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Styrene	U		0.000249	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,1,1,2-Tetrachloroethane	U		0.000280	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,1,2,2-Tetrachloroethane	U		0.000388	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,1,2-Trichlorotrifluoroethane	U		0.000388	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Tetrachloroethene	U		0.000293	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Toluene	U		0.000461	0.00500	0.00531	1	10/27/2017 01:19	WG1035964
1,2,3-Trichlorobenzene	U		0.000325	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,2,4-Trichlorobenzene	U		0.000412	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,1,1-Trichloroethane	U		0.000304	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,1,2-Trichloroethane	U		0.000294	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Trichloroethene	U		0.000296	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Trichlorofluoromethane	U		0.000406	0.00500	0.00531	1	10/27/2017 01:19	WG1035964
1,2,3-Trichloropropane	U		0.000787	0.00250	0.00266	1	10/27/2017 01:19	WG1035964
1,2,4-Trimethylbenzene	0.000270	J	0.000224	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,2,3-Trimethylbenzene	0.000393	J	0.000305	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Vinyl chloride	U		0.000309	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
1,3,5-Trimethylbenzene	U		0.000283	0.00100	0.00106	1	10/27/2017 01:19	WG1035964
Xylenes, Total	U		0.000742	0.00300	0.00319	1	10/27/2017 01:19	WG1035964
(S) Toluene-d8	*98.8*				*80.0-120*		*10/27/2017 01:19*	WG1035964
(S) Dibromofluoromethane	*105*				*74.0-131*		*10/27/2017 01:19*	WG1035964
(S) 4-Bromofluorobenzene	*105*				*64.0-132*		*10/27/2017 01:19*	WG1035964

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.42	4.00	4.25	1	10/28/2017 00:31	WG1035927
Residual Range Organics (RRO)	U		3.54	10.0	10.6	1	10/28/2017 00:31	WG1035927
(S) o-Terphenyl	*85.0*				*18.0-148*		*10/28/2017 00:31*	WG1035927

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3261869-1 10/31/17 08:48

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0			

L946526-01 Original Sample (OS) • Duplicate (DUP)

(OS) L946526-01 10/31/17 08:48 • (DUP) R3261869-3 10/31/17 08:48

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.1	93.8	1	0		5

Laboratory Control Sample (LCS)

(LCS) R3261869-2 10/31/17 08:48

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85-115	

Method Blank (MB)

(MB) R3261787-1 10/31/17 07:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0028	0.0200

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

(LCS) R3261787-2 10/31/17 08:01 • (LCSD) R3261787-3 10/31/17 08:03

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 %
Mercury	0.300	0.289	0.294	96	98	80-120			2	20

L946745-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L946745-01 10/31/17 08:05 • (MS) R3261787-4 10/31/17 08:07 • (MSD) R3261787-5 10/31/17 08:09

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	0.0226	0.301	0.309	93	95	1	75-125			2	20

Method Blank (MB)

(MB) R3261798-1 10/31/17 09:01

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Arsenic	U		0.65	2.00
Barium	U		0.17	0.500
Cadmium	U		0.07	0.500
Chromium	U		0.14	1.00
Lead	U		0.19	0.500
Selenium	U		0.74	2.00
Silver	U		0.28	1.00

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

(LCS) R3261798-2 10/31/17 09:04 • (LCSD) R3261798-3 10/31/17 09:07

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Arsenic	100	99.0	97.8	99	98	80-120			1	20
Barium	100	104	103	104	103	80-120			1	20
Cadmium	100	98.8	97.7	99	98	80-120			1	20
Chromium	100	99.5	98.7	99	99	80-120			1	20
Lead	100	100	99.5	100	100	80-120			1	20
Selenium	100	99.1	98.6	99	99	80-120			0	20
Silver	20.0	18.4	18.3	92	91	80-120			1	20

L945976-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L945976-21 10/31/17 09:10 • (MS) R3261798-6 10/31/17 09:19 • (MSD) R3261798-7 10/31/17 09:22

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	100	20.0	118	117	98	96	1	75-125			1	20
Barium	100	117	215	212	97	95	1	75-125			1	20
Cadmium	100	ND	98.4	97.3	98	97	1	75-125			1	20
Chromium	100	14.3	108	108	93	93	1	75-125			0	20
Lead	100	6.41	107	107	101	101	1	75-125			0	20
Selenium	100	ND	97.0	96.9	97	97	1	75-125			0	20
Silver	20.0	ND	18.6	18.2	93	91	1	75-125			2	20

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

Method Blank (MB)

(MB) R3260991-3 10/26/17 17:36

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)	*101*			*77.0-120*

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

(LCS) R3260991-1 10/26/17 16:30 • (LCSD) R3260991-2 10/26/17 16:52

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 %
Gasoline Range Organics-NWTPH	5.50	4.97	5.26	90.4	95.6	70.0-133			5.61	20
(S) a,a,a-Trifluorotoluene(FID)				*103*	*103*	*77.0-120*				

L946432-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L946432-01 10/27/17 00:03 • (MS) R3260991-4 10/27/17 00:25 • (MSD) R3260991-5 10/27/17 00:48

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5.50	196	566	562	67.3	66.5	100	10.0-146			0.750	30
(S) a,a,a-Trifluorotoluene(FID)					*101*	*101*		*77.0-120*				

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

Method Blank (MB)

(MB) R3260989-3 10/26/17 23:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Isopropylbenzene	U		0.000243	0.00100

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

Method Blank (MB)

(MB) R3260989-3 10/26/17 23:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	*103*			*80.0-120*
(S) Dibromofluoromethane	*99.6*			*74.0-131*
(S) 4-Bromofluorobenzene	*105*			*64.0-132*

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

(LCS) R3260989-1 10/26/17 21:02 • (LCSD) R3260989-2 10/26/17 22:10

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	0.125	0.150	0.172	120	138	11.0-160			14.2	23
Acrylonitrile	0.125	0.137	0.138	110	110	61.0-143			0.530	20
Benzene	0.0250	0.0240	0.0235	96.1	93.9	71.0-124			2.33	20
Bromobenzene	0.0250	0.0241	0.0242	96.3	96.6	78.0-120			0.330	20
Bromodichloromethane	0.0250	0.0238	0.0240	95.2	96.1	75.0-120			0.960	20

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

(LCS) R3260989-1 10/26/17 21:02 • (LCSD) R3260989-2 10/26/17 22:10

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 %
Bromoform	0.0250	0.0243	0.0254	97.2	102	65.0-133			4.56	20
Bromomethane	0.0250	0.0265	0.0262	106	105	26.0-160			1.36	20
n-Butylbenzene	0.0250	0.0287	0.0286	115	115	73.0-126			0.0400	20
sec-Butylbenzene	0.0250	0.0276	0.0274	110	110	75.0-121			0.590	20
tert-Butylbenzene	0.0250	0.0267	0.0258	107	103	74.0-122			3.48	20
Carbon tetrachloride	0.0250	0.0233	0.0228	93.1	91.3	66.0-123			1.94	20
Chlorobenzene	0.0250	0.0250	0.0246	100	98.5	79.0-121			1.54	20
Chlorodibromomethane	0.0250	0.0247	0.0257	98.8	103	74.0-128			3.99	20
Chloroethane	0.0250	0.0261	0.0255	105	102	51.0-147			2.34	20
Chloroform	0.0250	0.0241	0.0239	96.6	95.4	73.0-123			1.20	20
Chloromethane	0.0250	0.0239	0.0241	95.6	96.5	51.0-138			0.890	20
2-Chlorotoluene	0.0250	0.0276	0.0275	111	110	72.0-124			0.540	20
4-Chlorotoluene	0.0250	0.0255	0.0258	102	103	78.0-120			0.940	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0249	0.0267	99.6	107	65.0-126			7.07	20
1,2-Dibromoethane	0.0250	0.0240	0.0248	96.1	99.1	78.0-122			3.09	20
Dibromomethane	0.0250	0.0231	0.0235	92.5	94.0	79.0-120			1.54	20
1,2-Dichlorobenzene	0.0250	0.0263	0.0261	105	105	80.0-120			0.710	20
1,3-Dichlorobenzene	0.0250	0.0266	0.0271	106	108	72.0-123			1.65	20
1,4-Dichlorobenzene	0.0250	0.0247	0.0254	98.9	101	77.0-120			2.52	20
Dichlorodifluoromethane	0.0250	0.0213	0.0245	85.4	97.9	49.0-155			13.6	20
1,1-Dichloroethane	0.0250	0.0246	0.0243	98.3	97.3	70.0-128			0.980	20
1,2-Dichloroethane	0.0250	0.0252	0.0250	101	100	69.0-128			0.680	20
1,1-Dichloroethene	0.0250	0.0247	0.0238	98.8	95.3	63.0-131			3.52	20
cis-1,2-Dichloroethene	0.0250	0.0246	0.0231	98.6	92.6	74.0-123			6.29	20
trans-1,2-Dichloroethene	0.0250	0.0238	0.0231	95.1	92.5	72.0-122			2.87	20
1,2-Dichloropropane	0.0250	0.0252	0.0255	101	102	75.0-126			1.16	20
1,1-Dichloropropene	0.0250	0.0250	0.0239	99.8	95.8	72.0-130			4.15	20
1,3-Dichloropropane	0.0250	0.0247	0.0249	98.7	99.5	80.0-121			0.760	20
cis-1,3-Dichloropropene	0.0250	0.0254	0.0254	101	102	80.0-125			0.230	20
trans-1,3-Dichloropropene	0.0250	0.0236	0.0236	94.3	94.4	75.0-129			0.180	20
2,2-Dichloropropane	0.0250	0.0240	0.0234	96.0	93.8	60.0-129			2.32	20
Di-isopropyl ether	0.0250	0.0259	0.0259	104	103	62.0-133			0.0900	20
Ethylbenzene	0.0250	0.0263	0.0262	105	105	77.0-120			0.600	20
Hexachloro-1,3-butadiene	0.0250	0.0300	0.0296	120	118	68.0-128			1.28	20
Isopropylbenzene	0.0250	0.0260	0.0255	104	102	75.0-120			2.06	20
p-Isopropyltoluene	0.0250	0.0280	0.0274	112	110	74.0-125			2.19	20
2-Butanone (MEK)	0.125	0.123	0.142	98.5	114	37.0-159			14.5	20
Methylene Chloride	0.0250	0.0228	0.0224	91.2	89.4	67.0-123			2.00	20
4-Methyl-2-pentanone (MIBK)	0.125	0.138	0.153	111	122	60.0-144			9.84	20
Methyl tert-butyl ether	0.0250	0.0259	0.0267	104	107	66.0-125			3.23	20

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

(LCS) R3260989-1 10/26/17 21:02 • (LCSD) R3260989-2 10/26/17 22:10

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 %
Naphthalene	0.0250	0.0262	0.0273	105	109	64.0-125			4.17	20
n-Propylbenzene	0.0250	0.0264	0.0263	106	105	78.0-120			0.260	20
Styrene	0.0250	0.0265	0.0262	106	105	78.0-124			1.16	20
1,1,1,2-Tetrachloroethane	0.0250	0.0248	0.0241	99.1	96.2	74.0-124			2.97	20
1,1,2,2-Tetrachloroethane	0.0250	0.0229	0.0245	91.5	98.0	73.0-120			6.85	20
Tetrachloroethene	0.0250	0.0255	0.0248	102	99.1	70.0-127			2.73	20
Toluene	0.0250	0.0236	0.0233	94.6	93.0	77.0-120			1.65	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0252	0.0245	101	98.1	64.0-135			2.76	20
1,2,3-Trichlorobenzene	0.0250	0.0256	0.0259	102	104	68.0-126			1.40	20
1,2,4-Trichlorobenzene	0.0250	0.0277	0.0291	111	117	70.0-127			4.89	20
1,1,1-Trichloroethane	0.0250	0.0244	0.0235	97.6	94.0	69.0-125			3.76	20
1,1,2-Trichloroethane	0.0250	0.0238	0.0247	95.0	98.6	78.0-120			3.70	20
Trichloroethene	0.0250	0.0246	0.0241	98.5	96.4	79.0-120			2.18	20
Trichlorofluoromethane	0.0250	0.0256	0.0257	102	103	59.0-136			0.370	20
1,2,3-Trichloropropane	0.0250	0.0253	0.0274	101	109	73.0-124			7.94	20
1,2,3-Trimethylbenzene	0.0250	0.0259	0.0256	103	103	76.0-120			0.920	20
1,2,4-Trimethylbenzene	0.0250	0.0260	0.0259	104	104	75.0-120			0.380	20
1,3,5-Trimethylbenzene	0.0250	0.0281	0.0275	113	110	75.0-120			2.10	20
Vinyl chloride	0.0250	0.0256	0.0255	102	102	63.0-134			0.580	20
Xylenes, Total	0.0750	0.0767	0.0757	102	101	77.0-120			1.31	20
(S) Toluene-d8				*102*	*102*	*80.0-120*				
(S) Dibromofluoromethane				*101*	*99.5*	*74.0-131*				
(S) 4-Bromofluorobenzene				*98.4*	*100*	*64.0-132*				

L946205-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L946205-08 10/27/17 04:27 • (MS) R3260989-4 10/27/17 07:36 • (MSD) R3260989-5 10/27/17 07:57

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	ND	2.55	3.19	81.4	102	25	10.0-160			22.4	36
Acrylonitrile	0.125	ND	3.09	3.52	98.9	112	25	14.0-160			12.8	33
Benzene	0.0250	ND	0.539	0.575	86.2	92.0	25	13.0-146			6.52	27
Bromobenzene	0.0250	ND	0.505	0.533	80.8	85.2	25	10.0-149			5.31	33
Bromodichloromethane	0.0250	ND	0.510	0.539	81.6	86.3	25	15.0-142			5.60	28
Bromoform	0.0250	ND	0.454	0.499	72.7	79.8	25	10.0-147			9.42	31
Bromomethane	0.0250	ND	0.393	0.395	62.8	63.2	25	10.0-160			0.620	32
n-Butylbenzene	0.0250	ND	0.619	0.627	96.1	97.4	25	10.0-154			1.34	37
sec-Butylbenzene	0.0250	0.0254	0.623	0.656	95.6	101	25	10.0-151			5.28	36
tert-Butylbenzene	0.0250	ND	0.587	0.616	93.9	98.6	25	10.0-152			4.95	35

L946205-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L946205-08 10/27/17 04:27 • (MS) R3260989-4 10/27/17 07:36 • (MSD) R3260989-5 10/27/17 07:57

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.0250	ND	0.498	0.538	79.6	86.1	25	13.0-140			7.82	30
Chlorobenzene	0.0250	ND	0.547	0.572	87.5	91.6	25	10.0-149			4.52	31
Chlorodibromomethane	0.0250	ND	0.503	0.546	80.5	87.4	25	12.0-147			8.12	29
Chloroethane	0.0250	ND	0.119	0.144	19.0	23.0	25	10.0-159			19.0	33
Chloroform	0.0250	ND	0.534	0.574	85.4	91.9	25	18.0-148			7.32	28
Chloromethane	0.0250	ND	0.446	0.486	71.3	77.8	25	10.0-146			8.74	29
2-Chlorotoluene	0.0250	ND	0.611	0.639	97.8	102	25	10.0-151			4.54	35
4-Chlorotoluene	0.0250	ND	0.583	0.601	93.2	96.2	25	10.0-150			3.14	35
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.487	0.511	78.0	81.8	25	10.0-149			4.72	34
1,2-Dibromoethane	0.0250	ND	0.507	0.547	81.1	87.5	25	14.0-145			7.60	28
Dibromomethane	0.0250	ND	0.499	0.539	79.8	86.2	25	18.0-144			7.78	27
1,2-Dichlorobenzene	0.0250	ND	0.567	0.581	90.7	92.9	25	10.0-153			2.32	34
1,3-Dichlorobenzene	0.0250	ND	0.563	0.585	90.1	93.6	25	10.0-150			3.86	35
1,4-Dichlorobenzene	0.0250	ND	0.533	0.534	85.3	85.4	25	10.0-148			0.0900	34
Dichlorodifluoromethane	0.0250	ND	0.397	0.426	63.5	68.1	25	10.0-160			6.99	30
1,1-Dichloroethane	0.0250	ND	0.544	0.586	87.1	93.8	25	19.0-148			7.43	28
1,2-Dichloroethane	0.0250	ND	0.547	0.581	87.4	93.0	25	17.0-147			6.14	27
1,1-Dichloroethene	0.0250	ND	0.415	0.447	66.3	71.6	25	10.0-150			7.62	31
cis-1,2-Dichloroethene	0.0250	ND	0.556	0.594	88.9	95.0	25	16.0-145			6.63	28
trans-1,2-Dichloroethene	0.0250	ND	0.530	0.563	84.8	90.1	25	11.0-142			6.07	29
1,2-Dichloropropane	0.0250	ND	0.542	0.569	86.7	91.1	25	17.0-148			4.99	28
1,1-Dichloropropene	0.0250	ND	0.564	0.600	90.2	95.9	25	10.0-150			6.15	30
1,3-Dichloropropane	0.0250	ND	0.530	0.569	84.8	91.0	25	16.0-148			7.06	27
cis-1,3-Dichloropropene	0.0250	ND	0.545	0.583	87.1	93.3	25	13.0-150			6.84	28
trans-1,3-Dichloropropene	0.0250	ND	0.505	0.539	80.8	86.2	25	10.0-152			6.45	29
2,2-Dichloropropane	0.0250	ND	0.448	0.468	71.7	74.8	25	16.0-143			4.31	30
Di-isopropyl ether	0.0250	ND	0.562	0.613	89.9	98.1	25	16.0-149			8.74	28
Ethylbenzene	0.0250	ND	0.583	0.606	93.2	96.9	25	10.0-147			3.91	31
Hexachloro-1,3-butadiene	0.0250	ND	0.566	0.552	90.5	88.3	25	10.0-154			2.41	40
Isopropylbenzene	0.0250	ND	0.575	0.602	90.1	94.4	25	10.0-147			4.57	33
p-Isopropyltoluene	0.0250	ND	0.610	0.631	96.5	99.9	25	10.0-156			3.40	37
2-Butanone (MEK)	0.125	ND	3.44	3.75	110	120	25	10.0-160			8.74	33
Methylene Chloride	0.0250	ND	0.525	0.557	83.9	89.2	25	16.0-139			6.09	29
4-Methyl-2-pentanone (MIBK)	0.125	ND	4.47	4.72	143	151	25	12.0-160			5.38	32
Methyl tert-butyl ether	0.0250	ND	0.540	0.586	86.4	93.8	25	21.0-145			8.21	29
Naphthalene	0.0250	ND	0.539	0.507	86.3	81.1	25	10.0-153			6.22	36
n-Propylbenzene	0.0250	0.0688	0.630	0.651	89.7	93.2	25	10.0-151			3.39	34
Styrene	0.0250	ND	0.588	0.631	94.1	101	25	10.0-155			7.03	34
1,1,1,2-Tetrachloroethane	0.0250	ND	0.517	0.547	82.7	87.5	25	10.0-147			5.71	30
1,1,2,2-Tetrachloroethane	0.0250	ND	0.675	0.694	108	111	25	10.0-155			2.81	31

L946205-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L946205-08 10/27/17 04:27 • (MS) R3260989-4 10/27/17 07:36 • (MSD) R3260989-5 10/27/17 07:57

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.527	0.567	84.4	90.7	25	10.0-144			7.23	32
Toluene	0.0250	ND	0.527	0.559	84.3	89.4	25	10.0-144			5.88	28
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.452	0.477	72.4	76.2	25	10.0-153			5.17	33
1,2,3-Trichlorobenzene	0.0250	ND	0.529	0.505	84.7	80.9	25	10.0-153			4.62	40
1,2,4-Trichlorobenzene	0.0250	ND	0.587	0.546	93.9	87.4	25	10.0-156			7.11	40
1,1,1-Trichloroethane	0.0250	ND	0.505	0.528	80.8	84.5	25	18.0-145			4.49	29
1,1,2-Trichloroethane	0.0250	ND	0.724	0.733	116	117	25	12.0-151			1.32	28
Trichloroethene	0.0250	ND	0.534	0.577	85.4	92.3	25	11.0-148			7.69	29
Trichlorofluoromethane	0.0250	ND	0.177	0.399	28.4	63.9	25	10.0-157		J3	77.0	34
1,2,3-Trichloropropane	0.0250	ND	0.573	0.646	91.7	103	25	10.0-154			11.9	32
1,2,3-Trimethylbenzene	0.0250	ND	0.619	0.635	95.4	98.0	25	10.0-150			2.58	33
1,2,4-Trimethylbenzene	0.0250	0.177	0.734	0.757	89.3	92.8	25	10.0-151			3.00	34
1,3,5-Trimethylbenzene	0.0250	0.0421	0.648	0.673	96.9	101	25	10.0-150			3.84	33
Vinyl chloride	0.0250	ND	0.483	0.520	77.2	83.2	25	10.0-150			7.46	29
Xylenes, Total	0.0750	ND	1.69	1.77	89.9	94.2	25	10.0-150			4.75	31
(S) Toluene-d8					*101*	*99.1*		*80.0-120*				
(S) Dibromofluoromethane					*97.3*	*95.0*		*74.0-131*				
(S) 4-Bromofluorobenzene					*109*	*105*		*64.0-132*				

Sample Narrative:

OS: Non-target compounds too high to run at a lower dilution.

Method Blank (MB)

(MB) R3261130-1 10/27/17 10:20

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	*90.6*			*18.0-148*

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

(LCS) R3261130-2 10/27/17 10:38 • (LCSD) R3261130-3 10/27/17 10:55

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 %
Diesel Range Organics (DRO)	30.0	23.3	22.6	77.5	75.3	50.0-150			2.94	20
Residual Range Organics (RRO)	30.0	23.1	22.5	77.1	74.9	50.0-150			2.86	20
(S) o-Terphenyl				*80.0*	*75.2*	*18.0-148*				

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

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.

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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, 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.
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.
J3	The associated batch QC was outside the established quality control range for precision.

ACCREDITATIONS & LOCATIONS

ESC Lab Sciences 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.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1,4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

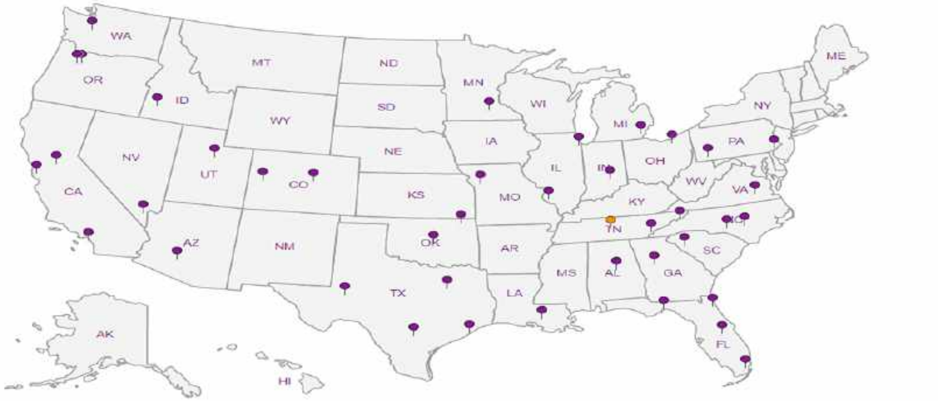
Third Party & Federal Accreditations

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

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

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



TGE Resources
8040 Northcourt Rd.
Houston, TX 77040

Billing Information:

Account Payable
8040 Northcourt Rd.
Houston, TX 77040

Pres Chk

Chain of Custody Page 1 of 1

ESC
LAB SCIENCES

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

Report to: **Kristi Barnette, Evan Sitler**

Email To: kristi.b@TGEresources.com

Project Description: Future Star Lake Hospital

City/State Collected: Federal Way, WA

Phone: **713-744-5800**
Fax:

Client Project # R13411.04

Lab Project # TGERESHTX-R13411

Collected by (print): Evan Sitler

Site/Facility ID # 29805 Pacific Hwy South

P.O. # 7759

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

L# 1946526
10-144

Acctnum: **TGERESHTX**
Template:
Prelogin:
TSR: **Mark Beasley**
PB:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPH DRO, RRO	TS	NWTPH, GRO	V8260	MRCRA8	HoLD	pH				Remarks	Sample # (lab only)
TSB-1 (4.5-5.5)	Grab	SS	4.5-5.5'	10/25/17	0915	6	✓	✓	✓	✓	✓	✓						-01
TSB-1 (10.5-11.5)	Grab	SS	10.5-11.5'	10/25/17	0930	6	✓	✓	✓	✓	✓	✓	✓					
TSB-1 (20-21)	Grab	SS	20-21'	10/25/17	0945	6	✓	✓	✓	✓	✓	✓						
TSB-1 (38-39)	Grab	SS	38-39'	10/25/17	1000	6	✓	✓	✓	✓	✓	✓						
TSB-1 (52-53)	Grab	SS	52-53'	10/25/17	1120	6	✓	✓	✓	✓	✓	✓						

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

Remarks: Hold all Soil Samples

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

Relinquished by : (Signature) | Date: 10/25/17 | Time: 1700 | Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
1 [✓ HCL] / MeoH
TBR

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

Temp: 1.2 °C Bottles Received: 30

If preservation required by Login: Date/Time

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

Date: 10/26/17 Time: 0845

Hold:

Condition: NCF / [✓ OK]

MW 11

Susan Peach

From: Jason Romer
Sent: Thursday, October 26, 2017 3:05 PM
To: Reporting
Cc: Olivia Studebaker; Mark Beasley
Subject: FW: *TGERESHTX* rush arrived today, 10/26

Please scan this email with the COC.

1 SS for V8260C, NWTPHGX, NWTPHDXNOSGT, MRCRA8 and TS. Due 10/31.

Logged to L946526.

From: Jason Romer
Sent: Thursday, October 26, 2017 2:13 PM
To: Login; Due SVOC; Due Metals; Due VOC
Cc: Mark Beasley
Subject: *TGERESHTX* rush arrived today, 10/26

1 SS for V8260C, NWTPHGX, NWTPHDXNOSGT, MRCRA8 and TS. **Log as R1 due 10/31.**

Thanks,

Jason Romer
Project Manager
ESC Lab Sciences-a subsidiary of Pace Analytical
12065 Lebanon Road | Mt. Juliet, TN 37122
800.767.5859 Ext. 9713| Direct 615.773.9713
jromer@esclabsciences.com | www.esclabsciences.com

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Thanks,
Jason Romer
Project Manager

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jromer@esclabsciences.com | www.esclabsciences.com

ANALYTICAL REPORT

October 31, 2017

TGE Resources

Sample Delivery Group:	L946745
Samples Received:	10/27/2017
Project Number:	R13411.04
Description:	Future Star Lake Hospital
Site:	29805 PACIFIC HWY
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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SAMPLE SUMMARY

SB-6 1-2 L946745-01 Solid

Collected by	Collected date/time	Received date/time
Evan Sitler	10/26/17 14:45	10/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1037198	1	10/31/17 08:23	10/31/17 08:32	KDW
Mercury by Method 7471A	WG1036762	1	10/30/17 15:17	10/31/17 08:05	ABL
Metals (ICP) by Method 6010C	WG1036378	1	10/31/17 05:55	10/31/17 09:59	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1036348	1	10/27/17 11:59	10/27/17 13:55	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1036523	1	10/27/17 11:59	10/27/17 23:36	DWR
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1036907	1	10/31/17 02:05	10/31/17 10:42	ACM

SB-10 1-2 L946745-02 Solid

Collected by	Collected date/time	Received date/time
Evan Sitler	10/26/17 15:45	10/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1037198	1	10/31/17 08:23	10/31/17 08:32	KDW
Mercury by Method 7471A	WG1036762	1	10/30/17 15:17	10/31/17 08:16	ABL
Metals (ICP) by Method 6010C	WG1036378	1	10/31/17 05:55	10/31/17 10:02	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1036348	1	10/27/17 11:59	10/27/17 14:19	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1036523	1	10/27/17 11:59	10/27/17 23:57	DWR
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1036907	10	10/31/17 02:05	10/31/17 11:25	ACM

SB-11 3-4 L946745-03 Solid

Collected by	Collected date/time	Received date/time
Evan Sitler	10/26/17 15:30	10/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1037198	1	10/31/17 08:23	10/31/17 08:32	KDW
Mercury by Method 7471A	WG1036762	1	10/30/17 15:17	10/31/17 08:18	ABL
Metals (ICP) by Method 6010C	WG1036378	1	10/31/17 05:55	10/31/17 10:05	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1036348	1	10/27/17 11:59	10/27/17 14:43	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1036523	1	10/27/17 11:59	10/28/17 00:18	DWR
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1036907	1	10/31/17 02:05	10/31/17 10:57	ACM
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1036907	10	10/31/17 02:05	10/31/17 11:53	ACM

SB-11 5-6 L946745-04 Solid

Collected by	Collected date/time	Received date/time
Evan Sitler	10/26/17 15:35	10/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1037199	1	10/31/17 08:51	10/31/17 09:02	JD
Mercury by Method 7471A	WG1036762	1	10/30/17 15:17	10/31/17 08:25	ABL
Metals (ICP) by Method 6010C	WG1036378	1	10/31/17 05:55	10/31/17 10:09	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1036348	1	10/27/17 11:59	10/27/17 15:06	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1036523	1	10/27/17 11:59	10/28/17 00:39	DWR
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1036907	10	10/31/17 02:05	10/31/17 11:11	ACM

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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.

Mark W. Beasley
Technical Service Representative

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Technical Service Representative

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: ESC Lab Sciences	LRC Date: 10/31/2017 15:35
Project Name: Future Star Lake Hospital	Laboratory Job Number: L946745-01, 02, 03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1036348, WG1036523, WG1036907, WG1036762, WG1036378, WG1037198 and WG1037199

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: ESC Lab Sciences	LRC Date: 10/31/2017 15:35
Project Name: Future Star Lake Hospital	Laboratory Job Number: L946745-01, 02, 03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1036348, WG1036523, WG1036907, WG1036762, WG1036378, WG1037198 and WG1037199

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: ESC Lab Sciences	LRC Date: 10/31/2017 15:35
Project Name: Future Star Lake Hospital	Laboratory Job Number: L946745-01, 02, 03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1036348, WG1036523, WG1036907, WG1036762, WG1036378, WG1037198 and WG1037199

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	10/31/2017 08:32	WG1037198

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0244		0.00302	0.0200	0.0216	1	10/31/2017 08:05	WG1036762

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.07	J	0.701	2.00	2.16	1	10/31/2017 09:59	WG1036378
Barium	59.4		0.183	0.500	0.539	1	10/31/2017 09:59	WG1036378
Cadmium	0.0759	J	0.0755	0.500	0.539	1	10/31/2017 09:59	WG1036378
Chromium	17.3		0.151	1.00	1.08	1	10/31/2017 09:59	WG1036378
Lead	6.49		0.205	0.500	0.539	1	10/31/2017 09:59	WG1036378
Selenium	U		0.798	2.00	2.16	1	10/31/2017 09:59	WG1036378
Silver	U		0.302	1.00	1.08	1	10/31/2017 09:59	WG1036378

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	0.0415	J	0.0366	0.100	0.108	1	10/27/2017 13:55	WG1036348
(S) a,a,a-Trifluorotoluene(FID)	*94.7*				*77.0-120*		*10/27/2017 13:55*	WG1036348

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0108	0.0500	0.0539	1	10/27/2017 23:36	WG1036523
Acrylonitrile	U		0.00193	0.0100	0.0108	1	10/27/2017 23:36	WG1036523
Benzene	U		0.000291	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Bromobenzene	U		0.000306	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Bromodichloromethane	U		0.000274	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Bromoform	U		0.000457	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Bromomethane	U		0.00145	0.00500	0.00539	1	10/27/2017 23:36	WG1036523
n-Butylbenzene	U		0.000278	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
sec-Butylbenzene	U		0.000217	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
tert-Butylbenzene	U		0.000222	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Carbon tetrachloride	U		0.000354	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Chlorobenzene	U		0.000229	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Chlorodibromomethane	U		0.000402	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Chloroethane	U		0.00102	0.00500	0.00539	1	10/27/2017 23:36	WG1036523
Chloroform	U		0.000247	0.00500	0.00539	1	10/27/2017 23:36	WG1036523
Chloromethane	U		0.000405	0.00250	0.00270	1	10/27/2017 23:36	WG1036523
2-Chlorotoluene	U		0.000325	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
4-Chlorotoluene	U		0.000259	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00500	0.00539	1	10/27/2017 23:36	WG1036523
1,2-Dibromoethane	U		0.000370	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Dibromomethane	U		0.000412	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,2-Dichlorobenzene	U		0.000329	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,3-Dichlorobenzene	U		0.000258	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,4-Dichlorobenzene	U		0.000244	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Dichlorodifluoromethane	U		0.000769	0.00500	0.00539	1	10/27/2017 23:36	WG1036523
1,1-Dichloroethane	U		0.000215	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,2-Dichloroethane	U		0.000286	0.00100	0.00108	1	10/27/2017 23:36	WG1036523

SB-6 1-2

Collected date/time: 10/26/17 14:45

SAMPLE RESULTS - 01

L946745

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000327	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
cis-1,2-Dichloroethene	U		0.000254	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
trans-1,2-Dichloroethene	U		0.000285	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,2-Dichloropropane	U		0.000386	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,1-Dichloropropene	U		0.000342	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,3-Dichloropropane	U		0.000223	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
cis-1,3-Dichloropropene	U		0.000283	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
trans-1,3-Dichloropropene	U		0.000288	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
2,2-Dichloropropane	U		0.000301	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Di-isopropyl ether	U		0.000268	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Ethylbenzene	U		0.000320	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Hexachloro-1,3-butadiene	U		0.000369	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Isopropylbenzene	U		0.000262	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
p-Isopropyltoluene	U		0.000220	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
2-Butanone (MEK)	U		0.00505	0.0100	0.0108	1	10/27/2017 23:36	WG1036523
Methylene Chloride	U		0.00108	0.00500	0.00539	1	10/27/2017 23:36	WG1036523
4-Methyl-2-pentanone (MIBK)	U		0.00203	0.0100	0.0108	1	10/27/2017 23:36	WG1036523
Methyl tert-butyl ether	U		0.000229	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Naphthalene	U		0.00108	0.00500	0.00539	1	10/27/2017 23:36	WG1036523
n-Propylbenzene	U		0.000222	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Styrene	U		0.000252	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,1,1,2-Tetrachloroethane	U		0.000285	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,1,2,2-Tetrachloroethane	U		0.000394	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,1,2-Trichlorotrifluoroethane	U		0.000394	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Tetrachloroethene	U		0.000298	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Toluene	U		0.000468	0.00500	0.00539	1	10/27/2017 23:36	WG1036523
1,2,3-Trichlorobenzene	U		0.000330	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,2,4-Trichlorobenzene	U		0.000419	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,1,1-Trichloroethane	U		0.000309	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,1,2-Trichloroethane	U		0.000299	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Trichloroethene	U		0.000301	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Trichlorofluoromethane	U		0.000412	0.00500	0.00539	1	10/27/2017 23:36	WG1036523
1,2,3-Trichloropropane	U		0.000799	0.00250	0.00270	1	10/27/2017 23:36	WG1036523
1,2,4-Trimethylbenzene	U		0.000228	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,2,3-Trimethylbenzene	U		0.000310	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Vinyl chloride	U		0.000314	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
1,3,5-Trimethylbenzene	U		0.000287	0.00100	0.00108	1	10/27/2017 23:36	WG1036523
Xylenes, Total	U		0.000753	0.00300	0.00324	1	10/27/2017 23:36	WG1036523
(S) Toluene-d8	*98.0*				*80.0-120*		*10/27/2017 23:36*	WG1036523
(S) Dibromofluoromethane	*107*				*74.0-131*		*10/27/2017 23:36*	WG1036523
(S) 4-Bromofluorobenzene	*95.5*				*64.0-132*		*10/27/2017 23:36*	WG1036523

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.44	4.00	4.31	1	10/31/2017 10:42	WG1036907
Residual Range Organics (RRO)	14.3		3.60	10.0	10.8	1	10/31/2017 10:42	WG1036907
(S) o-Terphenyl	*59.8*				*18.0-148*		*10/31/2017 10:42*	WG1036907

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.7		1	10/31/2017 08:32	WG1037198

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0171	J	0.00296	0.0200	0.0211	1	10/31/2017 08:16	WG1036762

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.20		0.686	2.00	2.11	1	10/31/2017 10:02	WG1036378
Barium	48.3		0.180	0.500	0.528	1	10/31/2017 10:02	WG1036378
Cadmium	0.101	J	0.0739	0.500	0.528	1	10/31/2017 10:02	WG1036378
Chromium	15.8		0.148	1.00	1.06	1	10/31/2017 10:02	WG1036378
Lead	7.75		0.201	0.500	0.528	1	10/31/2017 10:02	WG1036378
Selenium	U		0.781	2.00	2.11	1	10/31/2017 10:02	WG1036378
Silver	U		0.296	1.00	1.06	1	10/31/2017 10:02	WG1036378

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	0.0570	J	0.0358	0.100	0.106	1	10/27/2017 14:19	WG1036348
(S) a,a,a-Trifluorotoluene(FID)	*92.7*				*77.0-120*		*10/27/2017 14:19*	WG1036348

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0139	J	0.0106	0.0500	0.0528	1	10/27/2017 23:57	WG1036523
Acrylonitrile	U		0.00189	0.0100	0.0106	1	10/27/2017 23:57	WG1036523
Benzene	U		0.000285	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Bromobenzene	U		0.000300	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Bromodichloromethane	U		0.000268	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Bromoform	U		0.000448	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Bromomethane	U		0.00141	0.00500	0.00528	1	10/27/2017 23:57	WG1036523
n-Butylbenzene	U		0.000272	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
sec-Butylbenzene	U		0.000212	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
tert-Butylbenzene	U		0.000218	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Carbon tetrachloride	U		0.000346	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Chlorobenzene	U		0.000224	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Chlorodibromomethane	U		0.000394	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Chloroethane	U		0.000999	0.00500	0.00528	1	10/27/2017 23:57	WG1036523
Chloroform	U		0.000242	0.00500	0.00528	1	10/27/2017 23:57	WG1036523
Chloromethane	U		0.000396	0.00250	0.00264	1	10/27/2017 23:57	WG1036523
2-Chlorotoluene	U		0.000318	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
4-Chlorotoluene	U		0.000253	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,2-Dibromo-3-Chloropropane	U		0.00111	0.00500	0.00528	1	10/27/2017 23:57	WG1036523
1,2-Dibromoethane	U		0.000362	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Dibromomethane	U		0.000403	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,2-Dichlorobenzene	U		0.000322	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,3-Dichlorobenzene	U		0.000252	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,4-Dichlorobenzene	U		0.000239	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Dichlorodifluoromethane	U		0.000753	0.00500	0.00528	1	10/27/2017 23:57	WG1036523
1,1-Dichloroethane	U		0.000210	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,2-Dichloroethane	U		0.000280	0.00100	0.00106	1	10/27/2017 23:57	WG1036523

SB-10 1-2

Collected date/time: 10/26/17 15:45

SAMPLE RESULTS - 02

L946745

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000320	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
cis-1,2-Dichloroethene	U		0.000248	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
trans-1,2-Dichloroethene	U		0.000279	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,2-Dichloropropane	U		0.000378	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,1-Dichloropropene	U		0.000335	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,3-Dichloropropane	U		0.000219	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
cis-1,3-Dichloropropene	U		0.000277	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
trans-1,3-Dichloropropene	U		0.000282	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
2,2-Dichloropropane	U		0.000295	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Di-isopropyl ether	U		0.000262	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Ethylbenzene	U		0.000314	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Hexachloro-1,3-butadiene	U		0.000361	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Isopropylbenzene	U		0.000257	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
p-Isopropyltoluene	U		0.000215	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
2-Butanone (MEK)	U		0.00494	0.0100	0.0106	1	10/27/2017 23:57	WG1036523
Methylene Chloride	U		0.00106	0.00500	0.00528	1	10/27/2017 23:57	WG1036523
4-Methyl-2-pentanone (MIBK)	U		0.00199	0.0100	0.0106	1	10/27/2017 23:57	WG1036523
Methyl tert-butyl ether	U		0.000224	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Naphthalene	U		0.00106	0.00500	0.00528	1	10/27/2017 23:57	WG1036523
n-Propylbenzene	U		0.000218	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Styrene	U		0.000247	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,1,1,2-Tetrachloroethane	U		0.000279	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,1,2,2-Tetrachloroethane	U		0.000385	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,1,2-Trichlorotrifluoroethane	U		0.000385	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Tetrachloroethene	U		0.000291	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Toluene	0.000496	J	0.000458	0.00500	0.00528	1	10/27/2017 23:57	WG1036523
1,2,3-Trichlorobenzene	U		0.000323	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,2,4-Trichlorobenzene	U		0.000410	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,1,1-Trichloroethane	U		0.000302	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,1,2-Trichloroethane	U		0.000292	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Trichloroethene	U		0.000295	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Trichlorofluoromethane	U		0.000403	0.00500	0.00528	1	10/27/2017 23:57	WG1036523
1,2,3-Trichloropropane	U		0.000782	0.00250	0.00264	1	10/27/2017 23:57	WG1036523
1,2,4-Trimethylbenzene	U		0.000223	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,2,3-Trimethylbenzene	U		0.000303	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Vinyl chloride	U		0.000307	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
1,3,5-Trimethylbenzene	U		0.000281	0.00100	0.00106	1	10/27/2017 23:57	WG1036523
Xylenes, Total	U		0.000737	0.00300	0.00317	1	10/27/2017 23:57	WG1036523
(S) Toluene-d8	*97.3*				*80.0-120*		*10/27/2017 23:57*	WG1036523
(S) Dibromofluoromethane	*109*				*74.0-131*		*10/27/2017 23:57*	WG1036523
(S) 4-Bromofluorobenzene	*97.3*				*64.0-132*		*10/27/2017 23:57*	WG1036523

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	264		14.1	4.00	42.2	10	10/31/2017 11:25	WG1036907
Residual Range Organics (RRO)	1710		35.2	10.0	106	10	10/31/2017 11:25	WG1036907
(S) o-Terphenyl	*72.4*				*18.0-148*		*10/31/2017 11:25*	WG1036907

SB-11 3-4

Collected date/time: 10/26/17 15:30

SAMPLE RESULTS - 03

L946745

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.4		1	10/31/2017 08:32	WG1037198

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0270		0.00306	0.0200	0.0219	1	10/31/2017 08:18	WG1036762

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.16	J	0.711	2.00	2.19	1	10/31/2017 10:05	WG1036378
Barium	69.9		0.186	0.500	0.547	1	10/31/2017 10:05	WG1036378
Cadmium	0.0853	J	0.0766	0.500	0.547	1	10/31/2017 10:05	WG1036378
Chromium	28.2		0.153	1.00	1.09	1	10/31/2017 10:05	WG1036378
Lead	6.17		0.208	0.500	0.547	1	10/31/2017 10:05	WG1036378
Selenium	U		0.810	2.00	2.19	1	10/31/2017 10:05	WG1036378
Silver	U		0.306	1.00	1.09	1	10/31/2017 10:05	WG1036378

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.48		0.0371	0.100	0.109	1	10/27/2017 14:43	WG1036348
(S) a,a,a-Trifluorotoluene(FID)	*92.7*				*77.0-120*		*10/27/2017 14:43*	WG1036348

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0510	J	0.0109	0.0500	0.0547	1	10/28/2017 00:18	WG1036523
Acrylonitrile	U		0.00196	0.0100	0.0109	1	10/28/2017 00:18	WG1036523
Benzene	U		0.000296	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Bromobenzene	U		0.000311	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Bromodichloromethane	U		0.000278	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Bromoform	U		0.000464	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Bromomethane	U		0.00147	0.00500	0.00547	1	10/28/2017 00:18	WG1036523
n-Butylbenzene	0.00171		0.000282	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
sec-Butylbenzene	0.000801	J	0.000220	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
tert-Butylbenzene	U		0.000225	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Carbon tetrachloride	U		0.000359	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Chlorobenzene	U		0.000232	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Chlorodibromomethane	U		0.000408	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Chloroethane	U		0.00104	0.00500	0.00547	1	10/28/2017 00:18	WG1036523
Chloroform	U		0.000251	0.00500	0.00547	1	10/28/2017 00:18	WG1036523
Chloromethane	U		0.000410	0.00250	0.00274	1	10/28/2017 00:18	WG1036523
2-Chlorotoluene	U		0.000329	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
4-Chlorotoluene	U		0.000263	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,2-Dibromo-3-Chloropropane	U		0.00115	0.00500	0.00547	1	10/28/2017 00:18	WG1036523
1,2-Dibromoethane	U		0.000375	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Dibromomethane	U		0.000418	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,2-Dichlorobenzene	U		0.000334	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,3-Dichlorobenzene	U		0.000262	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,4-Dichlorobenzene	U		0.000247	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Dichlorodifluoromethane	U		0.000780	0.00500	0.00547	1	10/28/2017 00:18	WG1036523
1,1-Dichloroethane	U		0.000218	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,2-Dichloroethane	U		0.000290	0.00100	0.00109	1	10/28/2017 00:18	WG1036523

SB-11 3-4

Collected date/time: 10/26/17 15:30

SAMPLE RESULTS - 03

L946745

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000332	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
cis-1,2-Dichloroethene	U		0.000257	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
trans-1,2-Dichloroethene	U		0.000289	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,2-Dichloropropane	U		0.000392	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,1-Dichloropropene	U		0.000347	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,3-Dichloropropane	U		0.000227	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
cis-1,3-Dichloropropene	U		0.000287	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
trans-1,3-Dichloropropene	U		0.000292	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
2,2-Dichloropropane	U		0.000305	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Di-isopropyl ether	U		0.000271	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Ethylbenzene	U		0.000325	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Hexachloro-1,3-butadiene	U		0.000374	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Isopropylbenzene	U		0.000266	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
p-Isopropyltoluene	0.000885	J	0.000223	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
2-Butanone (MEK)	0.00885	J	0.00512	0.0100	0.0109	1	10/28/2017 00:18	WG1036523
Methylene Chloride	U		0.00109	0.00500	0.00547	1	10/28/2017 00:18	WG1036523
4-Methyl-2-pentanone (MIBK)	U		0.00206	0.0100	0.0109	1	10/28/2017 00:18	WG1036523
Methyl tert-butyl ether	U		0.000232	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Naphthalene	0.00779		0.00109	0.00500	0.00547	1	10/28/2017 00:18	WG1036523
n-Propylbenzene	0.00110		0.000225	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Styrene	U		0.000256	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,1,1,2-Tetrachloroethane	U		0.000289	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,1,2,2-Tetrachloroethane	U		0.000399	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,1,2-Trichlorotrifluoroethane	U		0.000399	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Tetrachloroethene	U		0.000302	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Toluene	U		0.000475	0.00500	0.00547	1	10/28/2017 00:18	WG1036523
1,2,3-Trichlorobenzene	U		0.000335	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,2,4-Trichlorobenzene	U		0.000425	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,1,1-Trichloroethane	U		0.000313	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,1,2-Trichloroethane	U		0.000303	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Trichloroethene	U		0.000305	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Trichlorofluoromethane	U		0.000418	0.00500	0.00547	1	10/28/2017 00:18	WG1036523
1,2,3-Trichloropropane	U		0.000811	0.00250	0.00274	1	10/28/2017 00:18	WG1036523
1,2,4-Trimethylbenzene	0.00623		0.000231	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,2,3-Trimethylbenzene	0.00186		0.000314	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Vinyl chloride	U		0.000319	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
1,3,5-Trimethylbenzene	0.00447		0.000291	0.00100	0.00109	1	10/28/2017 00:18	WG1036523
Xylenes, Total	U		0.000764	0.00300	0.00328	1	10/28/2017 00:18	WG1036523
(S) Toluene-d8	*98.1*				*80.0-120*		*10/28/2017 00:18*	WG1036523
(S) Dibromofluoromethane	*110*				*74.0-131*		*10/28/2017 00:18*	WG1036523
(S) 4-Bromofluorobenzene	*98.7*				*64.0-132*		*10/28/2017 00:18*	WG1036523

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	559		14.6	4.00	4.00	10	10/31/2017 11:53	WG1036907
Residual Range Organics (RRO)	136		3.65	10.0	10.9	1	10/31/2017 10:57	WG1036907
(S) o-Terphenyl	*82.2*				*18.0-148*		*10/31/2017 10:57*	WG1036907
(S) o-Terphenyl	*88.9*				*18.0-148*		*10/31/2017 11:53*	WG1036907

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	74.6		1	10/31/2017 09:02	WG1037199

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0528		0.00376	0.0200	0.0268	1	10/31/2017 08:25	WG1036762

Metals (ICP) by Method 6010C

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	6.46		0.872	2.00	2.68	1	10/31/2017 10:09	WG1036378
Barium	111		0.228	0.500	0.671	1	10/31/2017 10:09	WG1036378
Cadmium	0.282	J	0.0939	0.500	0.671	1	10/31/2017 10:09	WG1036378
Chromium	29.2		0.188	1.00	1.34	1	10/31/2017 10:09	WG1036378
Lead	117		0.255	0.500	0.671	1	10/31/2017 10:09	WG1036378
Selenium	U		0.993	2.00	2.68	1	10/31/2017 10:09	WG1036378
Silver	U		0.376	1.00	1.34	1	10/31/2017 10:09	WG1036378

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	0.322		0.0455	0.100	0.134	1	10/27/2017 15:06	WG1036348
(S) a,a,a-Trifluorotoluene(FID)	*92.3*				*77.0-120*		*10/27/2017 15:06*	WG1036348

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	0.0698		0.0134	0.0500	0.0671	1	10/28/2017 00:39	WG1036523
Acrylonitrile	U		0.00240	0.0100	0.0134	1	10/28/2017 00:39	WG1036523
Benzene	U		0.000362	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Bromobenzene	U		0.000381	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Bromodichloromethane	U		0.000341	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Bromoform	U		0.000569	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Bromomethane	U		0.00180	0.00500	0.00671	1	10/28/2017 00:39	WG1036523
n-Butylbenzene	U		0.000346	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
sec-Butylbenzene	U		0.000270	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
tert-Butylbenzene	U		0.000276	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Carbon tetrachloride	U		0.000440	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Chlorobenzene	U		0.000284	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Chlorodibromomethane	U		0.000500	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Chloroethane	U		0.00127	0.00500	0.00671	1	10/28/2017 00:39	WG1036523
Chloroform	U		0.000307	0.00500	0.00671	1	10/28/2017 00:39	WG1036523
Chloromethane	U		0.000503	0.00250	0.00335	1	10/28/2017 00:39	WG1036523
2-Chlorotoluene	U		0.000404	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
4-Chlorotoluene	U		0.000322	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,2-Dibromo-3-Chloropropane	U		0.00141	0.00500	0.00671	1	10/28/2017 00:39	WG1036523
1,2-Dibromoethane	U		0.000460	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Dibromomethane	U		0.000512	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,2-Dichlorobenzene	U		0.000409	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,3-Dichlorobenzene	U		0.000321	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,4-Dichlorobenzene	U		0.000303	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Dichlorodifluoromethane	U		0.000956	0.00500	0.00671	1	10/28/2017 00:39	WG1036523
1,1-Dichloroethane	U		0.000267	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,2-Dichloroethane	U		0.000355	0.00100	0.00134	1	10/28/2017 00:39	WG1036523

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000406	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
cis-1,2-Dichloroethene	U		0.000315	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
trans-1,2-Dichloroethene	U		0.000354	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,2-Dichloropropane	U		0.000480	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,1-Dichloropropene	U		0.000425	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,3-Dichloropropane	U		0.000278	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
cis-1,3-Dichloropropene	U		0.000351	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
trans-1,3-Dichloropropene	U		0.000358	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
2,2-Dichloropropane	U		0.000374	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Di-isopropyl ether	U		0.000333	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Ethylbenzene	0.000551	J	0.000398	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Hexachloro-1,3-butadiene	U		0.000459	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Isopropylbenzene	U		0.000326	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
p-Isopropyltoluene	U		0.000274	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
2-Butanone (MEK)	0.0177		0.00628	0.0100	0.0134	1	10/28/2017 00:39	WG1036523
Methylene Chloride	U		0.00134	0.00500	0.00671	1	10/28/2017 00:39	WG1036523
4-Methyl-2-pentanone (MIBK)	U		0.00252	0.0100	0.0134	1	10/28/2017 00:39	WG1036523
Methyl tert-butyl ether	U		0.000284	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Naphthalene	U		0.00134	0.00500	0.00671	1	10/28/2017 00:39	WG1036523
n-Propylbenzene	0.000356	J	0.000276	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Styrene	U		0.000314	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,1,1,2-Tetrachloroethane	U		0.000354	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,1,2,2-Tetrachloroethane	U		0.000490	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,1,2-Trichlorotrifluoroethane	U		0.000490	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Tetrachloroethene	U		0.000370	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Toluene	U		0.000582	0.00500	0.00671	1	10/28/2017 00:39	WG1036523
1,2,3-Trichlorobenzene	U		0.000410	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,2,4-Trichlorobenzene	U		0.000520	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,1,1-Trichloroethane	U		0.000384	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,1,2-Trichloroethane	U		0.000372	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Trichloroethene	U		0.000374	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Trichlorofluoromethane	U		0.000512	0.00500	0.00671	1	10/28/2017 00:39	WG1036523
1,2,3-Trichloropropane	U		0.000994	0.00250	0.00335	1	10/28/2017 00:39	WG1036523
1,2,4-Trimethylbenzene	0.00567		0.000283	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,2,3-Trimethylbenzene	0.00325		0.000385	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Vinyl chloride	U		0.000390	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
1,3,5-Trimethylbenzene	0.00267		0.000357	0.00100	0.00134	1	10/28/2017 00:39	WG1036523
Xylenes, Total	0.00378	J	0.000936	0.00300	0.00402	1	10/28/2017 00:39	WG1036523
(S) Toluene-d8	*99.2*				*80.0-120*		*10/28/2017 00:39*	WG1036523
(S) Dibromofluoromethane	*105*				*74.0-131*		*10/28/2017 00:39*	WG1036523
(S) 4-Bromofluorobenzene	*97.0*				*64.0-132*		*10/28/2017 00:39*	WG1036523

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	171		17.9	4.00	53.7	10	10/31/2017 11:11	WG1036907
Residual Range Organics (RRO)	938		44.7	10.0	134	10	10/31/2017 11:11	WG1036907
(S) o-Terphenyl	*65.2*				*18.0-148*		*10/31/2017 11:11*	WG1036907

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

Method Blank (MB)

(MB) R3261860-1 10/31/17 08:32

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.001			

L946745-01 Original Sample (OS) • Duplicate (DUP)

(OS) L946745-01 10/31/17 08:32 • (DUP) R3261860-3 10/31/17 08:32

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	92.7	91.2	1	2		5

Laboratory Control Sample (LCS)

(LCS) R3261860-2 10/31/17 08:32

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85-115	

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

Method Blank (MB)

(MB) R3261873-1 10/31/17 09:02

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0			

L946769-01 Original Sample (OS) • Duplicate (DUP)

(OS) L946769-01 10/31/17 09:02 • (DUP) R3261873-3 10/31/17 09:02

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	80.4	80.8	1	0		5

Laboratory Control Sample (LCS)

(LCS) R3261873-2 10/31/17 09:02

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85-115	

QUALITY CONTROL SUMMARY

L946745-01,02,03,04

Method Blank (MB)

(MB) R3261787-1 10/31/17 07:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0028	0.0200

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

(LCS) R3261787-2 10/31/17 08:01 • (LCSD) R3261787-3 10/31/17 08:03

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 %
Mercury	0.300	0.289	0.294	96	98	80-120			2	20

L946745-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L946745-01 10/31/17 08:05 • (MS) R3261787-4 10/31/17 08:07 • (MSD) R3261787-5 10/31/17 08:09

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 %
Mercury	0.324	0.0244	0.325	0.333	93	95	1	75-125			2	20

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

Method Blank (MB)

(MB) R3261798-1 10/31/17 09:01

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.65	2.00
Barium	U		0.17	0.500
Cadmium	U		0.07	0.500
Chromium	U		0.14	1.00
Lead	U		0.19	0.500
Selenium	U		0.74	2.00
Silver	U		0.28	1.00

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

(LCS) R3261798-2 10/31/17 09:04 • (LCSD) R3261798-3 10/31/17 09:07

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 %
Arsenic	100	99.0	97.8	99	98	80-120			1	20
Barium	100	104	103	104	103	80-120			1	20
Cadmium	100	98.8	97.7	99	98	80-120			1	20
Chromium	100	99.5	98.7	99	99	80-120			1	20
Lead	100	100	99.5	100	100	80-120			1	20
Selenium	100	99.1	98.6	99	99	80-120			0	20
Silver	20.0	18.4	18.3	92	91	80-120			1	20

L945976-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L945976-21 10/31/17 09:10 • (MS) R3261798-6 10/31/17 09:19 • (MSD) R3261798-7 10/31/17 09:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	20.0	118	117	98	96	1	75-125			1	20
Barium	100	117	215	212	97	95	1	75-125			1	20
Cadmium	100	ND	98.4	97.3	98	97	1	75-125			1	20
Chromium	100	14.3	108	108	93	93	1	75-125			0	20
Lead	100	6.41	107	107	101	101	1	75-125			0	20
Selenium	100	ND	97.0	96.9	97	97	1	75-125			0	20
Silver	20.0	ND	18.6	18.2	93	91	1	75-125			2	20

WG1036348

Volatile Organic Compounds (GC) by Method NWTPHGX

QUALITY CONTROL SUMMARY

L946745-01,02,03,04

Method Blank (MB)

(MB) R3261264-3 10/27/17 11:59

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Gasoline Range Organics-NWTPH	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*96.5*			*77.0-120*

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

(LCS) R3261264-1 10/27/17 10:47 • (LCSD) R3261264-2 10/27/17 11:11

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Gasoline Range Organics-NWTPH	5.50	5.14	5.23	93.5	95.1	70.0-133			1.73	20
(S) a,a,a-Trifluorotoluene(FID)				*108*	*108*	*77.0-120*				

L946520-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L946520-01 10/27/17 15:54 • (MS) R3261264-4 10/27/17 21:33 • (MSD) R3261264-5 10/27/17 21:57

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Gasoline Range Organics-NWTPH	5.50	ND	113	115	82.1	83.3	25	10.0-146			1.44	30
(S) a,a,a-Trifluorotoluene(FID)					*110*	*110*		*77.0-120*				

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

Method Blank (MB)

(MB) R3261465-3 10/27/17 12:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Isopropylbenzene	U		0.000243	0.00100

Method Blank (MB)

(MB) R3261465-3 10/27/17 12:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	0.000357	J	0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	*104*			*80.0-120*
(S) Dibromofluoromethane	*105*			*74.0-131*
(S) 4-Bromofluorobenzene	*94.5*			*64.0-132*

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

(LCS) R3261465-1 10/27/17 11:05 • (LCSD) R3261465-2 10/27/17 11:26

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	0.125	0.153	0.156	122	125	11.0-160			2.17	23
Acrylonitrile	0.125	0.163	0.167	131	133	61.0-143			1.95	20
Benzene	0.0250	0.0259	0.0259	103	103	71.0-124			0.0600	20
Bromobenzene	0.0250	0.0250	0.0249	100	99.5	78.0-120			0.510	20
Bromodichloromethane	0.0250	0.0243	0.0244	97.3	97.5	75.0-120			0.200	20

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

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

(LCS) R3261465-1 10/27/17 11:05 • (LCSD) R3261465-2 10/27/17 11:26

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 %
Bromoform	0.0250	0.0237	0.0234	94.8	93.7	65.0-133			1.16	20
Bromomethane	0.0250	0.0289	0.0305	116	122	26.0-160			5.48	20
n-Butylbenzene	0.0250	0.0309	0.0311	124	124	73.0-126			0.680	20
sec-Butylbenzene	0.0250	0.0284	0.0289	114	116	75.0-121			1.68	20
tert-Butylbenzene	0.0250	0.0273	0.0275	109	110	74.0-122			0.970	20
Carbon tetrachloride	0.0250	0.0234	0.0237	93.6	94.8	66.0-123			1.32	20
Chlorobenzene	0.0250	0.0270	0.0272	108	109	79.0-121			0.890	20
Chlorodibromomethane	0.0250	0.0247	0.0249	98.8	99.6	74.0-128			0.810	20
Chloroethane	0.0250	0.0284	0.0294	114	117	51.0-147			3.43	20
Chloroform	0.0250	0.0259	0.0261	104	104	73.0-123			0.490	20
Chloromethane	0.0250	0.0321	0.0322	129	129	51.0-138			0.300	20
2-Chlorotoluene	0.0250	0.0265	0.0265	106	106	72.0-124			0.250	20
4-Chlorotoluene	0.0250	0.0270	0.0267	108	107	78.0-120			1.06	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0255	0.0249	102	99.7	65.0-126			2.15	20
1,2-Dibromoethane	0.0250	0.0252	0.0257	101	103	78.0-122			1.69	20
Dibromomethane	0.0250	0.0255	0.0258	102	103	79.0-120			1.34	20
1,2-Dichlorobenzene	0.0250	0.0273	0.0276	109	110	80.0-120			1.07	20
1,3-Dichlorobenzene	0.0250	0.0272	0.0274	109	110	72.0-123			1.01	20
1,4-Dichlorobenzene	0.0250	0.0274	0.0272	110	109	77.0-120			0.960	20
Dichlorodifluoromethane	0.0250	0.0288	0.0289	115	115	49.0-155			0.330	20
1,1-Dichloroethane	0.0250	0.0280	0.0281	112	112	70.0-128			0.490	20
1,2-Dichloroethane	0.0250	0.0276	0.0272	110	109	69.0-128			1.45	20
1,1-Dichloroethene	0.0250	0.0255	0.0254	102	102	63.0-131			0.600	20
cis-1,2-Dichloroethene	0.0250	0.0270	0.0267	108	107	74.0-123			1.03	20
trans-1,2-Dichloroethene	0.0250	0.0267	0.0268	107	107	72.0-122			0.120	20
1,2-Dichloropropane	0.0250	0.0281	0.0278	112	111	75.0-126			1.05	20
1,1-Dichloropropene	0.0250	0.0258	0.0261	103	104	72.0-130			1.04	20
1,3-Dichloropropane	0.0250	0.0262	0.0259	105	104	80.0-121			1.16	20
cis-1,3-Dichloropropene	0.0250	0.0251	0.0246	100	98.3	80.0-125			1.98	20
trans-1,3-Dichloropropene	0.0250	0.0251	0.0249	100	99.7	75.0-129			0.620	20
2,2-Dichloropropane	0.0250	0.0229	0.0240	91.7	96.0	60.0-129			4.59	20
Di-isopropyl ether	0.0250	0.0283	0.0283	113	113	62.0-133			0.0800	20
Ethylbenzene	0.0250	0.0259	0.0262	104	105	77.0-120			1.04	20
Hexachloro-1,3-butadiene	0.0250	0.0290	0.0297	116	119	68.0-128			2.21	20
Isopropylbenzene	0.0250	0.0284	0.0287	113	115	75.0-120			1.12	20
p-Isopropyltoluene	0.0250	0.0288	0.0291	115	116	74.0-125			1.16	20
2-Butanone (MEK)	0.125	0.147	0.148	117	118	37.0-159			0.800	20
Methylene Chloride	0.0250	0.0255	0.0257	102	103	67.0-123			0.890	20
4-Methyl-2-pentanone (MIBK)	0.125	0.140	0.144	112	115	60.0-144			3.21	20
Methyl tert-butyl ether	0.0250	0.0275	0.0279	110	112	66.0-125			1.43	20

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

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

(LCS) R3261465-1 10/27/17 11:05 • (LCSD) R3261465-2 10/27/17 11:26

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 %
Naphthalene	0.0250	0.0280	0.0289	112	116	64.0-125			2.96	20
n-Propylbenzene	0.0250	0.0276	0.0279	110	112	78.0-120			1.29	20
Styrene	0.0250	0.0248	0.0244	99.0	97.7	78.0-124			1.32	20
1,1,1,2-Tetrachloroethane	0.0250	0.0253	0.0258	101	103	74.0-124			1.99	20
1,1,2,2-Tetrachloroethane	0.0250	0.0267	0.0274	107	109	73.0-120			2.38	20
Tetrachloroethene	0.0250	0.0251	0.0253	100	101	70.0-127			0.740	20
Toluene	0.0250	0.0247	0.0247	98.8	98.8	77.0-120			0.0200	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0251	0.0251	100	100	64.0-135			0.0100	20
1,2,3-Trichlorobenzene	0.0250	0.0269	0.0271	108	108	68.0-126			0.720	20
1,2,4-Trichlorobenzene	0.0250	0.0277	0.0269	111	108	70.0-127			2.69	20
1,1,1-Trichloroethane	0.0250	0.0248	0.0253	99.0	101	69.0-125			2.08	20
1,1,2-Trichloroethane	0.0250	0.0253	0.0258	101	103	78.0-120			1.73	20
Trichloroethene	0.0250	0.0255	0.0262	102	105	79.0-120			2.75	20
Trichlorofluoromethane	0.0250	0.0264	0.0277	106	111	59.0-136			4.83	20
1,2,3-Trichloropropane	0.0250	0.0243	0.0250	97.1	100	73.0-124			2.96	20
1,2,3-Trimethylbenzene	0.0250	0.0269	0.0272	108	109	76.0-120			0.980	20
1,2,4-Trimethylbenzene	0.0250	0.0271	0.0275	109	110	75.0-120			1.14	20
1,3,5-Trimethylbenzene	0.0250	0.0270	0.0273	108	109	75.0-120			1.10	20
Vinyl chloride	0.0250	0.0304	0.0307	122	123	63.0-134			0.920	20
Xylenes, Total	0.0750	0.0779	0.0791	104	105	77.0-120			1.53	20
(S) Toluene-d8				*100*	*100*	*80.0-120*				
(S) Dibromofluoromethane				*104*	*105*	*74.0-131*				
(S) 4-Bromofluorobenzene				*95.3*	*94.5*	*64.0-132*				

WG1036907

QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

L946745-01,02,03,04

Method Blank (MB)

(MB) R3261760-1 10/31/17 09:29

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	*53.7*			*18.0-148*

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

(LCS) R3261760-2 10/31/17 09:44 • (LCSD) R3261760-3 10/31/17 09:59

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 %
Diesel Range Organics (DRO)	30.0	23.1	21.0	77.1	70.0	50.0-150			9.59	20
Residual Range Organics (RRO)	30.0	23.5	21.2	78.3	70.5	50.0-150			10.4	20
(S) o-Terphenyl				*61.1*	*53.0*	*18.0-148*				

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

GLOSSARY OF TERMS

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

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.

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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, 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.
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.

ACCREDITATIONS & LOCATIONS

ESC Lab Sciences 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.

State Accreditations

Alabama	40660
Alaska	UST-080
Arizona	AZ0612
Arkansas	88-0469
California	01157CA
Colorado	TN00003
Conneticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1]	90010
Kentucky [2]	16
Louisiana	AI30792
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico	TN00003
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [2]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	221
South Carolina	84004
South Dakota	n/a
Tennessee [1 4]	2006
Texas	T 104704245-07-TX
Texas [5]	LAB0152
Utah	6157585858
Vermont	VT2006
Virginia	109
Washington	C1915
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

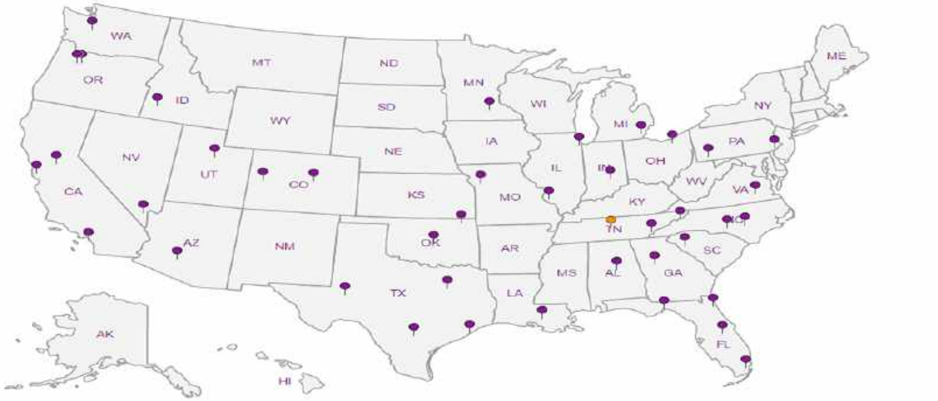
Third Party & Federal Accreditations

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

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

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



TGE Resources
8040 Northcourt Rd.
Houston, TX 77040

Billing Information:
Account Payable
8040 Northcourt Rd.
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

ESC LAB SCIENCES

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

Report to: **Kristi Barnette, Evan Sitler**

Email To: kristib@tgeresources.com

Project Description: Future Star Lake Hospitl

City/State Collected: Federal Way, WA

L# L946745

F044

Phone: **713-744-5800**
Fax:

Client Project # R13411.04

Lab Project # TGERESHTX-R13411

Collected by (print): E. Sitler

Site/Facility ID # 29805 Pacific Hwy

P.O. # 7759

Acctnum: **TGERESHTX**
Template:
Prelogin:
TSR: **Mark Beasley**
PB:
Shipped Via:

Collected by (signature):

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

Immediately Packed on Ice N ___ Y ✓

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs DR	NWTPH DRO, RRO	TS	NWTPH, GRO	V8260	MRCRA8	HOLD	pH				Remarks	Sample # (lab only)
SB-6(1-2)	Grab	SS	1-2'	10/26/17	1445	5	✓	✓	✓	✓	✓							-01
SB-6(5-6)	Grab	SS	5-6'	10/26/17	1455	5	✓	✓	✓	✓	✓	✓						
SB-10 (1-2)	Grab	SS	1-2'	10/26/17	1545	6	✓	✓	✓	✓	✓							02
SB-10(5-6)	Grab	SS	5-6'	10/26/17	1555	5 6	✓	✓	✓	✓	✓	✓						
SB-11 (3-4)	Grab	SS	3-4'	10/26/17	1530	6	✓	✓	✓	✓	✓							03
SB-11 (5-6)	Grab	SS	5-6'	10/26/17	1535	6	✓	✓	✓	✓	✓							04

* 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 # 7474 0933 2547

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

Relinquished by : (Signature)	Date: 10/26/17	Time: 1700	Received by: (Signature)	Trip Blank Received: Yes [✓ No] HCL / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.5 °C	Bottles Received: 33
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) 834	Date: 10-27-17	Time: 0845

If preservation required by Login: Date/Time

10-155

Condition: NCF / [✓ OK]

ANALYTICAL REPORT

October 31, 2017

TGE Resources

Sample Delivery Group:	L947070
Samples Received:	10/28/2017
Project Number:	R13411.04
Description:	Future Star Lake Hospital
Site:	29805 PACIFIC HWY S
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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SB-7 (1-2) L947070-01 Solid

Collected by	Collected date/time	Received date/time
Evan Sutler	10/27/17 09:40	10/28/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1037200	1	10/31/17 08:10	10/31/17 08:19	KDW
Wet Chemistry by Method 9045D	WG1036680	1	10/31/17 13:50	10/31/17 14:35	GB
Mercury by Method 7471A	WG1036762	1	10/30/17 15:18	10/31/17 08:29	ABL
Metals (ICP) by Method 6010C	WG1036378	1	10/31/17 06:24	10/31/17 10:18	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1036707	1.2	10/27/17 09:40	10/29/17 19:22	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1036732	1	10/27/17 09:40	10/31/17 12:23	BMB
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1036831	1	10/29/17 20:35	10/31/17 10:14	ACM

SB-8 (0-1) L947070-02 Solid

Collected by	Collected date/time	Received date/time
Evan Sutler	10/27/17 08:30	10/28/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1037200	1	10/31/17 08:10	10/31/17 08:19	KDW
Mercury by Method 7471A	WG1036762	1	10/30/17 15:18	10/31/17 08:31	ABL
Metals (ICP) by Method 6010C	WG1036378	1	10/31/17 06:24	10/31/17 10:22	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1036707	1	10/27/17 08:30	10/29/17 19:44	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1036732	1	10/27/17 08:30	10/31/17 12:43	BMB
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1036831	10	10/29/17 20:35	10/30/17 14:58	ACM

SB-9 (1-2) L947070-03 Solid

Collected by	Collected date/time	Received date/time
Evan Sutler	10/27/17 08:50	10/28/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1037200	1	10/31/17 08:10	10/31/17 08:19	KDW
Mercury by Method 7471A	WG1036762	1	10/30/17 15:18	10/31/17 08:34	ABL
Metals (ICP) by Method 6010C	WG1036378	1	10/31/17 06:24	10/31/17 10:25	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1036707	1	10/27/17 08:50	10/29/17 20:07	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1036732	1	10/27/17 08:50	10/31/17 13:03	BMB
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1036831	1	10/29/17 20:35	10/31/17 10:28	ACM

SB-12 (1-2) L947070-04 Solid

Collected by	Collected date/time	Received date/time
Evan Sutler	10/27/17 09:10	10/28/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1037200	1	10/31/17 08:10	10/31/17 08:19	KDW
Mercury by Method 7471A	WG1036762	1	10/30/17 15:18	10/31/17 08:36	ABL
Metals (ICP) by Method 6010C	WG1036378	1	10/31/17 06:24	10/31/17 10:28	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1036707	34.75	10/27/17 09:10	10/31/17 00:36	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1036732	34.75	10/27/17 09:10	10/31/17 13:23	BMB
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1036831	10	10/29/17 20:35	10/30/17 16:00	ACM

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

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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.

Mark W. Beasley
Technical Service Representative

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Technical Service Representative

Laboratory Review Checklist: Reportable Data

Laboratory Name: ESC Lab Sciences	LRC Date: 10/31/2017 17:16
Project Name: Future Star Lake Hospital	Laboratory Job Number: L947070-01, 02, 03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1036707, WG1036831, WG1036762, WG1036378, WG1036732, WG1037200 and WG1036680

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?		X			1
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: ESC Lab Sciences	LRC Date: 10/31/2017 17:16
Project Name: Future Star Lake Hospital	Laboratory Job Number: L947070-01, 02, 03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1036707, WG1036831, WG1036762, WG1036378, WG1036732, WG1037200 and WG1036680

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: ESC Lab Sciences	LRC Date: 10/31/2017 17:16
Project Name: Future Star Lake Hospital	Laboratory Job Number: L947070-01, 02, 03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1036707, WG1036831, WG1036762, WG1036378, WG1036732, WG1037200 and WG1036680

ER #[1]	Description
1	9045D WG1036680 L947070-01: Prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.
2	8260C WG1036732 Hexachloro-1,3-butadiene: Percent Recovery is outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	83.5		1	10/31/2017 08:19	WG1037200

Wet Chemistry by Method 9045D

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	su			date / time	
pH	6.68	T8	1	10/31/2017 14:35	WG1036680

Sample Narrative:

L947070-01 WG1036680: 6.68 at 17.2C

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0602		0.00335	0.0200	0.0239	1	10/31/2017 08:29	WG1036762

Metals (ICP) by Method 6010C

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	2.91		0.778	2.00	2.39	1	10/31/2017 10:18	WG1036378
Barium	138		0.203	0.500	0.598	1	10/31/2017 10:18	WG1036378
Cadmium	U		0.0838	0.500	0.598	1	10/31/2017 10:18	WG1036378
Chromium	27.3		0.168	1.00	1.20	1	10/31/2017 10:18	WG1036378
Lead	4.03		0.227	0.500	0.598	1	10/31/2017 10:18	WG1036378
Selenium	U		0.886	2.00	2.39	1	10/31/2017 10:18	WG1036378
Silver	U		0.335	1.00	1.20	1	10/31/2017 10:18	WG1036378

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	0.0569	J	0.0487	0.100	0.144	1.2	10/29/2017 19:22	WG1036707
(S) a,a,a-Trifluorotoluene(FID)	*97.7*				*77.0-120*		*10/29/2017 19:22*	WG1036707

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0120	0.0500	0.0598	1	10/31/2017 12:23	WG1036732
Acrylonitrile	U		0.00214	0.0100	0.0120	1	10/31/2017 12:23	WG1036732
Benzene	0.000340	J	0.000323	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Bromobenzene	U		0.000340	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Bromodichloromethane	U		0.000304	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Bromoform	U		0.000508	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Bromomethane	U		0.00160	0.00500	0.00598	1	10/31/2017 12:23	WG1036732
n-Butylbenzene	U		0.000309	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
sec-Butylbenzene	U		0.000241	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
tert-Butylbenzene	U		0.000247	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Carbon tetrachloride	U		0.000393	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Chlorobenzene	U		0.000254	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Chlorodibromomethane	U		0.000446	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Chloroethane	U		0.00113	0.00500	0.00598	1	10/31/2017 12:23	WG1036732
Chloroform	U		0.000274	0.00500	0.00598	1	10/31/2017 12:23	WG1036732
Chloromethane	U		0.000449	0.00250	0.00299	1	10/31/2017 12:23	WG1036732
2-Chlorotoluene	U		0.000360	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
4-Chlorotoluene	U		0.000287	0.00100	0.00120	1	10/31/2017 12:23	WG1036732

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.00126	0.00500	0.00598	1	10/31/2017 12:23	WG1036732
1,2-Dibromoethane	U		0.000411	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Dibromomethane	U		0.000457	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,2-Dichlorobenzene	U		0.000365	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,3-Dichlorobenzene	U		0.000286	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,4-Dichlorobenzene	U		0.000271	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Dichlorodifluoromethane	U		0.000853	0.00500	0.00598	1	10/31/2017 12:23	WG1036732
1,1-Dichloroethane	U		0.000238	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,2-Dichloroethane	U		0.000317	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,1-Dichloroethene	U		0.000363	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
cis-1,2-Dichloroethene	U		0.000281	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
trans-1,2-Dichloroethene	U		0.000316	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,2-Dichloropropane	U		0.000429	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,1-Dichloropropene	U		0.000379	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,3-Dichloropropane	U		0.000248	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
cis-1,3-Dichloropropene	U		0.000314	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
trans-1,3-Dichloropropene	U		0.000320	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
2,2-Dichloropropane	U		0.000334	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Di-isopropyl ether	U		0.000297	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Ethylbenzene	U		0.000355	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Hexachloro-1,3-butadiene	U	J4	0.000409	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Isopropylbenzene	U		0.000291	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
p-Isopropyltoluene	U		0.000244	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
2-Butanone (MEK)	U		0.00560	0.0100	0.0120	1	10/31/2017 12:23	WG1036732
Methylene Chloride	U		0.00120	0.00500	0.00598	1	10/31/2017 12:23	WG1036732
4-Methyl-2-pentanone (MIBK)	U		0.00225	0.0100	0.0120	1	10/31/2017 12:23	WG1036732
Methyl tert-butyl ether	U		0.000254	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Naphthalene	U		0.00120	0.00500	0.00598	1	10/31/2017 12:23	WG1036732
n-Propylbenzene	U		0.000247	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Styrene	U		0.000280	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,1,1,2-Tetrachloroethane	U		0.000316	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,1,2,2-Tetrachloroethane	U		0.000437	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,1,2-Trichlorotrifluoroethane	U		0.000437	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Tetrachloroethene	U		0.000330	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Toluene	U		0.000519	0.00500	0.00598	1	10/31/2017 12:23	WG1036732
1,2,3-Trichlorobenzene	U		0.000366	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,2,4-Trichlorobenzene	U		0.000464	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,1,1-Trichloroethane	U		0.000342	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,1,2-Trichloroethane	U		0.000332	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Trichloroethene	U		0.000334	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Trichlorofluoromethane	U		0.000457	0.00500	0.00598	1	10/31/2017 12:23	WG1036732
1,2,3-Trichloropropane	U		0.000887	0.00250	0.00299	1	10/31/2017 12:23	WG1036732
1,2,4-Trimethylbenzene	U		0.000253	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,2,3-Trimethylbenzene	U		0.000344	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Vinyl chloride	U		0.000348	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
1,3,5-Trimethylbenzene	U		0.000318	0.00100	0.00120	1	10/31/2017 12:23	WG1036732
Xylenes, Total	U		0.000835	0.00300	0.00359	1	10/31/2017 12:23	WG1036732
(S) Toluene-d8	*92.6*				*80.0-120*		*10/31/2017 12:23*	WG1036732
(S) Dibromofluoromethane	*111*				*74.0-131*		*10/31/2017 12:23*	WG1036732
(S) 4-Bromofluorobenzene	*97.2*				*64.0-132*		*10/31/2017 12:23*	WG1036732

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	3.11	J	1.60	4.00	4.79	1	10/31/2017 10:14	WG1036831
Residual Range Organics (RRO)	7.84	J	3.99	10.0	12.0	1	10/31/2017 10:14	WG1036831

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) o-Terphenyl	*86.0*				*18.0-148*		*10/31/2017 10:14*	WG1036831

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.0		1	10/31/2017 08:19	WG1037200

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0149	J	0.00292	0.0200	0.0208	1	10/31/2017 08:31	WG1036762

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	10.1		0.677	2.00	2.08	1	10/31/2017 10:22	WG1036378
Barium	61.0		0.177	0.500	0.521	1	10/31/2017 10:22	WG1036378
Cadmium	0.129	J	0.0729	0.500	0.521	1	10/31/2017 10:22	WG1036378
Chromium	21.5		0.146	1.00	1.04	1	10/31/2017 10:22	WG1036378
Lead	26.6		0.198	0.500	0.521	1	10/31/2017 10:22	WG1036378
Selenium	U		0.771	2.00	2.08	1	10/31/2017 10:22	WG1036378
Silver	U		0.292	1.00	1.04	1	10/31/2017 10:22	WG1036378

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	0.0486	J	0.0353	0.100	0.104	1	10/29/2017 19:44	WG1036707
(S) a,a,a-Trifluorotoluene(FID)	*96.6*				*77.0-120*		*10/29/2017 19:44*	WG1036707

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0104	0.0500	0.0521	1	10/31/2017 12:43	WG1036732
Acrylonitrile	U		0.00186	0.0100	0.0104	1	10/31/2017 12:43	WG1036732
Benzene	0.000376	J	0.000281	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Bromobenzene	U		0.000296	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Bromodichloromethane	U		0.000265	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Bromoform	U		0.000442	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Bromomethane	U		0.00140	0.00500	0.00521	1	10/31/2017 12:43	WG1036732
n-Butylbenzene	U		0.000269	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
sec-Butylbenzene	U		0.000209	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
tert-Butylbenzene	U		0.000215	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Carbon tetrachloride	U		0.000342	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Chlorobenzene	U		0.000221	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Chlorodibromomethane	U		0.000388	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Chloroethane	U		0.000985	0.00500	0.00521	1	10/31/2017 12:43	WG1036732
Chloroform	U		0.000239	0.00500	0.00521	1	10/31/2017 12:43	WG1036732
Chloromethane	U		0.000391	0.00250	0.00260	1	10/31/2017 12:43	WG1036732
2-Chlorotoluene	U		0.000313	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
4-Chlorotoluene	U		0.000250	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,2-Dibromo-3-Chloropropane	U		0.00109	0.00500	0.00521	1	10/31/2017 12:43	WG1036732
1,2-Dibromoethane	U		0.000357	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Dibromomethane	U		0.000398	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,2-Dichlorobenzene	U		0.000318	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,3-Dichlorobenzene	U		0.000249	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,4-Dichlorobenzene	U		0.000235	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Dichlorodifluoromethane	U		0.000743	0.00500	0.00521	1	10/31/2017 12:43	WG1036732
1,1-Dichloroethane	U		0.000207	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,2-Dichloroethane	U		0.000276	0.00100	0.00104	1	10/31/2017 12:43	WG1036732

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000316	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
cis-1,2-Dichloroethene	U		0.000245	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
trans-1,2-Dichloroethene	U		0.000275	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,2-Dichloropropane	U		0.000373	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,1-Dichloropropene	U		0.000330	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,3-Dichloropropane	U		0.000216	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
cis-1,3-Dichloropropene	U		0.000273	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
trans-1,3-Dichloropropene	U		0.000278	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
2,2-Dichloropropane	U		0.000291	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Di-isopropyl ether	U		0.000258	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Ethylbenzene	U		0.000309	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Hexachloro-1,3-butadiene	U	J4	0.000356	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Isopropylbenzene	U		0.000253	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
p-Isopropyltoluene	U		0.000212	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
2-Butanone (MEK)	U		0.00487	0.0100	0.0104	1	10/31/2017 12:43	WG1036732
Methylene Chloride	U		0.00104	0.00500	0.00521	1	10/31/2017 12:43	WG1036732
4-Methyl-2-pentanone (MIBK)	U		0.00196	0.0100	0.0104	1	10/31/2017 12:43	WG1036732
Methyl tert-butyl ether	U		0.000221	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Naphthalene	U		0.00104	0.00500	0.00521	1	10/31/2017 12:43	WG1036732
n-Propylbenzene	U		0.000215	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Styrene	U		0.000244	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,1,1,2-Tetrachloroethane	U		0.000275	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,1,2,2-Tetrachloroethane	U		0.000380	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,1,2-Trichlorotrifluoroethane	U		0.000380	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Tetrachloroethene	U		0.000287	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Toluene	U		0.000452	0.00500	0.00521	1	10/31/2017 12:43	WG1036732
1,2,3-Trichlorobenzene	U		0.000319	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,2,4-Trichlorobenzene	U		0.000404	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,1,1-Trichloroethane	U		0.000298	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,1,2-Trichloroethane	U		0.000288	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Trichloroethene	U		0.000291	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Trichlorofluoromethane	U		0.000398	0.00500	0.00521	1	10/31/2017 12:43	WG1036732
1,2,3-Trichloropropane	U		0.000772	0.00250	0.00260	1	10/31/2017 12:43	WG1036732
1,2,4-Trimethylbenzene	U		0.000220	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,2,3-Trimethylbenzene	U		0.000299	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Vinyl chloride	U		0.000303	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
1,3,5-Trimethylbenzene	U		0.000277	0.00100	0.00104	1	10/31/2017 12:43	WG1036732
Xylenes, Total	U		0.000727	0.00300	0.00312	1	10/31/2017 12:43	WG1036732
(S) Toluene-d8	*94.3*				*80.0-120*		*10/31/2017 12:43*	WG1036732
(S) Dibromofluoromethane	*109*				*74.0-131*		*10/31/2017 12:43*	WG1036732
(S) 4-Bromofluorobenzene	*93.2*				*64.0-132*		*10/31/2017 12:43*	WG1036732

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	109		13.9	4.00	41.7	10	10/30/2017 14:58	WG1036831
Residual Range Organics (RRO)	1430		34.7	10.0	104	10	10/30/2017 14:58	WG1036831
(S) o-Terphenyl	*106*				*18.0-148*		*10/30/2017 14:58*	WG1036831

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	91.7		1	10/31/2017 08:19	WG1037200

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0295		0.00305	0.0200	0.0218	1	10/31/2017 08:34	WG1036762

Metals (ICP) by Method 6010C

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	3.93		0.709	2.00	2.18	1	10/31/2017 10:25	WG1036378
Barium	68.8		0.185	0.500	0.545	1	10/31/2017 10:25	WG1036378
Cadmium	0.115	J	0.0764	0.500	0.545	1	10/31/2017 10:25	WG1036378
Chromium	21.2		0.153	1.00	1.09	1	10/31/2017 10:25	WG1036378
Lead	10.5		0.207	0.500	0.545	1	10/31/2017 10:25	WG1036378
Selenium	U		0.807	2.00	2.18	1	10/31/2017 10:25	WG1036378
Silver	U		0.305	1.00	1.09	1	10/31/2017 10:25	WG1036378

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	0.0385	J	0.0370	0.100	0.109	1	10/29/2017 20:07	WG1036707
(S) a,a,a-Trifluorotoluene(FID)	*96.8*				*77.0-120*		*10/29/2017 20:07*	WG1036707

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	0.0175	J	0.0109	0.0500	0.0545	1	10/31/2017 13:03	WG1036732
Acrylonitrile	U		0.00195	0.0100	0.0109	1	10/31/2017 13:03	WG1036732
Benzene	U		0.000295	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Bromobenzene	U		0.000310	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Bromodichloromethane	U		0.000277	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Bromoform	U		0.000463	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Bromomethane	U		0.00146	0.00500	0.00545	1	10/31/2017 13:03	WG1036732
n-Butylbenzene	U		0.000281	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
sec-Butylbenzene	U		0.000219	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
tert-Butylbenzene	U		0.000225	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Carbon tetrachloride	U		0.000358	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Chlorobenzene	U		0.000231	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Chlorodibromomethane	U		0.000407	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Chloroethane	U		0.00103	0.00500	0.00545	1	10/31/2017 13:03	WG1036732
Chloroform	U		0.000250	0.00500	0.00545	1	10/31/2017 13:03	WG1036732
Chloromethane	U		0.000409	0.00250	0.00273	1	10/31/2017 13:03	WG1036732
2-Chlorotoluene	U		0.000328	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
4-Chlorotoluene	U		0.000262	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,2-Dibromo-3-Chloropropane	U		0.00115	0.00500	0.00545	1	10/31/2017 13:03	WG1036732
1,2-Dibromoethane	U		0.000374	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Dibromomethane	U		0.000417	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,2-Dichlorobenzene	U		0.000333	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,3-Dichlorobenzene	U		0.000261	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,4-Dichlorobenzene	U		0.000247	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Dichlorodifluoromethane	U		0.000778	0.00500	0.00545	1	10/31/2017 13:03	WG1036732
1,1-Dichloroethane	U		0.000217	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,2-Dichloroethane	U		0.000289	0.00100	0.00109	1	10/31/2017 13:03	WG1036732

SB-9 (1-2)

Collected date/time: 10/27/17 08:50

SAMPLE RESULTS - 03

L947070

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000331	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
cis-1,2-Dichloroethene	U		0.000256	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
trans-1,2-Dichloroethene	U		0.000288	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,2-Dichloropropane	U		0.000391	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,1-Dichloropropene	U		0.000346	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,3-Dichloropropane	U		0.000226	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
cis-1,3-Dichloropropene	U		0.000286	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
trans-1,3-Dichloropropene	U		0.000291	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
2,2-Dichloropropane	U		0.000304	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Di-isopropyl ether	U		0.000271	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Ethylbenzene	U		0.000324	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Hexachloro-1,3-butadiene	U	J4	0.000373	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Isopropylbenzene	U		0.000265	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
p-Isopropyltoluene	U		0.000223	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
2-Butanone (MEK)	U		0.00511	0.0100	0.0109	1	10/31/2017 13:03	WG1036732
Methylene Chloride	U		0.00109	0.00500	0.00545	1	10/31/2017 13:03	WG1036732
4-Methyl-2-pentanone (MIBK)	U		0.00205	0.0100	0.0109	1	10/31/2017 13:03	WG1036732
Methyl tert-butyl ether	U		0.000231	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Naphthalene	U		0.00109	0.00500	0.00545	1	10/31/2017 13:03	WG1036732
n-Propylbenzene	U		0.000225	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Styrene	U		0.000255	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,1,1,2-Tetrachloroethane	U		0.000288	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,1,2,2-Tetrachloroethane	U		0.000398	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,1,2-Trichlorotrifluoroethane	U		0.000398	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Tetrachloroethene	U		0.000301	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Toluene	U		0.000473	0.00500	0.00545	1	10/31/2017 13:03	WG1036732
1,2,3-Trichlorobenzene	U		0.000334	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,2,4-Trichlorobenzene	U		0.000423	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,1,1-Trichloroethane	U		0.000312	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,1,2-Trichloroethane	U		0.000302	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Trichloroethene	U		0.000304	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Trichlorofluoromethane	U		0.000417	0.00500	0.00545	1	10/31/2017 13:03	WG1036732
1,2,3-Trichloropropane	U		0.000808	0.00250	0.00273	1	10/31/2017 13:03	WG1036732
1,2,4-Trimethylbenzene	U		0.000230	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,2,3-Trimethylbenzene	U		0.000313	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Vinyl chloride	U		0.000317	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
1,3,5-Trimethylbenzene	U		0.000290	0.00100	0.00109	1	10/31/2017 13:03	WG1036732
Xylenes, Total	U		0.000762	0.00300	0.00327	1	10/31/2017 13:03	WG1036732
(S) Toluene-d8	*93.7*				*80.0-120*		*10/31/2017 13:03*	WG1036732
(S) Dibromofluoromethane	*113*				*74.0-131*		*10/31/2017 13:03*	WG1036732
(S) 4-Bromofluorobenzene	*95.0*				*64.0-132*		*10/31/2017 13:03*	WG1036732

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	3.09	J	1.45	4.00	4.36	1	10/31/2017 10:28	WG1036831
Residual Range Organics (RRO)	10.2	J	3.64	10.0	10.9	1	10/31/2017 10:28	WG1036831
(S) o-Terphenyl	*82.1*				*18.0-148*		*10/31/2017 10:28*	WG1036831

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.1		1	10/31/2017 08:19	WG1037200

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0277		0.00301	0.0200	0.0215	1	10/31/2017 08:36	WG1036762

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	9.16		0.698	2.00	2.15	1	10/31/2017 10:28	WG1036378
Barium	59.1		0.183	0.500	0.537	1	10/31/2017 10:28	WG1036378
Cadmium	0.150	J	0.0752	0.500	0.537	1	10/31/2017 10:28	WG1036378
Chromium	26.0		0.150	1.00	1.07	1	10/31/2017 10:28	WG1036378
Lead	64.6		0.204	0.500	0.537	1	10/31/2017 10:28	WG1036378
Selenium	U		0.795	2.00	2.15	1	10/31/2017 10:28	WG1036378
Silver	U		0.301	1.00	1.07	1	10/31/2017 10:28	WG1036378

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.56	J	1.27	0.100	3.73	34.75	10/31/2017 00:36	WG1036707
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*10/31/2017 00:36*	WG1036707

Sample Narrative:

L947070-04 WG1036707: No stir bars remain for analysis.

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.373	0.0500	1.87	34.75	10/31/2017 13:23	WG1036732
Acrylonitrile	U		0.0668	0.0100	0.373	34.75	10/31/2017 13:23	WG1036732
Benzene	U		0.0101	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Bromobenzene	U		0.0106	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Bromodichloromethane	U		0.00948	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Bromoform	U		0.0158	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Bromomethane	U		0.0500	0.00500	0.187	34.75	10/31/2017 13:23	WG1036732
n-Butylbenzene	U		0.00963	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
sec-Butylbenzene	U		0.00751	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
tert-Butylbenzene	U		0.00769	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Carbon tetrachloride	U		0.0122	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Chlorobenzene	U		0.00792	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Chlorodibromomethane	U		0.0139	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Chloroethane	U		0.0353	0.00500	0.187	34.75	10/31/2017 13:23	WG1036732
Chloroform	U		0.00855	0.00500	0.187	34.75	10/31/2017 13:23	WG1036732
Chloromethane	U		0.0140	0.00250	0.0934	34.75	10/31/2017 13:23	WG1036732
2-Chlorotoluene	U		0.0112	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
4-Chlorotoluene	U		0.00896	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,2-Dibromo-3-Chloropropane	U		0.0392	0.00500	0.187	34.75	10/31/2017 13:23	WG1036732
1,2-Dibromoethane	U		0.0128	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Dibromomethane	U		0.0143	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,2-Dichlorobenzene	U		0.0114	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,3-Dichlorobenzene	U		0.00892	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,4-Dichlorobenzene	U		0.00844	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732

SB-12 (1-2)
Collected date/time: 10/27/17 09:10

SAMPLE RESULTS - 04

L947070

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Dichlorodifluoromethane	U		0.0266	0.00500	0.187	34.75	10/31/2017 13:23	WG1036732
1,1-Dichloroethane	U		0.00743	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,2-Dichloroethane	U		0.00990	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,1-Dichloroethene	U		0.0113	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
cis-1,2-Dichloroethene	U		0.00878	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
trans-1,2-Dichloroethene	U		0.00986	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,2-Dichloropropane	U		0.0134	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,1-Dichloropropene	U		0.0118	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,3-Dichloropropane	U		0.00773	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
cis-1,3-Dichloropropene	U		0.00978	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
trans-1,3-Dichloropropene	U		0.00997	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
2,2-Dichloropropane	U		0.0104	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Di-isopropyl ether	U		0.00926	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Ethylbenzene	U		0.0111	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Hexachloro-1,3-butadiene	U	J4	0.0128	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Isopropylbenzene	U		0.00907	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
p-Isopropyltoluene	U		0.00762	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
2-Butanone (MEK)	U		0.175	0.0100	0.373	34.75	10/31/2017 13:23	WG1036732
Methylene Chloride	U		0.0373	0.00500	0.187	34.75	10/31/2017 13:23	WG1036732
4-Methyl-2-pentanone (MIBK)	U		0.0702	0.0100	0.373	34.75	10/31/2017 13:23	WG1036732
Methyl tert-butyl ether	U		0.00792	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Naphthalene	U		0.0373	0.00500	0.187	34.75	10/31/2017 13:23	WG1036732
n-Propylbenzene	U		0.00769	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Styrene	U		0.00874	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,1,1,2-Tetrachloroethane	U		0.00986	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,1,2,2-Tetrachloroethane	U		0.0136	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,1,2-Trichlorotrifluoroethane	U		0.0136	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Tetrachloroethene	U		0.0103	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Toluene	U		0.0162	0.00500	0.187	34.75	10/31/2017 13:23	WG1036732
1,2,3-Trichlorobenzene	U		0.0114	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,2,4-Trichlorobenzene	U		0.0145	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,1,1-Trichloroethane	U		0.0107	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,1,2-Trichloroethane	U		0.0103	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Trichloroethene	U		0.0104	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Trichlorofluoromethane	U		0.0143	0.00500	0.187	34.75	10/31/2017 13:23	WG1036732
1,2,3-Trichloropropane	U		0.0277	0.00250	0.0934	34.75	10/31/2017 13:23	WG1036732
1,2,4-Trimethylbenzene	U		0.00788	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,2,3-Trimethylbenzene	U		0.0107	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Vinyl chloride	U		0.0109	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
1,3,5-Trimethylbenzene	U		0.00993	0.00100	0.0373	34.75	10/31/2017 13:23	WG1036732
Xylenes, Total	U		0.0261	0.00300	0.112	34.75	10/31/2017 13:23	WG1036732
(S) Toluene-d8	*104*				*80.0-120*		*10/31/2017 13:23*	WG1036732
(S) Dibromofluoromethane	*97.7*				*74.0-131*		*10/31/2017 13:23*	WG1036732
(S) 4-Bromofluorobenzene	*98.6*				*64.0-132*		*10/31/2017 13:23*	WG1036732

Sample Narrative:

L947070-04 WG1036732: Lowest possible dilution. No stir bars remain for analysis.

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	42.9	J	14.3	4.00	43.0	10	10/30/2017 16:00	WG1036831
Residual Range Organics (RRO)	630		35.8	10.0	107	10	10/30/2017 16:00	WG1036831
(S) o-Terphenyl	*91.0*				*18.0-148*		*10/30/2017 16:00*	WG1036831

Sample Narrative:

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	

L947070-04 WG1036831: Dilution due to matrix impact during extract concentration procedure

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

Method Blank (MB)

(MB) R3261855-1 10/31/17 08:19

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.001			

L947070-01 Original Sample (OS) • Duplicate (DUP)

(OS) L947070-01 10/31/17 08:19 • (DUP) R3261855-3 10/31/17 08:19

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	83.5	86.4	1	3		5

Laboratory Control Sample (LCS)

(LCS) R3261855-2 10/31/17 08:19

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85-115	

L947070-01 Original Sample (OS) • Duplicate (DUP)

(OS) L947070-01 10/31/17 14:35 • (DUP) R3261913-4 10/31/17 14:35

Analyte	Original Result su	DUP Result su	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
pH	6.68	6.69	1	0.150		1

Sample Narrative:

OS: 6.68 at 17.2C

DUP: 6.69 at 17.2C

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

(LCS) R3261913-1 10/31/17 14:35 • (LCSD) R3261913-2 10/31/17 14:35

Analyte	Spike Amount su	LCS Result su	LCSD Result su	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
pH	5.96	6.02	6.02	101	101	98.3-102			0.000	1

Sample Narrative:

LCS: 6.02 at 18.6C

LCSD: 6.02 at 18.6C

WG1036762

Mercury by Method 7471A

QUALITY CONTROL SUMMARY

L947070-01,02,03,04

Method Blank (MB)

(MB) R3261787-1 10/31/17 07:59

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Mercury	U		0.0028	0.0200

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

(LCS) R3261787-2 10/31/17 08:01 • (LCSD) R3261787-3 10/31/17 08:03

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Mercury	0.300	0.289	0.294	96	98	80-120			2	20

L946745-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L946745-01 10/31/17 08:05 • (MS) R3261787-4 10/31/17 08:07 • (MSD) R3261787-5 10/31/17 08:09

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Mercury	0.324	0.0244	0.325	0.333	93	95	1	75-125			2	20

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

Method Blank (MB)

(MB) R3261798-1 10/31/17 09:01

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.65	2.00
Barium	U		0.17	0.500
Cadmium	U		0.07	0.500
Chromium	U		0.14	1.00
Lead	U		0.19	0.500
Selenium	U		0.74	2.00
Silver	U		0.28	1.00

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

(LCS) R3261798-2 10/31/17 09:04 • (LCSD) R3261798-3 10/31/17 09:07

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 %
Arsenic	100	99.0	97.8	99	98	80-120			1	20
Barium	100	104	103	104	103	80-120			1	20
Cadmium	100	98.8	97.7	99	98	80-120			1	20
Chromium	100	99.5	98.7	99	99	80-120			1	20
Lead	100	100	99.5	100	100	80-120			1	20
Selenium	100	99.1	98.6	99	99	80-120			0	20
Silver	20.0	18.4	18.3	92	91	80-120			1	20

L945976-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L945976-21 10/31/17 09:10 • (MS) R3261798-6 10/31/17 09:19 • (MSD) R3261798-7 10/31/17 09:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	20.0	118	117	98	96	1	75-125			1	20
Barium	100	117	215	212	97	95	1	75-125			1	20
Cadmium	100	ND	98.4	97.3	98	97	1	75-125			1	20
Chromium	100	14.3	108	108	93	93	1	75-125			0	20
Lead	100	6.41	107	107	101	101	1	75-125			0	20
Selenium	100	ND	97.0	96.9	97	97	1	75-125			0	20
Silver	20.0	ND	18.6	18.2	93	91	1	75-125			2	20

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

Method Blank (MB)

(MB) R3261585-3 10/29/17 18:26

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	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) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3261585-1 10/29/17 17:17 • (LCSD) R3261585-2 10/29/17 17:40

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Gasoline Range Organics-NWTPH	5.50	5.45	5.40	99.1	98.2	70.0-133			0.840	20
(S) a,a,a-Trifluorotoluene(FID)				*101*	*100*	*77.0-120*				

L946607-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L946607-15 10/30/17 02:47 • (MS) R3261585-4 10/30/17 03:10 • (MSD) R3261585-5 10/30/17 03:34

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Gasoline Range Organics-NWTPH	5.50	0.125	2.58	2.40	44.7	41.3	1	10.0-146			7.52	30
(S) a,a,a-Trifluorotoluene(FID)					*92.0*	*91.1*		*77.0-120*				

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

Method Blank (MB)

(MB) R3261837-3 10/31/17 11:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Isopropylbenzene	U		0.000243	0.00100

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

Method Blank (MB)

(MB) R3261837-3 10/31/17 11:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	*102*			*80.0-120*
(S) Dibromofluoromethane	*102*			*74.0-131*
(S) 4-Bromofluorobenzene	*91.6*			*64.0-132*

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

(LCS) R3261837-1 10/31/17 10:14 • (LCSD) R3261837-2 10/31/17 10:34

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	0.125	0.127	0.135	101	108	11.0-160			6.15	23
Acrylonitrile	0.125	0.119	0.123	95.0	98.5	61.0-143			3.64	20
Benzene	0.0250	0.0265	0.0262	106	105	71.0-124			1.12	20
Bromobenzene	0.0250	0.0253	0.0248	101	99.4	78.0-120			1.70	20
Bromodichloromethane	0.0250	0.0243	0.0245	97.3	97.9	75.0-120			0.600	20

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

(LCS) R3261837-1 10/31/17 10:14 • (LCSD) R3261837-2 10/31/17 10:34

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Bromoform	0.0250	0.0264	0.0272	105	109	65.0-133			3.17	20
Bromomethane	0.0250	0.0310	0.0308	124	123	26.0-160			0.540	20
n-Butylbenzene	0.0250	0.0311	0.0302	124	121	73.0-126			2.98	20
sec-Butylbenzene	0.0250	0.0290	0.0288	116	115	75.0-121			0.920	20
tert-Butylbenzene	0.0250	0.0271	0.0272	108	109	74.0-122			0.430	20
Carbon tetrachloride	0.0250	0.0258	0.0254	103	102	66.0-123			1.56	20
Chlorobenzene	0.0250	0.0269	0.0266	108	106	79.0-121			1.04	20
Chlorodibromomethane	0.0250	0.0261	0.0269	104	108	74.0-128			2.93	20
Chloroethane	0.0250	0.0277	0.0274	111	110	51.0-147			0.870	20
Chloroform	0.0250	0.0259	0.0255	104	102	73.0-123			1.52	20
Chloromethane	0.0250	0.0304	0.0299	122	119	51.0-138			1.81	20
2-Chlorotoluene	0.0250	0.0268	0.0264	107	105	72.0-124			1.64	20
4-Chlorotoluene	0.0250	0.0261	0.0255	104	102	78.0-120			2.12	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0243	0.0250	97.1	100	65.0-126			3.00	20
1,2-Dibromoethane	0.0250	0.0238	0.0242	95.1	96.7	78.0-122			1.62	20
Dibromomethane	0.0250	0.0237	0.0246	94.9	98.5	79.0-120			3.67	20
1,2-Dichlorobenzene	0.0250	0.0268	0.0264	107	106	80.0-120			1.42	20
1,3-Dichlorobenzene	0.0250	0.0268	0.0262	107	105	72.0-123			2.30	20
1,4-Dichlorobenzene	0.0250	0.0275	0.0267	110	107	77.0-120			2.72	20
Dichlorodifluoromethane	0.0250	0.0284	0.0282	114	113	49.0-155			0.820	20
1,1-Dichloroethane	0.0250	0.0276	0.0268	110	107	70.0-128			2.81	20
1,2-Dichloroethane	0.0250	0.0239	0.0241	95.7	96.5	69.0-128			0.790	20
1,1-Dichloroethene	0.0250	0.0262	0.0261	105	104	63.0-131			0.370	20
cis-1,2-Dichloroethene	0.0250	0.0257	0.0257	103	103	74.0-123			0.120	20
trans-1,2-Dichloroethene	0.0250	0.0256	0.0255	102	102	72.0-122			0.370	20
1,2-Dichloropropane	0.0250	0.0280	0.0279	112	112	75.0-126			0.0600	20
1,1-Dichloropropene	0.0250	0.0262	0.0262	105	105	72.0-130			0.160	20
1,3-Dichloropropane	0.0250	0.0246	0.0252	98.5	101	80.0-121			2.43	20
cis-1,3-Dichloropropene	0.0250	0.0270	0.0267	108	107	80.0-125			1.01	20
trans-1,3-Dichloropropene	0.0250	0.0256	0.0256	102	102	75.0-129			0.0500	20
2,2-Dichloropropane	0.0250	0.0284	0.0280	114	112	60.0-129			1.41	20
Di-isopropyl ether	0.0250	0.0291	0.0279	116	112	62.0-133			4.34	20
Ethylbenzene	0.0250	0.0267	0.0263	107	105	77.0-120			1.72	20
Hexachloro-1,3-butadiene	0.0250	0.0347	0.0336	139	135	68.0-128	J4	J4	3.16	20
Isopropylbenzene	0.0250	0.0265	0.0262	106	105	75.0-120			0.900	20
p-Isopropyltoluene	0.0250	0.0306	0.0299	122	120	74.0-125			2.21	20
2-Butanone (MEK)	0.125	0.129	0.139	103	111	37.0-159			7.69	20
Methylene Chloride	0.0250	0.0260	0.0255	104	102	67.0-123			1.90	20
4-Methyl-2-pentanone (MIBK)	0.125	0.128	0.137	102	110	60.0-144			6.84	20
Methyl tert-butyl ether	0.0250	0.0251	0.0244	100	97.6	66.0-125			2.71	20

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

(LCS) R3261837-1 10/31/17 10:14 • (LCSD) R3261837-2 10/31/17 10:34

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 %
Naphthalene	0.0250	0.0231	0.0241	92.4	96.5	64.0-125			4.29	20
n-Propylbenzene	0.0250	0.0292	0.0288	117	115	78.0-120			1.34	20
Styrene	0.0250	0.0269	0.0265	108	106	78.0-124			1.28	20
1,1,1,2-Tetrachloroethane	0.0250	0.0257	0.0257	103	103	74.0-124			0.270	20
1,1,2,2-Tetrachloroethane	0.0250	0.0247	0.0261	98.8	104	73.0-120			5.37	20
Tetrachloroethene	0.0250	0.0268	0.0268	107	107	70.0-127			0.110	20
Toluene	0.0250	0.0249	0.0248	99.7	99.1	77.0-120			0.580	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0276	0.0273	110	109	64.0-135			1.03	20
1,2,3-Trichlorobenzene	0.0250	0.0262	0.0264	105	106	68.0-126			0.990	20
1,2,4-Trichlorobenzene	0.0250	0.0273	0.0268	109	107	70.0-127			2.12	20
1,1,1-Trichloroethane	0.0250	0.0259	0.0259	103	104	69.0-125			0.260	20
1,1,2-Trichloroethane	0.0250	0.0242	0.0247	96.6	98.7	78.0-120			2.18	20
Trichloroethene	0.0250	0.0258	0.0258	103	103	79.0-120			0.110	20
Trichlorofluoromethane	0.0250	0.0280	0.0281	112	112	59.0-136			0.350	20
1,2,3-Trichloropropane	0.0250	0.0252	0.0259	101	103	73.0-124			2.70	20
1,2,3-Trimethylbenzene	0.0250	0.0247	0.0243	98.8	97.0	76.0-120			1.83	20
1,2,4-Trimethylbenzene	0.0250	0.0270	0.0265	108	106	75.0-120			2.00	20
1,3,5-Trimethylbenzene	0.0250	0.0271	0.0268	109	107	75.0-120			1.21	20
Vinyl chloride	0.0250	0.0283	0.0284	113	114	63.0-134			0.370	20
Xylenes, Total	0.0750	0.0803	0.0791	107	105	77.0-120			1.51	20
(S) Toluene-d8				*99.9*	*99.1*	*80.0-120*				
(S) Dibromofluoromethane				*103*	*102*	*74.0-131*				
(S) 4-Bromofluorobenzene				*92.9*	*94.0*	*64.0-132*				

Method Blank (MB)

(MB) R3261633-1 10/30/17 12:17

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	*65.8*			*18.0-148*

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

(LCS) R3261633-2 10/30/17 12:31 • (LCSD) R3261633-3 10/30/17 12:45

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 %
Diesel Range Organics (DRO)	30.0	23.9	24.5	79.6	81.8	50.0-150			2.74	20
Residual Range Organics (RRO)	30.0	23.2	24.1	77.3	80.5	50.0-150			4.08	20
(S) o-Terphenyl				*67.3*	*67.6*	*18.0-148*				

L945596-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L945596-07 10/30/17 13:43 • (MS) R3261633-4 10/30/17 13:57 • (MSD) R3261633-5 10/30/17 14:12

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)	61.2	6.18	40.9	43.9	56.8	61.6	1	50.0-150			6.93	20
Residual Range Organics (RRO)	61.2	41.4	72.8	85.1	51.3	71.4	1	50.0-150			15.5	20
(S) o-Terphenyl					*66.4*	*64.6*		*18.0-148*				

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

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.

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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, 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.
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.
J4	The associated batch QC was outside the established quality control range for accuracy.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

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

ESC Lab Sciences 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.

State Accreditations

Alabama	40660
Alaska	UST-080
Arizona	AZ0612
Arkansas	88-0469
California	01157CA
Colorado	TN00003
Conneticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1]	90010
Kentucky [2]	16
Louisiana	AI30792
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico	TN00003
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [2]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	221
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T 104704245-07-TX
Texas [5]	LAB0152
Utah	6157585858
Vermont	VT2006
Virginia	109
Washington	C1915
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

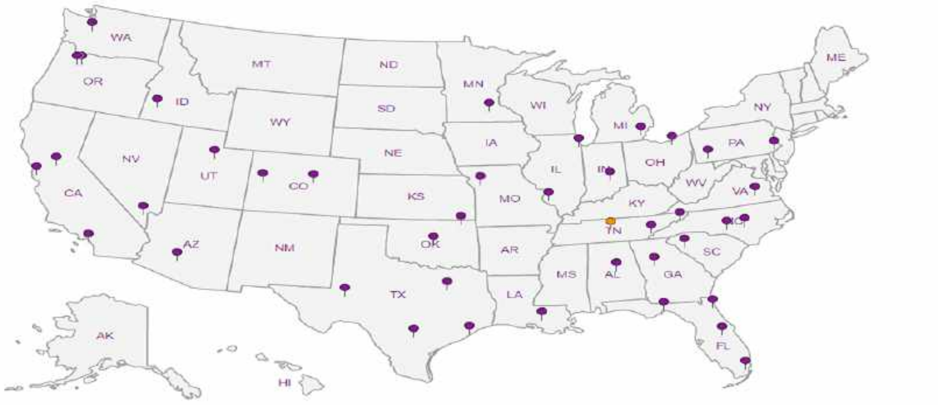
Third Party & Federal Accreditations

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

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

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address:

TGE RESOURCES

8040 Northcourt Rd.
Houston, TX 77040

Billing Information:

Accounts Payable
8040 Northcourt Rd.
Houston, TX 77040

Chain of Custody Page 1 of 1

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

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

L# L947070

H240

Acctnum: **TGERESHTX**
Template:
Prelogin:
TSR:
Cooler:
Shipped Via: **HTX Delivery**

Report to: Kristi Barnette

Email To: kristib@tgeresources.com

Project Description: Future Star Lake Hospital

City/State Collected: Federal Way, WA

Phone: **713-744-5812**
Fax:

Client Project #: R13411.04

Lab Project #: TGERESHTX-R13411

Collected by (print): Evan Sitler

Site/Facility ID #: 29805 Pacific Hwy S

P.O. #: 7759

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
✓ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 10/30/17

Email? ___ No ✓ Yes
FAX? ___ No ___ Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPH DRO, RRO	TS	NWTPH GRO	V8260	MRCRA 8	PH	Hold	TCLP	HOLD	Always QCTX-S, EDD	Rem./Contaminant	Sample # (lab only)
SB-11 (9-10)	Grab	SS	9-10'	10/27/17	0940	6	✓	✓	✓	✓	✓		✓		✓			~~-01~~
SB-7 (1-2)	Grab	SS	1-2	10/27/17	0815	6	✓	✓	✓	✓	✓	✓						-01 ~~-02~~
SB-7 (5-6)	Grab	SS	5-6	10/27/17	0820	6	✓	✓	✓	✓	✓		✓		✓			~~-03~~
SB-8 (0-1)	Grab	SS	0-1	10/27/17	0830	6	✓	✓	✓	✓	✓							-02 ~~-04~~
SB-8 (5-6)	Grab	SS	5-6	10/27/17	0840	6	✓	✓	✓	✓	✓		✓		✓			~~-05~~
SB-9 (1-2)	Grab	SS	1-2	10/27/17	0850	6	✓	✓	✓	✓	✓							-03 ~~-06~~
SB-9 (5-6)	Grab	SS	5-6	10/27/17	0900	6	✗	✓	✓	✓	✓		✓		✓			~~-07~~
IDW	Comp	SS	—	10/27/17	1000	[illegible]	○	✓	✓				✓	✓	✓			~~-08/09~~
SB-12 (1-2)	Grab	SS	1-2	10/27/17	0910	5	✓	✓	✓	✓	✓						-04	~~-09~~ ~~-10~~
SB-12 (5-6)	Grab	SS	5-6	10/27/17	0920	5	✓	✓	✓	✓	✓		✓		✓			~~-10~~ ~~-11~~

Don't run

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other ______

Remarks: 7474 0933 2558

pH ✓ Temp ______
Flow ______ Other ______

Hold # 10-168

Relinquished by: (Signature)	Date: 10/27/17	Time: 1200	Received by: (Signature)	Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ ______	Condition: (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1-3 °C Bottles Received: 53	COC Seal Intact: ✓ Y ___ N ___ NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) Jamie Royal 836	Date: 10-28-17 Time: 8:45	pH Checked: NCF:

ESC LAB SCIENCES

Cooler Receipt Form

Client: TGERESHTX

SDG# L947070

Cooler Received/Opened On: 10/28/17

Temperature: 1.3

Received By: Jennifer Royal

Signature: Jennifer Royal

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?		✓	
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			

ANALYTICAL REPORT

November 02, 2017

TGE Resources

Sample Delivery Group:	L947689
Samples Received:	10/27/2017
Project Number:	R13411.04
Description:	Future Star Lake Hospital
Site:	29805 PACIFIC HWY
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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	Collected by	Collected date/time	Received date/time
SB-11 3-4 L947689-01 Solid	Evan Sitler	10/26/17 15:30	10/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1037198	1	10/31/17 08:23	10/31/17 08:32	KDW
Metals (ICPMS) by Method 6020A	WG1038207	5	11/02/17 08:56	11/02/17 11:26	JPD

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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.

Mark W. Beasley
Technical Service Representative

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

   a. Items consistent with NELAC Chapter 5,
   b. dilution factors,
   c. preparation methods,
   d. cleanup methods, and
   e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

   a. Calculated recovery (%R), and
   b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

   a. LCS spiking amounts,
   b. Calculated %R for each analyte, and
   c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

   a. Samples associated with the MS/MSD clearly identified,
   b. MS/MSD spiking amounts,
   c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
   d. Calculated %Rs and relative percent differences (RPDs), and
   e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

   a. The amount of analyte measured in the duplicate,
   b. The calculated RPD, and
   c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Technical Service Representative

Laboratory Review Checklist: Reportable Data

Laboratory Name: ESC Lab Sciences	LRC Date: 11/02/2017 13:41
Project Name: Future Star Lake Hospital	Laboratory Job Number: L947689-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1037198 and WG1038207

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: ESC Lab Sciences	LRC Date: 11/02/2017 13:41
Project Name: Future Star Lake Hospital	Laboratory Job Number: L947689-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1037198 and WG1038207

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: ESC Lab Sciences	LRC Date: 11/02/2017 13:41
Project Name: Future Star Lake Hospital	Laboratory Job Number: L947689-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1037198 and WG1038207

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

SB-11 3-4

Collected date/time: 10/26/17 15:30

SAMPLE RESULTS - 01

L947689

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.4		1	10/31/2017 08:32	WG1037198

Metals (ICPMS) by Method 6020A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.244	J	0.208	0.100	0.547	5	11/02/2017 11:26	WG1038207

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

Method Blank (MB)

(MB) R3261860-1 10/31/17 08:32

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.001			

L946745-01 Original Sample (OS) • Duplicate (DUP)

(OS) L946745-01 10/31/17 08:32 • (DUP) R3261860-3 10/31/17 08:32

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	92.7	91.2	1	2		5

Laboratory Control Sample (LCS)

(LCS) R3261860-2 10/31/17 08:32

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85-115	

Method Blank (MB)

(MB) R3262488-1 11/02/17 11:16

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Selenium	U		0.19	0.500

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

(LCS) R3262488-2 11/02/17 11:19 • (LCSD) R3262488-3 11/02/17 11:23

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 %
Selenium	100	92.3	92.3	92	92	80-120			0	20

L947689-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L947689-01 11/02/17 11:26 • (MS) R3262488-6 11/02/17 11:37 • (MSD) R3262488-7 11/02/17 11:41

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 %
Selenium	21.9	0.244	101	104	92	94	5	75-125			3	20

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

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.

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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, 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.
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.

ACCREDITATIONS & LOCATIONS

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

ESC Lab Sciences 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.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

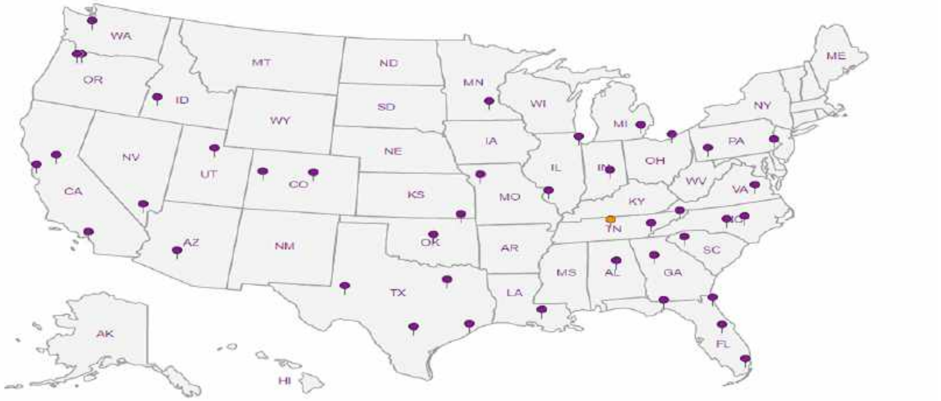
Third Party & Federal Accreditations

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

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

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



Chain of Custody Page 1 of 1

ESC

LAB SCIENCES

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

L# ~~L946745~~ K3 11 F044 947689

TGE Resources
8040 Northcourt Rd.
Houston, TX 77040

Billing Information:
Account Payable
8040 Northcourt Rd.
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette, Evan Sitler**

Email To: kristi.b@tgeresources.com

Project Description: Future Star Lake Hospital

City/State Collected: Federal Way, WA

Phone: **713-744-5800**

Fax:

Client Project # R13411.04

Lab Project # TGERESHTX-R13411

Collected by (print): E. Sitler

Site/Facility ID # 29805 Pacific HWY

P.O. # 7759

Collected by (signature):

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

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y ✓

Acctnum: **TGERESHTX**
Template:
Prelogin:
TSR: **Mark Beasley**
PB:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPH DRO, RRO	TS	NWTPH, GRO	V8260	MRCRA8	HOLD pH	Remarks	Sample # (lab only)
SB-6(3-2)	Grab	SS	1-2'	10/26/17	1445	5	✓	✓	✓	✓	✓			01
SB-6(5-6)	Grab	SS	5-6'	10/26/17	1455	5	✓	✓	✓	✓	✓	✓		
SB-10 (1-2)	Grab	SS	1-2'	10/26/17	1545	6	✓	✓	✓	✓	✓			02
SB-10(5-6)	Grab	SS	5-6'	10/26/17	1555	~~5~~ 6	✓	✓	✓	✓	✓	✓		
SB-11 (3-4)	Grab	SS	3-4'	10/26/17	1530	6	✓	✓	✓	✓	✓		01	05
SB-11 (5-6)	Grab	SS	5-6'	10/26/17	1535	6	✓	✓	✓	✓	✓			04

* 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 # 7474 0933 2547

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

Relinquished by : (Signature)	Date: 10/26/17	Time: 1700	Received by: (Signature)	Trip Blank Received: Yes / [✓ No] HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.5 °C Bottles Received: 33
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) 834	Date: 10-27-17 Time: 0845

If preservation required by Login: Date/Time

10-155

Condition: NCF / [✓ OK]

Matt Shacklock

From:	Mark Beasley
Sent:	Wednesday, November 01, 2017 1:46 PM
To:	Login; Sample Storage; Due Metals
Cc:	Jeremy Gupton
Subject:	L946745-03 *TGERESHTX* rush relog
Importance:	High

Relog L946745-03 for SEG. Transfer TS. Log as R2 due 11/2.

Mark Beasley
National Account Manager

ESC Lab Sciences-a subsidiary of Pace Analytical
12065 Lebanon Road | Mt. Juliet, TN 37122
615.773.9672 | Cell 615.330.1602
mbeasley@esclabsciences.com | www.esclabsciences.com

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ANALYTICAL REPORT

November 06, 2017

TGE Resources

Sample Delivery Group:	L948202
Samples Received:	10/27/2017
Project Number:	R13411.04
Description:	Future Star Lake Hospital
Site:	29805 PACIFIC HWY S
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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SB-7 (1-2) L948202-01 Solid

Collected by	Collected date/time	Received date/time
Evan Sutler	10/27/17 08:15	10/28/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1037200	1	10/31/17 08:10	10/31/17 08:19	KDW
Metals (ICPMS) by Method 6020A	WG1039112	5	11/04/17 08:32	11/05/17 18:56	LAT

SB-11 (5-6) L948202-02 Solid

Collected by	Collected date/time	Received date/time
Evan Sutler	10/26/17 15:35	10/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1037199	1	10/31/17 08:51	10/31/17 09:02	JD
Metals (ICPMS) by Method 6020A	WG1039112	5	11/04/17 08:32	11/05/17 19:00	LAT

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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.

Mark W. Beasley
Technical Service Representative

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Technical Service Representative

Laboratory Review Checklist: Reportable Data

Laboratory Name: ESC Lab Sciences	LRC Date: 11/06/2017 13:59
Project Name: Future Star Lake Hospital	Laboratory Job Number: L948202-01 and 02
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1037200, WG1037199 and WG1039112

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Supporting Data

Laboratory Name: ESC Lab Sciences	LRC Date: 11/06/2017 13:59
Project Name: Future Star Lake Hospital	Laboratory Job Number: L948202-01 and 02
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1037200, WG1037199 and WG1039112

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: ESC Lab Sciences	LRC Date: 11/06/2017 13:59
Project Name: Future Star Lake Hospital	Laboratory Job Number: L948202-01 and 02
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1037200, WG1037199 and WG1039112

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.5		1	10/31/2017 08:19	WG1037200

Metals (ICPMS) by Method 6020A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.416	J	0.228	0.100	0.599	5	11/05/2017 18:56	WG1039112

SB-11 (5-6)

Collected date/time: 10/26/17 15:35

SAMPLE RESULTS - 02

L948202

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	74.6		1	10/31/2017 09:02	WG1037199

Metals (ICPMS) by Method 6020A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.529	J	0.255	0.100	0.670	5	11/05/2017 19:00	WG1039112

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

Method Blank (MB)

(MB) R3261873-1 10/31/17 09:02

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0			

L946769-01 Original Sample (OS) • Duplicate (DUP)

(OS) L946769-01 10/31/17 09:02 • (DUP) R3261873-3 10/31/17 09:02

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	80.4	80.8	1	0		5

Laboratory Control Sample (LCS)

(LCS) R3261873-2 10/31/17 09:02

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85-115	

Method Blank (MB)

(MB) R3261855-1 10/31/17 08:19

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.001			

L947070-01 Original Sample (OS) • Duplicate (DUP)

(OS) L947070-01 10/31/17 08:19 • (DUP) R3261855-3 10/31/17 08:19

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	83.5	86.4	1	3		5

Laboratory Control Sample (LCS)

(LCS) R3261855-2 10/31/17 08:19

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85-115	

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

Method Blank (MB)

(MB) R3263242-1 11/05/17 17:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Selenium	U		0.19	0.500

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

(LCS) R3263242-2 11/05/17 17:45 • (LCSD) R3263242-3 11/05/17 17:52

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 %
Selenium	100	109	115	109	115	80-120			5	20

L947673-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L947673-01 11/05/17 17:55 • (MS) R3263242-6 11/05/17 18:06 • (MSD) R3263242-7 11/05/17 18:09

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Selenium	20.0	0.542	110	124	109	124	5	75-125			12	20

GLOSSARY OF TERMS

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

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.

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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, 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.
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.

ACCREDITATIONS & LOCATIONS

ESC Lab Sciences 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.

State Accreditations

Alabama	40660
Alaska	UST-080
Arizona	AZ0612
Arkansas	88-0469
California	01157CA
Colorado	TN00003
Conneticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1]	90010
Kentucky [2]	16
Louisiana	AI30792
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico	TN00003
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [2]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	221
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T 104704245-07-TX
Texas [5]	LAB0152
Utah	6157585858
Vermont	VT2006
Virginia	109
Washington	C1915
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party & Federal Accreditations

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

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

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**

WA
MT
ND
ME
OR
ID
MN
WI
MI
NY
WY
SD
NV
UT
IA
PA
NE
CO
IL
IN
OH
CA
KS
MO
WV
VA
KY
AZ
NM
OK
AR
TN
NC
SC
MS
AL
GA
TX
LA
AK
FL
HI

Company Name/Address: **TGE RESOURCES** 8040 Northcourt Rd. Houston, TX 77040	Billing Information: **Accounts Payable** 8040 Northcourt Rd. Houston, TX 77040
Report to: Kristi Barnette	Email To: kristib@tgeresources.com

Project Description: Future Star Lake Hospital

City/State Collected: Federal Way, WA

Phone: 713-744-5812

Fax:

Client Project # R13411.04

Lab Project # TGERESHTX-R13411

Collected by (print): Evan Sitler

Site/Facility ID # 29805 Pacific Hwy S

P.O. # 7759

Collected by (signature):

Immediately Packed on Ice N___ Y ✓

Rush? (Lab MUST Be Notified)
✓ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 10/30/17

Email? ___No ✓ Yes

FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

MJ1173

L# ~~1947070~~
H240 94820

Acctnum: **TGERESHTX**
Template:
Prelogin:
TSR:
Cooler:
Shipped Via: **HTX Delivery**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPH DRO, RRO	TS	NWTPH GRO	V8260	MRCRA8	PH	Hold	TCLP	HOLD	Always QCTX-S, EDD	Item/Containment	Sample # (lab only)
SB-11 (9-10)	Grab	SS	9-10'	10/27/17	0940	6	✓	✓	✓	✓	✓		✓		✓			~~-01~~
SB-7 (1-2)	Grab	SS	1-2	10/27/17	0815	6	✓	✓	✓	✓	✓	✓					01	~~-01~~ -02
SB-7 (5-6)	Grab	SS	5-6	10/27/17	0820	6	✓	✓	✓	✓	✓		✓		✓			-03
SB-8 (0-1)	Grab	SS	0-1	10/27/17	0830	6	✓	✓	✓	✓	✓							-52 -04
SB-8 (5-6)	Grab	SS	5-6	10/27/17	0840	6	✓	✓	✓	✓	✓		✓		✓			-05
SB-9 (1-2)	Grab	SS	1-2	10/27/17	0850	6	✓	✓	✓	✓	✓							-53 -06
SB-9 (5-6)	Grab	SS	5-6	10/27/17	0900	6	✗	✓	✓	✓	✓		✓		✓			-07
IDW	Comp	SS	—	10/27/17	1000	6	✗	✓	✓				✓	✓	✓			-08/09
SB-12 (1-2)	Grab	SS	1-2	10/27/17	0910	5	✓	✓	✓	✓	✓						-54	~~-09~~ -10
SB-12 (5-6)	Grab	SS	5-6	10/27/17	0920	5	✓	✓	✓	✓	✓		✓		✓			~~-10~~ -11

Dont run

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other______

pH ✓ Temp______

Remarks: 7474 0933 2558

Flow______ Other______

Hold # 10-168

Relinquished by : (Signature)	Date: 10/27/17	Time: 1200	Received by: (Signature)	Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐____	Condition: (lab use only)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1-3 °C Bottles Received: 53	COC Seal Intact: ✓ Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) 836	Date: 10-28-17 Time: 8:45	pH Checked: NCF:

TGE Resources
8040 Northcourt Rd.
Houston, TX 77040

Billing Information:
Account Payable
8040 Northcourt Rd.
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

ESC LAB SCIENCES

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

Report to: **Kristi Barnette, Evan Sitler**

Email To: kristi.b@tgeresources.com

Project Description: Future Star Lake Hospital

City/State Collected: Federal Way, WA

Phone: **713-744-5800**
Fax:

Client Project #: R13411.04

Lab Project #: TGERESHTX-R13411

L#: L946745

F044

9x77

Acctnum: **TGERESHTX**
Template:
Prelogin:
TSR: **Mark Beasley**
PB:
Shipped Via:

Collected by (print): E. Sitler

Site/Facility ID #: 29805 Pacific HWY

P.O. #: 7759

Quote #:

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

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPH DRO, RRO	TS	NWTPH, GRO	V8260	MRCRA8	HOLD	pH				Remarks	Sample # (lab only)
SB-6 (1-2)	Grab	SS	1-2'	10/26/17	1445	5	✓	✓	✓	✓	✓							-01
SB-6 (5-6)	Grab	SS	5-6'	10/26/17	1455	5	✓	✓	✓	✓	✓	✓						
SB-10 (1-2)	Grab	SS	1-2'	10/26/17	1545	6	✓	✓	✓	✓	✓							02
SB-10 (5-6)	Grab	SS	5-6'	10/26/17	1555	5 6	✓	✓	✓	✓	✓	✓						
SB-11 (3-4)	Grab	SS	3-4'	10/26/17	1530	6	✓	✓	✓	✓	✓							05
SB-11 (5-6)	Grab	SS	5-6'	10/26/17	1535	6	✓	✓	✓	✓	✓						02	04

* 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 # 7474 0933 2547

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

Relinquished by : (Signature)	Date: 10/26/17	Time: 1700	Received by: (Signature)	Trip Blank Received: Yes / [✓ No] HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.5 °C Bottles Received: 33
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) 834	Date: 10-27-17 Time: 0845

If preservation required by Login: Date/Time

10-155

Condition: NCF / [✓ OK]

Matt Shacklock

From: Mark Beasley
Sent: Friday, November 03, 2017 11:16 AM
To: Login; Due Metals
Cc: Jeremy Gupton
Subject: L947070 & L946745 *TGERESHTX* rush relog

Importance: High

Relog L947070-01 and L946745-04 for SEG. Transfer TS results. Log as R2 due 11/6.

Mark Beasley
National Account Manager

ESC Lab Sciences-a subsidiary of Pace Analytical
12065 Lebanon Road | Mt. Juliet, TN 37122
615.773.9672 | Cell 615.330.1602
mbeasley@esclabsciences.com | www.esclabsciences.com

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ANALYTICAL REPORT

November 15, 2017

TGE Resources

Sample Delivery Group:	L949489
Samples Received:	10/26/2017
Project Number:	R13411.04
Description:	Future Star Lake Hospital
Site:	29805 PACIFIC
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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	Collected by	Collected date/time	Received date/time
	Evan Sitler	10/25/17 11:20	10/26/17 08:45

TSB-1 (52-53) L949489-01 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1040945	1	11/09/17 13:39	11/09/17 13:50	JD
Mercury by Method 7471A	WG1041192	1	11/13/17 09:59	11/14/17 08:56	ABL
Metals (ICP) by Method 6010C	WG1041038	1	11/10/17 11:33	11/11/17 12:20	TRB
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1040961	1	10/25/17 11:20	11/09/17 15:34	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1040894	1	10/25/17 11:20	11/09/17 16:13	BMB
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1041930	1	11/13/17 23:15	11/14/17 18:16	ACM

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. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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.

Mark W. Beasley
Technical Service Representative

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Technical Service Representative

Laboratory Review Checklist: Reportable Data

Laboratory Name: ESC Lab Sciences	LRC Date: 11/15/2017 17:22
Project Name: Future Star Lake Hospital	Laboratory Job Number: L949489-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1040961, WG1040894, WG1040945, WG1041038, WG1041192 and WG1041930

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?		X			1
		Other than those results < MQL, were all other raw values bracketed by calibration standards?		X			2
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			3
		Were MS/MSD RPDs within laboratory QC limits?		X			4
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: ESC Lab Sciences	LRC Date: 11/15/2017 17:22
Project Name: Future Star Lake Hospital	Laboratory Job Number: L949489-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1040961, WG1040894, WG1040945, WG1041038, WG1041192 and WG1041930

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			5
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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Laboratory Review Checklist: Exception Reports

Laboratory Name: ESC Lab Sciences	LRC Date: 11/15/2017 17:22
Project Name: Future Star Lake Hospital	Laboratory Job Number: L949489-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1040961, WG1040894, WG1040945, WG1041038, WG1041192 and WG1041930

ER #[1]	**Description**
1	NWTPHDX-NO SGT WG1041930 L949489-01: Prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values. 8260C WG1040894 L949489-01: Prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values. NWTPHGX WG1040961 L949489-01: Prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.
2	WG1040894 R3264514-5 and 6: The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
3	8260C WG1040894 Naphthalene: Percent Recovery is outside of established control limits. NWTPHDX-NO SGT WG1041930 Residual Range Organics (RRO): Percent Recovery is outside of established control limits.
4	NWTPHDX-NO SGT WG1041930 Residual Range Organics (RRO): Relative Percent Difference is outside of established control limits.
5	6010C WG1041038 Barium, Chromium: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.9		1	11/09/2017 13:50	WG1040945

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0167	J	0.00319	0.0200	0.0228	1	11/14/2017 08:56	WG1041192

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.56		0.740	2.00	2.28	1	11/11/2017 12:20	WG1041038
Barium	40.4		0.193	0.500	0.569	1	11/11/2017 12:20	WG1041038
Cadmium	U		0.0796	0.500	0.569	1	11/11/2017 12:20	WG1041038
Chromium	18.7		0.159	1.00	1.14	1	11/11/2017 12:20	WG1041038
Lead	0.725		0.216	0.500	0.569	1	11/11/2017 12:20	WG1041038
Selenium	U		0.842	2.00	2.28	1	11/11/2017 12:20	WG1041038
Silver	U		0.319	1.00	1.14	1	11/11/2017 12:20	WG1041038

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	0.0518	J T8	0.0386	0.100	0.114	1	11/09/2017 15:34	WG1040961
(S) a,a,a-Trifluorotoluene(FID)	*92.5*				*77.0-120*		*11/09/2017 15:34*	WG1040961

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	T8	0.0114	0.0500	0.0569	1	11/09/2017 16:13	WG1040894
Acrylonitrile	U	T8	0.00204	0.0100	0.0114	1	11/09/2017 16:13	WG1040894
Benzene	U	T8	0.000307	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Bromobenzene	U	T8	0.000323	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Bromodichloromethane	U	T8	0.000289	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Bromoform	U	T8	0.000482	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Bromomethane	U	T8	0.00152	0.00500	0.00569	1	11/09/2017 16:13	WG1040894
n-Butylbenzene	U	T8	0.000294	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
sec-Butylbenzene	U	T8	0.000229	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
tert-Butylbenzene	U	T8	0.000234	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Carbon tetrachloride	U	T8	0.000373	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Chlorobenzene	U	T8	0.000241	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Chlorodibromomethane	U	T8	0.000424	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Chloroethane	U	T8	0.00108	0.00500	0.00569	1	11/09/2017 16:13	WG1040894
Chloroform	U	T8	0.000261	0.00500	0.00569	1	11/09/2017 16:13	WG1040894
Chloromethane	U	T8	0.000427	0.00250	0.00284	1	11/09/2017 16:13	WG1040894
2-Chlorotoluene	U	T8	0.000342	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
4-Chlorotoluene	U	T8	0.000273	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,2-Dibromo-3-Chloropropane	U	T8	0.00119	0.00500	0.00569	1	11/09/2017 16:13	WG1040894
1,2-Dibromoethane	U	T8	0.000390	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Dibromomethane	U	T8	0.000435	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,2-Dichlorobenzene	U	T8	0.000347	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,3-Dichlorobenzene	U	T8	0.000272	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,4-Dichlorobenzene	U	T8	0.000257	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Dichlorodifluoromethane	U	T8	0.000811	0.00500	0.00569	1	11/09/2017 16:13	WG1040894
1,1-Dichloroethane	U	T8	0.000226	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,2-Dichloroethane	U	T8	0.000301	0.00100	0.00114	1	11/09/2017 16:13	WG1040894

TSB-1 (52-53)

Collected date/time: 10/25/17 11:20

SAMPLE RESULTS - 01

L949489

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U	T8	0.000345	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
cis-1,2-Dichloroethene	U	T8	0.000267	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
trans-1,2-Dichloroethene	U	T8	0.000300	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,2-Dichloropropane	U	T8	0.000407	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,1-Dichloropropene	U	T8	0.000361	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,3-Dichloropropane	U	T8	0.000236	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
cis-1,3-Dichloropropene	U	T8	0.000298	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
trans-1,3-Dichloropropene	U	T8	0.000304	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
2,2-Dichloropropane	U	T8	0.000317	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Di-isopropyl ether	U	T8	0.000282	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Ethylbenzene	U	T8	0.000338	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Hexachloro-1,3-butadiene	U	T8	0.000389	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Isopropylbenzene	U	T8	0.000276	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
p-Isopropyltoluene	U	T8	0.000232	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
2-Butanone (MEK)	U	T8	0.00532	0.0100	0.0114	1	11/09/2017 16:13	WG1040894
Methylene Chloride	U	T8	0.00114	0.00500	0.00569	1	11/09/2017 16:13	WG1040894
4-Methyl-2-pentanone (MIBK)	U	T8	0.00214	0.0100	0.0114	1	11/09/2017 16:13	WG1040894
Methyl tert-butyl ether	U	T8	0.000241	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Naphthalene	U	T8	0.00114	0.00500	0.00569	1	11/09/2017 16:13	WG1040894
n-Propylbenzene	U	T8	0.000234	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Styrene	U	T8	0.000266	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,1,1,2-Tetrachloroethane	U	T8	0.000300	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,1,2,2-Tetrachloroethane	U	T8	0.000415	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,1,2-Trichlorotrifluoroethane	U	T8	0.000415	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Tetrachloroethene	U	T8	0.000314	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Toluene	0.000567	J T8	0.000494	0.00500	0.00569	1	11/09/2017 16:13	WG1040894
1,2,3-Trichlorobenzene	U	T8	0.000348	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,2,4-Trichlorobenzene	U	T8	0.000441	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,1,1-Trichloroethane	U	T8	0.000325	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,1,2-Trichloroethane	U	T8	0.000315	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Trichloroethene	U	T8	0.000317	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Trichlorofluoromethane	U	T8	0.000435	0.00500	0.00569	1	11/09/2017 16:13	WG1040894
1,2,3-Trichloropropane	U	T8	0.000843	0.00250	0.00284	1	11/09/2017 16:13	WG1040894
1,2,4-Trimethylbenzene	U	T8	0.000240	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,2,3-Trimethylbenzene	U	T8	0.000327	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Vinyl chloride	U	T8	0.000331	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
1,3,5-Trimethylbenzene	U	T8	0.000303	0.00100	0.00114	1	11/09/2017 16:13	WG1040894
Xylenes, Total	U	T8	0.000794	0.00300	0.00341	1	11/09/2017 16:13	WG1040894
(S) Toluene-d8	*103*				*80.0-120*		*11/09/2017 16:13*	WG1040894
(S) Dibromofluoromethane	*99.2*				*74.0-131*		*11/09/2017 16:13*	WG1040894
(S) 4-Bromofluorobenzene	*99.9*				*64.0-132*		*11/09/2017 16:13*	WG1040894

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U	T8	1.52	4.00	4.55	1	11/14/2017 18:16	WG1041930
Residual Range Organics (RRO)	U	T8	3.79	10.0	11.4	1	11/14/2017 18:16	WG1041930
(S) o-Terphenyl	*83.2*				*18.0-148*		*11/14/2017 18:16*	WG1041930

Method Blank (MB)

(MB) R3264597-1 11/09/17 13:50

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.0006			

L949394-04 Original Sample (OS) • Duplicate (DUP)

(OS) L949394-04 11/09/17 13:50 • (DUP) R3264597-3 11/09/17 13:50

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	83.4	82.1	1	2		5

Laboratory Control Sample (LCS)

(LCS) R3264597-2 11/09/17 13:50

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85-115	

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

Method Blank (MB)

(MB) R3265412-1 11/14/17 08:36

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Mercury	U		0.0028	0.0200

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

(LCS) R3265412-2 11/14/17 08:38 • (LCSD) R3265412-3 11/14/17 08:40

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Mercury	0.300	0.259	0.285	86	95	80-120			9	20

L949579-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L949579-01 11/14/17 08:43 • (MS) R3265412-4 11/14/17 08:45 • (MSD) R3265412-5 11/14/17 08:47

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Mercury	0.312	ND	0.328	0.323	100	98	1	75-125			2	20

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

Method Blank (MB)

(MB) R3264865-1 11/11/17 11:37

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Arsenic	U		0.65	2.00
Barium	U		0.17	0.500
Cadmium	U		0.07	0.500
Chromium	U		0.14	1.00
Lead	U		0.19	0.500
Selenium	U		0.74	2.00
Silver	U		0.28	1.00

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

(LCS) R3264865-2 11/11/17 11:40 • (LCSD) R3264865-3 11/11/17 11:42

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Arsenic	100	98.2	98.9	98	99	80-120			1	20
Barium	100	105	106	105	106	80-120			0	20
Cadmium	100	99.5	99.7	100	100	80-120			0	20
Chromium	100	101	101	101	101	80-120			0	20
Lead	100	99.4	99.4	99	99	80-120			0	20
Selenium	100	99.1	99.3	99	99	80-120			0	20
Silver	20.0	18.3	18.3	92	91	80-120			0	20

L949159-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L949159-01 11/11/17 11:45 • (MS) R3264865-6 11/11/17 11:52 • (MSD) R3264865-7 11/11/17 11:55

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	100	10.8	105	106	94	95	1	75-125			1	20
Barium	100	138	230	238	92	99	1	75-125			3	20
Cadmium	100	ND	96.5	97.5	96	98	1	75-125			1	20
Chromium	100	25.3	117	121	91	95	1	75-125			3	20
Lead	100	6.91	105	107	98	100	1	75-125			2	20
Selenium	100	ND	92.6	94.4	93	94	1	75-125			2	20
Silver	20.0	ND	17.7	17.8	89	89	1	75-125			0	20

Method Blank (MB)

(MB) R3264492-3 11/09/17 11:46

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)	*95.6*			*77.0-120*

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

(LCS) R3264492-1 11/09/17 10:32 • (LCSD) R3264492-2 11/09/17 10:56

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 %
Gasoline Range Organics-NWTPH	5.50	5.81	5.68	106	103	70.0-133			2.22	20
(S) a,a,a-Trifluorotoluene(FID)				*106*	*107*	*77.0-120*				

Method Blank (MB)

(MB) R3264514-3 11/09/17 10:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Isopropylbenzene	U		0.000243	0.00100

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

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

Method Blank (MB)

(MB) R3264514-3 11/09/17 10:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	*107*			*80.0-120*
(S) Dibromofluoromethane	*97.0*			*74.0-131*
(S) 4-Bromofluorobenzene	*102*			*64.0-132*

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

(LCS) R3264514-1 11/09/17 08:56 • (LCSD) R3264514-2 11/09/17 09:18

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	0.125	0.161	0.146	128	117	11.0-160			9.43	23
Acrylonitrile	0.125	0.131	0.138	105	110	61.0-143			4.97	20
Benzene	0.0250	0.0239	0.0238	95.5	95.3	71.0-124			0.210	20
Bromobenzene	0.0250	0.0233	0.0226	93.3	90.4	78.0-120			3.09	20
Bromodichloromethane	0.0250	0.0226	0.0227	90.2	90.7	75.0-120			0.540	20

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

(LCS) R3264514-1 11/09/17 08:56 • (LCSD) R3264514-2 11/09/17 09:18

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 %
Bromoform	0.0250	0.0237	0.0233	94.7	93.1	65.0-133			1.75	20
Bromomethane	0.0250	0.0258	0.0257	103	103	26.0-160			0.180	20
n-Butylbenzene	0.0250	0.0267	0.0273	107	109	73.0-126			2.18	20
sec-Butylbenzene	0.0250	0.0261	0.0263	104	105	75.0-121			0.600	20
tert-Butylbenzene	0.0250	0.0252	0.0252	101	101	74.0-122			0.0300	20
Carbon tetrachloride	0.0250	0.0223	0.0209	89.1	83.5	66.0-123			6.49	20
Chlorobenzene	0.0250	0.0246	0.0250	98.3	100	79.0-121			1.70	20
Chlorodibromomethane	0.0250	0.0238	0.0246	95.4	98.6	74.0-128			3.30	20
Chloroethane	0.0250	0.0263	0.0252	105	101	51.0-147			4.31	20
Chloroform	0.0250	0.0229	0.0225	91.4	90.0	73.0-123			1.58	20
Chloromethane	0.0250	0.0266	0.0262	106	105	51.0-138			1.43	20
2-Chlorotoluene	0.0250	0.0266	0.0265	106	106	72.0-124			0.240	20
4-Chlorotoluene	0.0250	0.0247	0.0248	98.9	99.1	78.0-120			0.190	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0234	0.0229	93.5	91.8	65.0-126			1.85	20
1,2-Dibromoethane	0.0250	0.0232	0.0235	92.7	93.9	78.0-122			1.23	20
Dibromomethane	0.0250	0.0226	0.0219	90.2	87.8	79.0-120			2.72	20
1,2-Dichlorobenzene	0.0250	0.0249	0.0249	99.5	99.6	80.0-120			0.0500	20
1,3-Dichlorobenzene	0.0250	0.0257	0.0257	103	103	72.0-123			0.240	20
1,4-Dichlorobenzene	0.0250	0.0235	0.0240	94.2	96.0	77.0-120			1.87	20
Dichlorodifluoromethane	0.0250	0.0228	0.0225	91.0	90.0	49.0-155			1.15	20
1,1-Dichloroethane	0.0250	0.0244	0.0241	97.4	96.4	70.0-128			1.03	20
1,2-Dichloroethane	0.0250	0.0232	0.0227	92.7	90.8	69.0-128			2.08	20
1,1-Dichloroethene	0.0250	0.0237	0.0234	94.7	93.5	63.0-131			1.23	20
cis-1,2-Dichloroethene	0.0250	0.0239	0.0230	95.7	92.0	74.0-123			3.91	20
trans-1,2-Dichloroethene	0.0250	0.0233	0.0234	93.1	93.5	72.0-122			0.440	20
1,2-Dichloropropane	0.0250	0.0259	0.0255	103	102	75.0-126			1.47	20
1,1-Dichloropropene	0.0250	0.0240	0.0238	96.1	95.1	72.0-130			1.01	20
1,3-Dichloropropane	0.0250	0.0242	0.0247	96.8	98.9	80.0-121			2.07	20
cis-1,3-Dichloropropene	0.0250	0.0251	0.0249	101	99.7	80.0-125			0.870	20
trans-1,3-Dichloropropene	0.0250	0.0230	0.0227	91.9	90.9	75.0-129			1.18	20
2,2-Dichloropropane	0.0250	0.0224	0.0223	89.4	89.1	60.0-129			0.330	20
Di-isopropyl ether	0.0250	0.0260	0.0257	104	103	62.0-133			1.17	20
Ethylbenzene	0.0250	0.0254	0.0262	101	105	77.0-120			3.29	20
Hexachloro-1,3-butadiene	0.0250	0.0268	0.0278	107	111	68.0-128			3.43	20
Isopropylbenzene	0.0250	0.0252	0.0250	101	100	75.0-120			0.760	20
p-Isopropyltoluene	0.0250	0.0263	0.0262	105	105	74.0-125			0.550	20
2-Butanone (MEK)	0.125	0.133	0.123	106	98.1	37.0-159			8.07	20
Methylene Chloride	0.0250	0.0234	0.0227	93.6	90.6	67.0-123			3.20	20
4-Methyl-2-pentanone (MIBK)	0.125	0.146	0.144	117	115	60.0-144			1.78	20
Methyl tert-butyl ether	0.0250	0.0255	0.0250	102	99.9	66.0-125			1.97	20

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

(LCS) R3264514-1 11/09/17 08:56 • (LCSD) R3264514-2 11/09/17 09:18

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 %
Naphthalene	0.0250	0.0234	0.0241	93.5	96.4	64.0-125			3.02	20
n-Propylbenzene	0.0250	0.0256	0.0256	102	102	78.0-120			0.0500	20
Styrene	0.0250	0.0250	0.0248	100	99.4	78.0-124			0.750	20
1,1,1,2-Tetrachloroethane	0.0250	0.0240	0.0243	96.1	97.1	74.0-124			1.03	20
1,1,2,2-Tetrachloroethane	0.0250	0.0232	0.0223	92.7	89.2	73.0-120			3.84	20
Tetrachloroethene	0.0250	0.0255	0.0260	102	104	70.0-127			1.94	20
Toluene	0.0250	0.0237	0.0242	94.9	96.8	77.0-120			1.99	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0242	0.0236	96.9	94.6	64.0-135			2.43	20
1,2,3-Trichlorobenzene	0.0250	0.0230	0.0236	91.9	94.3	68.0-126			2.60	20
1,2,4-Trichlorobenzene	0.0250	0.0254	0.0264	101	105	70.0-127			3.81	20
1,1,1-Trichloroethane	0.0250	0.0228	0.0224	91.3	89.5	69.0-125			1.92	20
1,1,2-Trichloroethane	0.0250	0.0239	0.0243	95.8	97.1	78.0-120			1.40	20
Trichloroethene	0.0250	0.0242	0.0242	96.9	96.9	79.0-120			0.0100	20
Trichlorofluoromethane	0.0250	0.0247	0.0242	99.0	97.0	59.0-136			2.05	20
1,2,3-Trichloropropane	0.0250	0.0250	0.0242	99.9	96.7	73.0-124			3.30	20
1,2,3-Trimethylbenzene	0.0250	0.0242	0.0243	97.0	97.3	76.0-120			0.340	20
1,2,4-Trimethylbenzene	0.0250	0.0248	0.0248	99.2	99.4	75.0-120			0.230	20
1,3,5-Trimethylbenzene	0.0250	0.0266	0.0265	106	106	75.0-120			0.270	20
Vinyl chloride	0.0250	0.0265	0.0258	106	103	63.0-134			2.73	20
Xylenes, Total	0.0750	0.0743	0.0768	99.1	102	77.0-120			3.31	20
(S) Toluene-d8				*104*	*108*	*80.0-120*				
(S) Dibromofluoromethane				*96.3*	*97.4*	*74.0-131*				
(S) 4-Bromofluorobenzene				*97.8*	*97.5*	*64.0-132*				

L949394-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L949394-10 11/09/17 17:36 • (MS) R3264514-5 11/09/17 17:57 • (MSD) R3264514-6 11/09/17 18:18

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	U	93.1	81.0	157	136	476	10.0-160			14.0	36
Acrylonitrile	0.125	U	79.6	64.1	134	108	476	14.0-160			21.6	33
Benzene	0.0250	U	11.1	10.5	93.5	88.4	476	13.0-146			5.57	27
Bromobenzene	0.0250	U	11.3	11.1	95.3	93.4	476	10.0-149			1.97	33
Bromodichloromethane	0.0250	U	11.0	10.3	92.4	86.3	476	15.0-142			6.77	28
Bromoform	0.0250	U	11.4	11.3	95.7	94.8	476	10.0-147			1.00	31
Bromomethane	0.0250	U	7.19	6.55	60.4	55.0	476	10.0-160			9.41	32
n-Butylbenzene	0.0250	U	13.8	12.9	116	108	476	10.0-154			6.75	37
sec-Butylbenzene	0.0250	0.149	13.6	13.0	113	108	476	10.0-151			4.52	36
tert-Butylbenzene	0.0250	U	13.0	12.5	109	105	476	10.0-152			4.33	35

L949394-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L949394-10 11/09/17 17:36 • (MS) R3264514-5 11/09/17 17:57 • (MSD) R3264514-6 11/09/17 18:18

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.0250	U	10.1	9.66	85.0	81.2	476	13.0-140			4.62	30
Chlorobenzene	0.0250	U	12.0	11.5	100	96.6	476	10.0-149			3.92	31
Chlorodibromomethane	0.0250	U	11.7	11.1	98.6	93.0	476	12.0-147			5.91	29
Chloroethane	0.0250	U	3.84	3.56	32.3	29.9	476	10.0-159			7.47	33
Chloroform	0.0250	U	11.2	10.2	94.5	85.8	476	18.0-148			9.64	28
Chloromethane	0.0250	U	10.5	9.52	88.3	80.0	476	10.0-146			9.84	29
2-Chlorotoluene	0.0250	U	13.4	13.0	113	109	476	10.0-151			3.41	35
4-Chlorotoluene	0.0250	U	12.3	12.1	103	102	476	10.0-150			1.26	35
1,2-Dibromo-3-Chloropropane	0.0250	U	12.3	11.4	103	95.9	476	10.0-149			7.22	34
1,2-Dibromoethane	0.0250	U	11.3	11.1	95.3	93.5	476	14.0-145			1.91	28
Dibromomethane	0.0250	U	10.7	9.77	90.3	82.1	476	18.0-144			9.51	27
1,2-Dichlorobenzene	0.0250	U	12.7	11.9	107	100	476	10.0-153			6.74	34
1,3-Dichlorobenzene	0.0250	U	12.7	12.2	107	103	476	10.0-150			3.53	35
1,4-Dichlorobenzene	0.0250	U	11.7	11.5	98.3	96.4	476	10.0-148			1.99	34
Dichlorodifluoromethane	0.0250	U	11.6	10.1	97.6	84.5	476	10.0-160			14.4	30
1,1-Dichloroethane	0.0250	U	11.9	10.8	99.6	91.0	476	19.0-148			9.10	28
1,2-Dichloroethane	0.0250	U	11.0	10.3	92.8	86.1	476	17.0-147			7.39	27
1,1-Dichloroethene	0.0250	U	10.1	9.07	84.9	76.2	476	10.0-150			10.8	31
cis-1,2-Dichloroethene	0.0250	U	11.1	10.3	93.3	86.7	476	16.0-145			7.35	28
trans-1,2-Dichloroethene	0.0250	U	10.3	9.21	86.6	77.4	476	11.0-142			11.2	29
1,2-Dichloropropane	0.0250	U	12.4	11.7	104	98.5	476	17.0-148			5.21	28
1,1-Dichloropropene	0.0250	U	10.8	9.73	90.3	81.8	476	10.0-150			9.93	30
1,3-Dichloropropane	0.0250	U	12.0	11.9	101	100	476	16.0-148			1.14	27
cis-1,3-Dichloropropene	0.0250	U	12.1	11.7	101	98.0	476	13.0-150			3.34	28
trans-1,3-Dichloropropene	0.0250	U	11.4	11.0	95.7	92.4	476	10.0-152			3.60	29
2,2-Dichloropropane	0.0250	U	11.0	10.4	92.7	87.7	476	16.0-143			5.64	30
Di-isopropyl ether	0.0250	U	12.7	11.7	107	98.5	476	16.0-149			8.34	28
Ethylbenzene	0.0250	0.167	12.5	12.0	104	99.4	476	10.0-147			4.33	31
Hexachloro-1,3-butadiene	0.0250	U	12.1	10.5	102	88.2	476	10.0-154			14.6	40
Isopropylbenzene	0.0250	U	12.8	12.2	107	103	476	10.0-147			4.63	33
p-Isopropyltoluene	0.0250	0.461	13.9	13.2	113	107	476	10.0-156			5.11	37
2-Butanone (MEK)	0.125	U	73.3	66.3	123	111	476	10.0-160			9.99	33
Methylene Chloride	0.0250	U	10.9	9.65	91.8	81.1	476	16.0-139			12.4	29
4-Methyl-2-pentanone (MIBK)	0.125	U	76.7	68.9	129	116	476	12.0-160			10.7	32
Methyl tert-butyl ether	0.0250	U	12.3	11.4	103	95.4	476	21.0-145			8.02	29
Naphthalene	0.0250	145	161	141	140	0.000	476	10.0-153	E	E V	13.7	36
n-Propylbenzene	0.0250	U	13.0	12.6	109	106	476	10.0-151			3.39	34
Styrene	0.0250	U	12.8	12.3	108	103	476	10.0-155			4.23	34
1,1,1,2-Tetrachloroethane	0.0250	U	11.7	10.6	98.4	88.9	476	10.0-147			10.1	30
1,1,2,2-Tetrachloroethane	0.0250	U	12.0	11.2	101	94.3	476	10.0-155			6.41	31

L949394-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L949394-10 11/09/17 17:36 • (MS) R3264514-5 11/09/17 17:57 • (MSD) R3264514-6 11/09/17 18:18

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	U	11.9	11.1	99.9	93.0	476	10.0-144			7.19	32
Toluene	0.0250	0.264	11.7	11.1	96.3	91.1	476	10.0-144			5.34	28
1,1,2-Trichlorotrifluoroethane	0.0250	U	11.6	10.3	97.2	86.8	476	10.0-153			11.3	33
1,2,3-Trichlorobenzene	0.0250	U	11.2	10.5	93.9	88.1	476	10.0-153			6.36	40
1,2,4-Trichlorobenzene	0.0250	U	12.5	11.7	105	98.6	476	10.0-156			6.61	40
1,1,1-Trichloroethane	0.0250	U	11.2	10.2	94.1	86.0	476	18.0-145			8.92	29
1,1,2-Trichloroethane	0.0250	U	12.3	11.4	103	96.1	476	12.0-151			6.89	28
Trichloroethene	0.0250	U	11.3	10.4	95.0	87.1	476	11.0-148			8.62	29
Trichlorofluoromethane	0.0250	U	9.22	8.50	77.5	71.4	476	10.0-157			8.12	34
1,2,3-Trichloropropane	0.0250	U	12.7	12.4	106	104	476	10.0-154			2.03	32
1,2,3-Trimethylbenzene	0.0250	0.852	12.8	12.3	100	96.0	476	10.0-150			4.20	33
1,2,4-Trimethylbenzene	0.0250	1.87	14.4	13.7	106	99.3	476	10.0-151			5.28	34
1,3,5-Trimethylbenzene	0.0250	0.836	14.2	13.5	112	106	476	10.0-150			5.29	33
Vinyl chloride	0.0250	U	11.2	9.88	93.7	83.0	476	10.0-150			12.2	29
Xylenes, Total	0.0750	1.20	37.7	35.0	102	94.7	476	10.0-150			7.43	31
(S) Toluene-d8					*106*	*107*		*80.0-120*				
(S) Dibromofluoromethane					*96.3*	*92.8*		*74.0-131*				
(S) 4-Bromofluorobenzene					*97.9*	*103*		*64.0-132*				

Method Blank (MB)

(MB) R3265453-1 11/14/17 09:46

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	*69.5*			*18.0-148*

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

(LCS) R3265453-2 11/14/17 10:01 • (LCSD) R3265453-3 11/14/17 10:16

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 %
Diesel Range Organics (DRO)	30.0	24.4	23.5	81.2	78.3	50.0-150			3.64	20
Residual Range Organics (RRO)	30.0	24.9	23.9	83.0	79.8	50.0-150			3.92	20
(S) o-Terphenyl				*57.9*	*57.7*	*18.0-148*				

L949394-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L949394-05 11/14/17 23:12 • (MS) R3265453-4 11/14/17 23:27 • (MSD) R3265453-5 11/14/17 23:42

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)	34.6	49.5	86.4	85.6	107	104	10	50.0-150			0.966	20
Residual Range Organics (RRO)	34.6	ND	161	119	252	130	10	50.0-150	J5	J3	30.3	20
(S) o-Terphenyl					*89.8*	*84.7*		*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.

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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, 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.
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.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

ESC Lab Sciences 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.

State Accreditations

Alabama	40660
Alaska	UST-080
Arizona	AZ0612
Arkansas	88-0469
California	01157CA
Colorado	TN00003
Conneticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1]	90010
Kentucky [2]	16
Louisiana	AI30792
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico	TN00003
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [2]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	221
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T 104704245-07-TX
Texas [5]	LAB0152
Utah	6157585858
Vermont	VT2006
Virginia	109
Washington	C1915
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

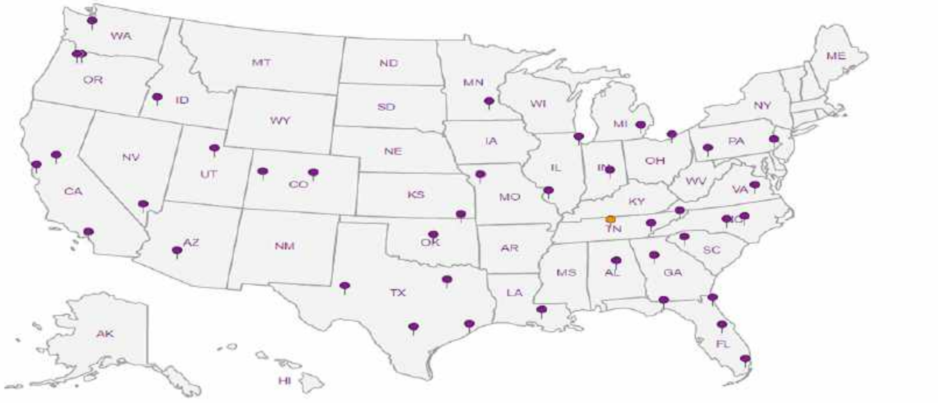
Third Party & Federal Accreditations

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

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

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



TGE Resources
8040 Northcourt Rd.
Houston, TX 77040

Billing Information:
Account Payable
8040 Northcourt Rd.
Houston, TX 77040

Pres Chk

Chain of Custody Page 1 of 1

ESC LAB SCIENCES

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

Report to: **Kristi Barnette, Evan Sitler**

Email To: Kristi.b@TGEresources.com

Project Description: Future Star Lake Hospital

City/State Collected: Federal Way, WA

Phone: **713-744-5800**
Fax:

Client Project #: R13411.04

Lab Project #: TGERESHTX-R13411

Collected by (print): Evan Sitler

Site/Facility ID #: 27805 Pacific Hwy South

P.O. #: 7759

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

L #: ~~[illegible]~~
A053
L949989

N
11/9/17

Acctnum: **TGERESHTX**
Template:
Prelogin:
TSR: **Mark Beasley**
PB:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPH DRO, RRO	TS	NWTPH, GRO	V8260	MRCRA8	HOLD	pH					Remarks	Sample # (lab only)
TSB-1 (4.5-5.5)	Grab	SS	4.5-5.5'	10/25/17	0915	6	✓	✓	✓	✓	✓	✓							~~-01~~
TSB-1 (10.5-11.5)	Grab	SS	10.5-11.5'	10/25/17	0930	6	✓	✓	✓	✓	✓	✓	✓						
TSB-1 (20-21)	Grab	SS	20-21'	10/25/17	0945	6	✓	✓	✓	✓	✓	✓							
TSB-1 (38-39)	Grab	SS	38-39'	10/25/17	1000	6	✓	✓	✓	✓	✓	✓							
TSB-1 (52-53)	Grab	SS	52-53'	10/25/17	1120	6	✓	✓	✓	✓	✓	✓							-01

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

Remarks: Hold all Soil Samples

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

Relinquished by: (Signature) | Date: 10/25/17 | Time: 1700 | Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
1 [✓ HCl] / MeoH
TBR

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

Temp: 1.2 °C Bottles Received: 30

If preservation required by Login: Date/Time

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

Date: 10/26/17 Time: 0845

mw 11

Hold:

Condition: NCF / [✓ OK]

Andy Vann

From: Mark Beasley
Sent: Wednesday, November 08, 2017 11:04 AM
To: Login
Subject: L946526 *TGERESHTX* hold sample

Log sample TSB-1 (52-53) previously on hold for V8260C, MRCRA8, NWTPHGX, NWTPHDXNOSGT, TERRACORE, & TS. Log as EX due 11/15. Use PO# 7795.

Thanks
Mark

From: Kristi Barnette [mailto:kristib@tgeresources.com]
Sent: Wednesday, November 08, 2017 10:59 AM
To: Mark Beasley
Cc: Tim Crump
Subject: Request for additional analysi

Please run the following under a standard TAT. PO is attached.

TGE Sample ID	Analysis	
TSB1(52-53)		NWTPH DRO/RRO NWTPH GRO RCRA 8 VOCs

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
Kristib@TGEResources.com| www.tgeresources.com

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DUNS# 929574051
CAGE Code 08PQ6

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ANALYTICAL REPORT

August 21, 2018

TGE Resources

Sample Delivery Group:	L1017897
Samples Received:	08/15/2018
Project Number:	R13411.06
Description:	Future Federal Way Hospital

Report To:
Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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 National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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B-1 (4) L1017897-01 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 08:50	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154707	1	08/20/18 14:08	08/20/18 14:20	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 11:46	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 11:52	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153541	27.75	08/14/18 08:50	08/17/18 05:48	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1153795	1.11	08/14/18 08:50	08/17/18 16:29	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154430	1.11	08/14/18 08:50	08/19/18 15:51	JAH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 16:26	MTJ

B-1 (9) L1017897-02 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 09:00	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154707	1	08/20/18 14:08	08/20/18 14:20	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 11:49	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 11:55	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153541	25	08/14/18 09:00	08/17/18 06:09	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1153795	1	08/14/18 09:00	08/17/18 16:50	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154430	1	08/14/18 09:00	08/19/18 16:10	JAH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 16:39	MTJ

B-2 (4) L1017897-03 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 09:30	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154707	1	08/20/18 14:08	08/20/18 14:20	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 11:57	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:02	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	26	08/14/18 09:30	08/17/18 12:59	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1153795	1.04	08/14/18 09:30	08/17/18 17:10	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154430	1.04	08/14/18 09:30	08/19/18 16:30	JAH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 16:52	MTJ

B-2 (8) L1017897-04 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 09:40	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154707	1	08/20/18 14:08	08/20/18 14:20	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 11:59	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:05	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	25	08/14/18 09:40	08/17/18 13:21	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1153795	1	08/14/18 09:40	08/17/18 17:31	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154430	1	08/14/18 09:40	08/19/18 16:49	JAH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 17:05	MTJ

B-3 (4) L1017897-05 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 09:55	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154707	1	08/20/18 14:08	08/20/18 14:20	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 12:02	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:07	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	25	08/14/18 09:55	08/17/18 13:43	DWR

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

B-3 (4) L1017897-05 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 09:55	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1153795	1	08/14/18 09:55	08/17/18 17:51	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154430	1	08/14/18 09:55	08/19/18 17:08	JAH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 19:14	MTJ

B-3 (10) L1017897-06 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 10:10	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154707	1	08/20/18 14:08	08/20/18 14:20	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 12:04	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:10	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	26.75	08/14/18 10:10	08/17/18 14:05	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1153795	1.07	08/14/18 10:10	08/17/18 18:12	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154430	1.07	08/14/18 10:10	08/19/18 17:28	JAH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 17:17	MTJ

B-4 (3) L1017897-07 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 10:30	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154707	1	08/20/18 14:08	08/20/18 14:20	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 12:07	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:12	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	25	08/14/18 10:30	08/17/18 14:26	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1153795	1	08/14/18 10:30	08/17/18 18:33	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154430	1	08/14/18 10:30	08/19/18 17:48	JAH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 15:47	MTJ

B-4 (6) L1017897-08 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 10:35	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154707	1	08/20/18 14:08	08/20/18 14:20	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 12:09	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:15	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	25	08/14/18 10:35	08/17/18 14:48	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1	08/14/18 10:35	08/18/18 14:16	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1	08/14/18 10:35	08/19/18 12:50	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 17:30	MTJ

B-5 (4) L1017897-09 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 11:05	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154708	1	08/20/18 11:06	08/20/18 11:13	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 12:12	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:17	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	25	08/14/18 11:05	08/17/18 15:10	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1	08/14/18 11:05	08/18/18 14:36	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1	08/14/18 11:05	08/19/18 13:08	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 17:43	MTJ

B-5 (9) L1017897-10 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 11:30	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154708	1	08/20/18 11:06	08/20/18 11:13	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 12:14	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 11:40	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	25	08/14/18 11:30	08/17/18 15:32	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1	08/14/18 11:30	08/18/18 14:57	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1	08/14/18 11:30	08/19/18 13:27	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 17:57	MTJ

B-6 (3) L1017897-11 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 11:45	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154708	1	08/20/18 11:06	08/20/18 11:13	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 12:17	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:20	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	25	08/14/18 11:45	08/17/18 15:53	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1	08/14/18 11:45	08/18/18 15:17	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1	08/14/18 11:45	08/19/18 13:46	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 18:09	MTJ

B-6 (6) L1017897-12 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 11:55	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154708	1	08/20/18 11:06	08/20/18 11:13	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 12:20	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:22	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	28.75	08/14/18 11:55	08/17/18 16:15	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1.16	08/14/18 11:55	08/18/18 15:37	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1.16	08/14/18 11:55	08/19/18 14:05	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 18:22	MTJ

B-7 (4) L1017897-13 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 12:30	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154708	1	08/20/18 11:06	08/20/18 11:13	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 12:27	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:25	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	28.5	08/14/18 12:30	08/17/18 16:37	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1.14	08/14/18 12:30	08/18/18 15:57	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1.14	08/14/18 12:30	08/19/18 14:23	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 18:35	MTJ

B-7 (9) L1017897-14 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 12:40	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154708	1	08/20/18 11:06	08/20/18 11:13	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 12:30	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:33	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	25	08/14/18 12:40	08/17/18 16:58	DWR

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 12:40	08/15/18 08:45

B-7 (9) L1017897-14 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1	08/14/18 12:40	08/18/18 16:18	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1	08/14/18 12:40	08/19/18 14:42	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 18:47	MTJ

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 12:50	08/15/18 08:45

B-8 (4) L1017897-15 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154708	1	08/20/18 11:06	08/20/18 11:13	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 12:32	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:35	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	25	08/14/18 12:50	08/17/18 17:20	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1	08/14/18 12:50	08/18/18 16:38	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1	08/14/18 12:50	08/19/18 15:01	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 19:39	MTJ

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 13:00	08/15/18 08:45

B-8 (7) L1017897-16 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154708	1	08/20/18 11:06	08/20/18 11:13	JD
Mercury by Method 7471A	WG1153486	1	08/16/18 17:27	08/17/18 12:35	TRB
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:38	WBD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1153735	25	08/14/18 13:00	08/17/18 17:41	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1	08/14/18 13:00	08/18/18 16:58	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1	08/14/18 13:00	08/19/18 15:20	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1153557	1	08/20/18 07:24	08/20/18 19:01	MTJ

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: ESC Lab Sciences	LRC Date: 08/21/2018 18:03
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1017897-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15 and 16
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1153486, WG1153795, WG1154260, WG1153541, WG1153735, WG1153500, WG1154491, WG1154430, WG1153557, WG1154708 and WG1154707

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			3
		Were MS/MSD RPDs within laboratory QC limits?		X			4
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Supporting Data

Laboratory Name: ESC Lab Sciences	LRC Date: 08/21/2018 18:03
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1017897-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15 and 16
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1153486, WG1153795, WG1154260, WG1153541, WG1153735, WG1153500, WG1154491, WG1154430, WG1153557, WG1154708 and WG1154707

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			5
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: ESC Lab Sciences	LRC Date: 08/21/2018 18:03
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1017897-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15 and 16
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1153486, WG1153795, WG1154260, WG1153541, WG1153735, WG1153500, WG1154491, WG1154430, WG1153557, WG1154708 and WG1154707

ER #[1]	**Description**
1	WG1154260 Toluene-d8 R3334775-3 and 4: Percent Recovery is outside of established control limits.
2	8260C WG1153795 1,3-Dichloropropane: Percent Recovery is outside of established control limits.
3	8260C WG1153795 Benzene, Bromodichloromethane, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chlorodibromomethane, Chloroform, Chloromethane, Dibromomethane, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,2-Dichloropropane, 1,1-Dichloropropene, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Di-isopropyl ether, Ethylbenzene, Isopropylbenzene, Methylene Chloride, Methyl tert-butyl ether, n-Propylbenzene, 1,1,1,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,1,2-Trichlorotrifluoroethane, 1,1,1-Trichloroethane, Trichloroethene, Trichlorofluoromethane, 1,3,5-Trimethylbenzene, Xylenes, Total: Percent Recovery is outside of established control limits. 8260C WG1154260 Acetone, Acrylonitrile, Benzene, Bromobenzene, Bromodichloromethane, Bromoform, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chlorodibromomethane, Chloroform, 2-Chlorotoluene, 4-Chlorotoluene, 1,2-Dibromo-3-Chloropropane, 1,2-Dibromoethane, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,1-Dichloropropene, 1,3-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 2,2-Dichloropropane, Di-isopropyl ether, Ethylbenzene, Isopropylbenzene, p-Isopropyltoluene, Methylene Chloride, 4-Methyl-2-pentanone (MIBK), Methyl tert-butyl ether, Naphthalene, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Toluene, 1,1,2-Trichlorotrifluoroethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, Trichlorofluoromethane, 1,2,3-Trichloropropane, 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Xylenes, Total: Percent Recovery is outside of established control limits. 6010C WG1153500 Barium: Percent Recovery is outside of established control limits.
4	8260C WG1153795 Benzene, Bromobenzene, Bromodichloromethane, Bromomethane, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, 2-Chlorotoluene, 4-Chlorotoluene, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,2-Dichloropropane, 1,1-Dichloropropene, 1,3-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Di-isopropyl ether, Ethylbenzene, Hexachloro-1,3-butadiene, Isopropylbenzene, p-Isopropyltoluene, Methylene Chloride, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,1,2-Trichlorotrifluoroethane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, Trichlorofluoromethane, 1,2,4-Trimethylbenzene, 1,2,3-Trimethylbenzene, 1,3,5-Trimethylbenzene, Xylenes, Total: Relative Percent Difference is outside of established control limits.
5	6010C WG1153500 Barium, Chromium: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

B-1 (4)
Collected date/time: 08/14/18 08:50

SAMPLE RESULTS - 01

L1017897

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.3		1	08/20/2018 14:20	WG1154707

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.00633	J	0.00291	0.0200	0.0208	1	08/17/2018 11:46	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.37		0.675	2.00	2.08	1	08/19/2018 11:52	WG1153500
Barium	76.4		0.176	0.500	0.519	1	08/19/2018 11:52	WG1153500
Cadmium	0.0811	J	0.0727	0.500	0.519	1	08/19/2018 11:52	WG1153500
Chromium	22.4		0.145	1.00	1.04	1	08/19/2018 11:52	WG1153500
Lead	2.35		0.197	0.500	0.519	1	08/19/2018 11:52	WG1153500
Selenium	U		0.768	2.00	2.08	1	08/19/2018 11:52	WG1153500
Silver	U		0.291	1.00	1.04	1	08/19/2018 11:52	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.976	0.100	2.88	27.75	08/17/2018 05:48	WG1153541
(S) a,a,a-Trifluorotoluene(FID)	*107*				*77.0-120*		*08/17/2018 05:48*	WG1153541

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0158	0.0250	0.0288	1.11	08/19/2018 15:51	WG1154430
Acrylonitrile	U		0.00219	0.0125	0.0144	1.11	08/17/2018 16:29	WG1153795
Benzene	U		0.000461	0.00100	0.00115	1.11	08/17/2018 16:29	WG1153795
Bromobenzene	U		0.00121	0.0125	0.0144	1.11	08/17/2018 16:29	WG1153795
Bromodichloromethane	U		0.000908	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
Bromoform	U		0.00689	0.0250	0.0288	1.11	08/17/2018 16:29	WG1153795
Bromomethane	U		0.00426	0.0125	0.0144	1.11	08/17/2018 16:29	WG1153795
n-Butylbenzene	U		0.00442	0.0125	0.0144	1.11	08/17/2018 16:29	WG1153795
sec-Butylbenzene	U		0.00291	0.0125	0.0144	1.11	08/17/2018 16:29	WG1153795
tert-Butylbenzene	U		0.00179	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
Carbon tetrachloride	U		0.00124	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
Chlorobenzene	U		0.000660	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
Chlorodibromomethane	U		0.000518	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
Chloroethane	U		0.00124	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
Chloroform	U		0.000478	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
Chloromethane	U		0.00160	0.0125	0.0144	1.11	08/17/2018 16:29	WG1153795
2-Chlorotoluene	U		0.00106	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
4-Chlorotoluene	U		0.00130	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
1,2-Dibromo-3-Chloropropane	U		0.00588	0.0250	0.0288	1.11	08/17/2018 16:29	WG1153795
1,2-Dibromoethane	U		0.000605	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
Dibromomethane	U		0.00115	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
1,2-Dichlorobenzene	U		0.00167	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
1,3-Dichlorobenzene	U		0.00196	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
1,4-Dichlorobenzene	U		0.00227	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
Dichlorodifluoromethane	U		0.000942	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
1,1-Dichloroethane	U		0.000662	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
1,2-Dichloroethane	U		0.000547	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795

B-1 (4)

Collected date/time: 08/14/18 08:50

SAMPLE RESULTS - 01

L1017897

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000576	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
cis-1,2-Dichloroethene	U		0.000795	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
trans-1,2-Dichloroethene	U		0.00165	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
1,2-Dichloropropane	U		0.00146	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
1,1-Dichloropropene	U		0.000806	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
1,3-Dichloropropane	U	J4	0.00202	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
cis-1,3-Dichloropropene	U		0.000781	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
trans-1,3-Dichloropropene	U		0.00176	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
2,2-Dichloropropane	U		0.000914	0.00250	0.00288	1.11	08/19/2018 15:51	WG1154430
Di-isopropyl ether	U		0.000403	0.00100	0.00115	1.11	08/17/2018 16:29	WG1153795
Ethylbenzene	U		0.000611	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
Hexachloro-1,3-butadiene	U		0.0146	0.0250	0.0288	1.11	08/17/2018 16:29	WG1153795
Isopropylbenzene	U		0.000994	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
p-Isopropyltoluene	U		0.00268	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
2-Butanone (MEK)	U		0.0144	0.0250	0.0288	1.11	08/19/2018 15:51	WG1154430
Methylene Chloride	U		0.00765	0.0250	0.0288	1.11	08/17/2018 16:29	WG1153795
4-Methyl-2-pentanone (MIBK)	U		0.0115	0.0250	0.0288	1.11	08/17/2018 16:29	WG1153795
Methyl tert-butyl ether	U		0.000340	0.00100	0.00115	1.11	08/17/2018 16:29	WG1153795
Naphthalene	U		0.00359	0.0125	0.0144	1.11	08/17/2018 16:29	WG1153795
n-Propylbenzene	U		0.00136	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
Styrene	U		0.00315	0.0125	0.0144	1.11	08/17/2018 16:29	WG1153795
1,1,1,2-Tetrachloroethane	U		0.000576	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
1,1,2,2-Tetrachloroethane	U		0.000449	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
1,1,2-Trichlorotrifluoroethane	U		0.000778	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
Tetrachloroethene	U		0.000806	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
Toluene	0.00465	J	0.00144	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
1,2,3-Trichlorobenzene	U		0.000720	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
1,2,4-Trichlorobenzene	U		0.00555	0.0125	0.0144	1.11	08/17/2018 16:29	WG1153795
1,1,1-Trichloroethane	U		0.000317	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
1,1,2-Trichloroethane	U		0.00102	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
Trichloroethene	U		0.000461	0.00100	0.00115	1.11	08/17/2018 16:29	WG1153795
Trichlorofluoromethane	U		0.000576	0.00250	0.00288	1.11	08/17/2018 16:29	WG1153795
1,2,3-Trichloropropane	U		0.00588	0.0125	0.0144	1.11	08/17/2018 16:29	WG1153795
1,2,4-Trimethylbenzene	U		0.00134	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
1,2,3-Trimethylbenzene	U		0.00132	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
Vinyl chloride	U		0.000787	0.00250	0.00288	1.11	08/19/2018 15:51	WG1154430
1,3,5-Trimethylbenzene	U		0.00124	0.00500	0.00576	1.11	08/17/2018 16:29	WG1153795
Xylenes, Total	U		0.00551	0.00650	0.00749	1.11	08/17/2018 16:29	WG1153795
(S) Toluene-d8	*117*				*80.0-120*		*08/17/2018 16:29*	WG1153795
(S) Toluene-d8	*114*				*80.0-120*		*08/19/2018 15:51*	WG1154430
(S) Dibromofluoromethane	*94.5*				*74.0-131*		*08/17/2018 16:29*	WG1153795
(S) Dibromofluoromethane	*92.9*				*74.0-131*		*08/19/2018 15:51*	WG1154430
(S) 4-Bromofluorobenzene	*103*				*64.0-132*		*08/17/2018 16:29*	WG1153795
(S) 4-Bromofluorobenzene	*101*				*64.0-132*		*08/19/2018 15:51*	WG1154430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.38	4.00	4.15	1	08/20/2018 16:26	WG1153557
Residual Range Organics (RRO)	U		3.46	10.0	10.4	1	08/20/2018 16:26	WG1153557
(S) o-Terphenyl	*69.8*				*18.0-148*		*08/20/2018 16:26*	WG1153557

B-1 (9)

Collected date/time: 08/14/18 09:00

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.9		1	08/20/2018 14:20	WG1154707

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.00554	J	0.00292	0.0200	0.0209	1	08/17/2018 11:49	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.56		0.678	2.00	2.09	1	08/19/2018 11:55	WG1153500
Barium	85.7		0.177	0.500	0.521	1	08/19/2018 11:55	WG1153500
Cadmium	U		0.0730	0.500	0.521	1	08/19/2018 11:55	WG1153500
Chromium	31.0		0.146	1.00	1.04	1	08/19/2018 11:55	WG1153500
Lead	2.16		0.198	0.500	0.521	1	08/19/2018 11:55	WG1153500
Selenium	U		0.772	2.00	2.09	1	08/19/2018 11:55	WG1153500
Silver	U		0.292	1.00	1.04	1	08/19/2018 11:55	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.884	0.100	2.61	25	08/17/2018 06:09	WG1153541
(S) a,a,a-Trifluorotoluene(FID)	*109*				*77.0-120*		*08/17/2018 06:09*	WG1153541

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0143	0.0250	0.0261	1	08/19/2018 16:10	WG1154430
Acrylonitrile	U		0.00198	0.0125	0.0130	1	08/17/2018 16:50	WG1153795
Benzene	U		0.000417	0.00100	0.00104	1	08/17/2018 16:50	WG1153795
Bromobenzene	U		0.00109	0.0125	0.0130	1	08/17/2018 16:50	WG1153795
Bromodichloromethane	U		0.000822	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
Bromoform	U		0.00624	0.0250	0.0261	1	08/17/2018 16:50	WG1153795
Bromomethane	U		0.00386	0.0125	0.0130	1	08/17/2018 16:50	WG1153795
n-Butylbenzene	U		0.00400	0.0125	0.0130	1	08/17/2018 16:50	WG1153795
sec-Butylbenzene	U		0.00264	0.0125	0.0130	1	08/17/2018 16:50	WG1153795
tert-Butylbenzene	U		0.00162	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
Carbon tetrachloride	U		0.00113	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
Chlorobenzene	U		0.000598	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
Chlorodibromomethane	U		0.000469	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
Chloroethane	U		0.00113	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
Chloroform	U		0.000433	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
Chloromethane	U		0.00145	0.0125	0.0130	1	08/17/2018 16:50	WG1153795
2-Chlorotoluene	U		0.000959	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
4-Chlorotoluene	U		0.00118	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
1,2-Dibromo-3-Chloropropane	U		0.00532	0.0250	0.0261	1	08/17/2018 16:50	WG1153795
1,2-Dibromoethane	U		0.000547	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
Dibromomethane	U		0.00104	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
1,2-Dichlorobenzene	U		0.00151	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
1,3-Dichlorobenzene	U		0.00177	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
1,4-Dichlorobenzene	U		0.00205	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
Dichlorodifluoromethane	U		0.000853	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
1,1-Dichloroethane	U		0.000600	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
1,2-Dichloroethane	U		0.000495	0.00250	0.00261	1	08/17/2018 16:50	WG1153795

B-1 (9)

Collected date/time: 08/14/18 09:00

SAMPLE RESULTS - 02

L1017897

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000521	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
cis-1,2-Dichloroethene	U		0.000720	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
trans-1,2-Dichloroethene	U		0.00149	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
1,2-Dichloropropane	U		0.00132	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
1,1-Dichloropropene	U		0.000730	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
1,3-Dichloropropane	U	J4	0.00182	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
cis-1,3-Dichloropropene	U		0.000707	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
trans-1,3-Dichloropropene	U		0.00160	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
2,2-Dichloropropane	U		0.000827	0.00250	0.00261	1	08/19/2018 16:10	WG1154430
Di-isopropyl ether	U		0.000365	0.00100	0.00104	1	08/17/2018 16:50	WG1153795
Ethylbenzene	U		0.000553	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
Hexachloro-1,3-butadiene	U		0.0132	0.0250	0.0261	1	08/17/2018 16:50	WG1153795
Isopropylbenzene	U		0.000900	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
p-Isopropyltoluene	U		0.00243	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
2-Butanone (MEK)	U		0.0130	0.0250	0.0261	1	08/19/2018 16:10	WG1154430
Methylene Chloride	U		0.00692	0.0250	0.0261	1	08/17/2018 16:50	WG1153795
4-Methyl-2-pentanone (MIBK)	U		0.0104	0.0250	0.0261	1	08/17/2018 16:50	WG1153795
Methyl tert-butyl ether	U		0.000308	0.00100	0.00104	1	08/17/2018 16:50	WG1153795
Naphthalene	U		0.00325	0.0125	0.0130	1	08/17/2018 16:50	WG1153795
n-Propylbenzene	U		0.00123	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
Styrene	U		0.00285	0.0125	0.0130	1	08/17/2018 16:50	WG1153795
1,1,1,2-Tetrachloroethane	U		0.000521	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
1,1,2,2-Tetrachloroethane	U		0.000407	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
1,1,2-Trichlorotrifluoroethane	U		0.000704	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
Tetrachloroethene	U		0.000730	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
Toluene	0.00197	J	0.00130	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
1,2,3-Trichlorobenzene	U		0.000652	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
1,2,4-Trichlorobenzene	U		0.00503	0.0125	0.0130	1	08/17/2018 16:50	WG1153795
1,1,1-Trichloroethane	U		0.000287	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
1,1,2-Trichloroethane	U		0.000921	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
Trichloroethene	U		0.000417	0.00100	0.00104	1	08/17/2018 16:50	WG1153795
Trichlorofluoromethane	U		0.000521	0.00250	0.00261	1	08/17/2018 16:50	WG1153795
1,2,3-Trichloropropane	U		0.00532	0.0125	0.0130	1	08/17/2018 16:50	WG1153795
1,2,4-Trimethylbenzene	U		0.00121	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
1,2,3-Trimethylbenzene	U		0.00120	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
Vinyl chloride	U		0.000712	0.00250	0.00261	1	08/19/2018 16:10	WG1154430
1,3,5-Trimethylbenzene	U		0.00113	0.00500	0.00521	1	08/17/2018 16:50	WG1153795
Xylenes, Total	U		0.00498	0.00650	0.00678	1	08/17/2018 16:50	WG1153795
(S) Toluene-d8	*112*				*80.0-120*		*08/17/2018 16:50*	WG1153795
(S) Toluene-d8	*115*				*80.0-120*		*08/19/2018 16:10*	WG1154430
(S) Dibromofluoromethane	*92.1*				*74.0-131*		*08/17/2018 16:50*	WG1153795
(S) Dibromofluoromethane	*93.2*				*74.0-131*		*08/19/2018 16:10*	WG1154430
(S) 4-Bromofluorobenzene	*101*				*64.0-132*		*08/17/2018 16:50*	WG1153795
(S) 4-Bromofluorobenzene	*94.5*				*64.0-132*		*08/19/2018 16:10*	WG1154430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.39	4.00	4.17	1	08/20/2018 16:39	WG1153557
Residual Range Organics (RRO)	U		3.47	10.0	10.4	1	08/20/2018 16:39	WG1153557
(S) o-Terphenyl	*76.3*				*18.0-148*		*08/20/2018 16:39*	WG1153557

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.5		1	08/20/2018 14:20	WG1154707

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0153	J	0.00296	0.0200	0.0212	1	08/17/2018 11:57	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.13		0.688	2.00	2.12	1	08/19/2018 12:02	WG1153500
Barium	69.9		0.180	0.500	0.529	1	08/19/2018 12:02	WG1153500
Cadmium	U		0.0741	0.500	0.529	1	08/19/2018 12:02	WG1153500
Chromium	27.9		0.148	1.00	1.06	1	08/19/2018 12:02	WG1153500
Lead	2.06		0.201	0.500	0.529	1	08/19/2018 12:02	WG1153500
Selenium	U		0.783	2.00	2.12	1	08/19/2018 12:02	WG1153500
Silver	U		0.296	1.00	1.06	1	08/19/2018 12:02	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.933	0.100	2.75	26	08/17/2018 12:59	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*08/17/2018 12:59*	WG1153735

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0151	0.0250	0.0275	1.04	08/19/2018 16:30	WG1154430
Acrylonitrile	U		0.00209	0.0125	0.0138	1.04	08/17/2018 17:10	WG1153795
Benzene	U		0.000440	0.00100	0.00110	1.04	08/17/2018 17:10	WG1153795
Bromobenzene	U		0.00116	0.0125	0.0138	1.04	08/17/2018 17:10	WG1153795
Bromodichloromethane	U		0.000867	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
Bromoform	U		0.00658	0.0250	0.0275	1.04	08/17/2018 17:10	WG1153795
Bromomethane	U		0.00407	0.0125	0.0138	1.04	08/17/2018 17:10	WG1153795
n-Butylbenzene	U		0.00423	0.0125	0.0138	1.04	08/17/2018 17:10	WG1153795
sec-Butylbenzene	U		0.00278	0.0125	0.0138	1.04	08/17/2018 17:10	WG1153795
tert-Butylbenzene	U		0.00171	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
Carbon tetrachloride	U		0.00119	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
Chlorobenzene	U		0.000631	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
Chlorodibromomethane	U		0.000495	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
Chloroethane	U		0.00119	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
Chloroform	U		0.000457	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
Chloromethane	U		0.00153	0.0125	0.0138	1.04	08/17/2018 17:10	WG1153795
2-Chlorotoluene	U		0.00101	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
4-Chlorotoluene	U		0.00124	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
1,2-Dibromo-3-Chloropropane	U		0.00561	0.0250	0.0275	1.04	08/17/2018 17:10	WG1153795
1,2-Dibromoethane	U		0.000578	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
Dibromomethane	U		0.00110	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
1,2-Dichlorobenzene	U		0.00160	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
1,3-Dichlorobenzene	U		0.00187	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
1,4-Dichlorobenzene	U		0.00217	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
Dichlorodifluoromethane	U		0.000900	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
1,1-Dichloroethane	U		0.000633	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
1,2-Dichloroethane	U		0.000523	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795

B-2 (4)
Collected date/time: 08/14/18 09:30

SAMPLE RESULTS - 03

L1017897

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000550	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
cis-1,2-Dichloroethene	U		0.000759	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
trans-1,2-Dichloroethene	U		0.00157	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
1,2-Dichloropropane	U		0.00140	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
1,1-Dichloropropene	U		0.000770	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
1,3-Dichloropropane	U	J4	0.00193	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
cis-1,3-Dichloropropene	U		0.000746	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
trans-1,3-Dichloropropene	U		0.00168	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
2,2-Dichloropropane	U		0.000873	0.00250	0.00275	1.04	08/19/2018 16:30	WG1154430
Di-isopropyl ether	U		0.000385	0.00100	0.00110	1.04	08/17/2018 17:10	WG1153795
Ethylbenzene	0.000654	J	0.000583	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
Hexachloro-1,3-butadiene	U		0.0140	0.0250	0.0275	1.04	08/17/2018 17:10	WG1153795
Isopropylbenzene	U		0.000950	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
p-Isopropyltoluene	U		0.00256	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
2-Butanone (MEK)	U		0.0138	0.0250	0.0275	1.04	08/19/2018 16:30	WG1154430
Methylene Chloride	U		0.00731	0.0250	0.0275	1.04	08/17/2018 17:10	WG1153795
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0250	0.0275	1.04	08/17/2018 17:10	WG1153795
Methyl tert-butyl ether	U		0.000325	0.00100	0.00110	1.04	08/17/2018 17:10	WG1153795
Naphthalene	U		0.00343	0.0125	0.0138	1.04	08/17/2018 17:10	WG1153795
n-Propylbenzene	U		0.00130	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
Styrene	U		0.00300	0.0125	0.0138	1.04	08/17/2018 17:10	WG1153795
1,1,1,2-Tetrachloroethane	U		0.000550	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
1,1,2,2-Tetrachloroethane	U		0.000429	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
1,1,2-Trichlorotrifluoroethane	U		0.000743	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
Tetrachloroethene	U		0.000770	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
Toluene	0.00497	J	0.00138	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
1,2,3-Trichlorobenzene	U		0.000688	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
1,2,4-Trichlorobenzene	U		0.00531	0.0125	0.0138	1.04	08/17/2018 17:10	WG1153795
1,1,1-Trichloroethane	U		0.000303	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
1,1,2-Trichloroethane	U		0.000972	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
Trichloroethene	U		0.000440	0.00100	0.00110	1.04	08/17/2018 17:10	WG1153795
Trichlorofluoromethane	U		0.000550	0.00250	0.00275	1.04	08/17/2018 17:10	WG1153795
1,2,3-Trichloropropane	U		0.00561	0.0125	0.0138	1.04	08/17/2018 17:10	WG1153795
1,2,4-Trimethylbenzene	0.00135	J	0.00128	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
1,2,3-Trimethylbenzene	U		0.00127	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
Vinyl chloride	U		0.000752	0.00250	0.00275	1.04	08/19/2018 16:30	WG1154430
1,3,5-Trimethylbenzene	U		0.00119	0.00500	0.00550	1.04	08/17/2018 17:10	WG1153795
Xylenes, Total	U		0.00526	0.00650	0.00715	1.04	08/17/2018 17:10	WG1153795
(S) Toluene-d8	*113*				*80.0-120*		*08/17/2018 17:10*	WG1153795
(S) Toluene-d8	*114*				*80.0-120*		*08/19/2018 16:30*	WG1154430
(S) Dibromofluoromethane	*94.1*				*74.0-131*		*08/17/2018 17:10*	WG1153795
(S) Dibromofluoromethane	*93.4*				*74.0-131*		*08/19/2018 16:30*	WG1154430
(S) 4-Bromofluorobenzene	*103*				*64.0-132*		*08/17/2018 17:10*	WG1153795
(S) 4-Bromofluorobenzene	*96.2*				*64.0-132*		*08/19/2018 16:30*	WG1154430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.41	4.00	4.23	1	08/20/2018 16:52	WG1153557
Residual Range Organics (RRO)	U		3.52	10.0	10.6	1	08/20/2018 16:52	WG1153557
(S) o-Terphenyl	*65.8*				*18.0-148*		*08/20/2018 16:52*	WG1153557

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.5		1	08/20/2018 14:20	WG1154707

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.00950	J	0.00293	0.0200	0.0209	1	08/17/2018 11:59	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.87		0.681	2.00	2.09	1	08/19/2018 12:05	WG1153500
Barium	52.3		0.178	0.500	0.524	1	08/19/2018 12:05	WG1153500
Cadmium	U		0.0733	0.500	0.524	1	08/19/2018 12:05	WG1153500
Chromium	31.7		0.147	1.00	1.05	1	08/19/2018 12:05	WG1153500
Lead	1.56		0.199	0.500	0.524	1	08/19/2018 12:05	WG1153500
Selenium	U		0.775	2.00	2.09	1	08/19/2018 12:05	WG1153500
Silver	U		0.293	1.00	1.05	1	08/19/2018 12:05	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.888	0.100	2.62	25	08/17/2018 13:21	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*08/17/2018 13:21*	WG1153735

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0143	0.0250	0.0262	1	08/19/2018 16:49	WG1154430
Acrylonitrile	U		0.00199	0.0125	0.0131	1	08/17/2018 17:31	WG1153795
Benzene	U		0.000419	0.00100	0.00105	1	08/17/2018 17:31	WG1153795
Bromobenzene	U		0.00110	0.0125	0.0131	1	08/17/2018 17:31	WG1153795
Bromodichloromethane	U		0.000825	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
Bromoform	U		0.00626	0.0250	0.0262	1	08/17/2018 17:31	WG1153795
Bromomethane	U		0.00388	0.0125	0.0131	1	08/17/2018 17:31	WG1153795
n-Butylbenzene	U		0.00402	0.0125	0.0131	1	08/17/2018 17:31	WG1153795
sec-Butylbenzene	U		0.00265	0.0125	0.0131	1	08/17/2018 17:31	WG1153795
tert-Butylbenzene	U		0.00162	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
Carbon tetrachloride	U		0.00113	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
Chlorobenzene	U		0.000600	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
Chlorodibromomethane	U		0.000471	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
Chloroethane	U		0.00113	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
Chloroform	U		0.000435	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
Chloromethane	U		0.00146	0.0125	0.0131	1	08/17/2018 17:31	WG1153795
2-Chlorotoluene	U		0.000964	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
4-Chlorotoluene	U		0.00118	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
1,2-Dibromo-3-Chloropropane	U		0.00534	0.0250	0.0262	1	08/17/2018 17:31	WG1153795
1,2-Dibromoethane	U		0.000550	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
Dibromomethane	U		0.00105	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
1,2-Dichlorobenzene	U		0.00152	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
1,3-Dichlorobenzene	U		0.00178	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
1,4-Dichlorobenzene	U		0.00206	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
Dichlorodifluoromethane	U		0.000857	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
1,1-Dichloroethane	U		0.000602	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
1,2-Dichloroethane	U		0.000497	0.00250	0.00262	1	08/17/2018 17:31	WG1153795

B-2 (8)

Collected date/time: 08/14/18 09:40

SAMPLE RESULTS - 04

L1017897

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000524	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
cis-1,2-Dichloroethene	U		0.000723	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
trans-1,2-Dichloroethene	U		0.00150	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
1,2-Dichloropropane	U		0.00133	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
1,1-Dichloropropene	U		0.000733	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
1,3-Dichloropropane	U	J4	0.00183	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
cis-1,3-Dichloropropene	U		0.000710	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
trans-1,3-Dichloropropene	U		0.00160	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
2,2-Dichloropropane	U		0.000831	0.00250	0.00262	1	08/19/2018 16:49	WG1154430
Di-isopropyl ether	U		0.000367	0.00100	0.00105	1	08/17/2018 17:31	WG1153795
Ethylbenzene	U		0.000555	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
Hexachloro-1,3-butadiene	U		0.0133	0.0250	0.0262	1	08/17/2018 17:31	WG1153795
Isopropylbenzene	U		0.000904	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
p-Isopropyltoluene	U		0.00244	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
2-Butanone (MEK)	U		0.0131	0.0250	0.0262	1	08/19/2018 16:49	WG1154430
Methylene Chloride	U		0.00695	0.0250	0.0262	1	08/17/2018 17:31	WG1153795
4-Methyl-2-pentanone (MIBK)	U		0.0105	0.0250	0.0262	1	08/17/2018 17:31	WG1153795
Methyl tert-butyl ether	U		0.000309	0.00100	0.00105	1	08/17/2018 17:31	WG1153795
Naphthalene	U		0.00327	0.0125	0.0131	1	08/17/2018 17:31	WG1153795
n-Propylbenzene	U		0.00124	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
Styrene	U		0.00286	0.0125	0.0131	1	08/17/2018 17:31	WG1153795
1,1,1,2-Tetrachloroethane	U		0.000524	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
1,1,2,2-Tetrachloroethane	U		0.000408	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
1,1,2-Trichlorotrifluoroethane	U		0.000707	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
Tetrachloroethene	U		0.000733	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
Toluene	0.00459	J	0.00131	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
1,2,3-Trichlorobenzene	U		0.000655	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
1,2,4-Trichlorobenzene	U		0.00505	0.0125	0.0131	1	08/17/2018 17:31	WG1153795
1,1,1-Trichloroethane	U		0.000288	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
1,1,2-Trichloroethane	U		0.000925	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
Trichloroethene	U		0.000419	0.00100	0.00105	1	08/17/2018 17:31	WG1153795
Trichlorofluoromethane	U		0.000524	0.00250	0.00262	1	08/17/2018 17:31	WG1153795
1,2,3-Trichloropropane	U		0.00534	0.0125	0.0131	1	08/17/2018 17:31	WG1153795
1,2,4-Trimethylbenzene	U		0.00121	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
1,2,3-Trimethylbenzene	U		0.00120	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
Vinyl chloride	U		0.000715	0.00250	0.00262	1	08/19/2018 16:49	WG1154430
1,3,5-Trimethylbenzene	U		0.00113	0.00500	0.00524	1	08/17/2018 17:31	WG1153795
Xylenes, Total	U		0.00501	0.00650	0.00681	1	08/17/2018 17:31	WG1153795
(S) Toluene-d8	*111*				*80.0-120*		*08/17/2018 17:31*	WG1153795
(S) Toluene-d8	*113*				*80.0-120*		*08/19/2018 16:49*	WG1154430
(S) Dibromofluoromethane	*93.9*				*74.0-131*		*08/17/2018 17:31*	WG1153795
(S) Dibromofluoromethane	*95.2*				*74.0-131*		*08/19/2018 16:49*	WG1154430
(S) 4-Bromofluorobenzene	*103*				*64.0-132*		*08/17/2018 17:31*	WG1153795
(S) 4-Bromofluorobenzene	*90.8*				*64.0-132*		*08/19/2018 16:49*	WG1154430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.39	4.00	4.19	1	08/20/2018 17:05	WG1153557
Residual Range Organics (RRO)	U		3.49	10.0	10.5	1	08/20/2018 17:05	WG1153557
(S) o-Terphenyl	*79.8*				*18.0-148*		*08/20/2018 17:05*	WG1153557

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.8		1	08/20/2018 14:20	WG1154707

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0214	J	0.00302	0.0200	0.0215	1	08/17/2018 12:02	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	81.7		0.700	2.00	2.15	1	08/19/2018 12:07	WG1153500
Barium	62.9		0.183	0.500	0.539	1	08/19/2018 12:07	WG1153500
Cadmium	0.199	J	0.0754	0.500	0.539	1	08/19/2018 12:07	WG1153500
Chromium	25.2		0.151	1.00	1.08	1	08/19/2018 12:07	WG1153500
Lead	27.2		0.205	0.500	0.539	1	08/19/2018 12:07	WG1153500
Selenium	U		0.797	2.00	2.15	1	08/19/2018 12:07	WG1153500
Silver	U		0.302	1.00	1.08	1	08/19/2018 12:07	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.913	0.100	2.69	25	08/17/2018 13:43	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*08/17/2018 13:43*	WG1153735

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0148	0.0250	0.0269	1	08/19/2018 17:08	WG1154430
Acrylonitrile	U		0.00205	0.0125	0.0135	1	08/17/2018 17:51	WG1153795
Benzene	U		0.000431	0.00100	0.00108	1	08/17/2018 17:51	WG1153795
Bromobenzene	U		0.00113	0.0125	0.0135	1	08/17/2018 17:51	WG1153795
Bromodichloromethane	U		0.000849	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
Bromoform	U		0.00644	0.0250	0.0269	1	08/17/2018 17:51	WG1153795
Bromomethane	U		0.00399	0.0125	0.0135	1	08/17/2018 17:51	WG1153795
n-Butylbenzene	U		0.00414	0.0125	0.0135	1	08/17/2018 17:51	WG1153795
sec-Butylbenzene	U		0.00273	0.0125	0.0135	1	08/17/2018 17:51	WG1153795
tert-Butylbenzene	U		0.00167	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
Carbon tetrachloride	U		0.00116	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
Chlorobenzene	U		0.000617	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
Chlorodibromomethane	U		0.000485	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
Chloroethane	U		0.00116	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
Chloroform	U		0.000447	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
Chloromethane	U		0.00150	0.0125	0.0135	1	08/17/2018 17:51	WG1153795
2-Chlorotoluene	U		0.000991	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
4-Chlorotoluene	U		0.00122	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
1,2-Dibromo-3-Chloropropane	U		0.00549	0.0250	0.0269	1	08/17/2018 17:51	WG1153795
1,2-Dibromoethane	U		0.000565	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
Dibromomethane	U		0.00108	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
1,2-Dichlorobenzene	U		0.00156	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
1,3-Dichlorobenzene	U		0.00183	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
1,4-Dichlorobenzene	U		0.00212	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
Dichlorodifluoromethane	U		0.000881	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
1,1-Dichloroethane	U		0.000619	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
1,2-Dichloroethane	U		0.000512	0.00250	0.00269	1	08/17/2018 17:51	WG1153795

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000539	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
cis-1,2-Dichloroethene	U		0.000743	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
trans-1,2-Dichloroethene	U		0.00154	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
1,2-Dichloropropane	U		0.00137	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
1,1-Dichloropropene	U		0.000754	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
1,3-Dichloropropane	U	J4	0.00188	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
cis-1,3-Dichloropropene	U		0.000730	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
trans-1,3-Dichloropropene	U		0.00165	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
2,2-Dichloropropane	U		0.000854	0.00250	0.00269	1	08/19/2018 17:08	WG1154430
Di-isopropyl ether	U		0.000377	0.00100	0.00108	1	08/17/2018 17:51	WG1153795
Ethylbenzene	0.000991	J	0.000571	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
Hexachloro-1,3-butadiene	U		0.0137	0.0250	0.0269	1	08/17/2018 17:51	WG1153795
Isopropylbenzene	U		0.000930	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
p-Isopropyltoluene	U		0.00251	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
2-Butanone (MEK)	U		0.0135	0.0250	0.0269	1	08/19/2018 17:08	WG1154430
Methylene Chloride	U		0.00715	0.0250	0.0269	1	08/17/2018 17:51	WG1153795
4-Methyl-2-pentanone (MIBK)	U		0.0108	0.0250	0.0269	1	08/17/2018 17:51	WG1153795
Methyl tert-butyl ether	U		0.000318	0.00100	0.00108	1	08/17/2018 17:51	WG1153795
Naphthalene	0.00825	J	0.00336	0.0125	0.0135	1	08/17/2018 17:51	WG1153795
n-Propylbenzene	U		0.00127	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
Styrene	U		0.00294	0.0125	0.0135	1	08/17/2018 17:51	WG1153795
1,1,1,2-Tetrachloroethane	U		0.000539	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
1,1,2,2-Tetrachloroethane	U		0.000420	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
1,1,2-Trichlorotrifluoroethane	U		0.000727	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
Tetrachloroethene	U		0.000754	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
Toluene	0.00236	J	0.00135	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
1,2,3-Trichlorobenzene	U		0.000673	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
1,2,4-Trichlorobenzene	U		0.00519	0.0125	0.0135	1	08/17/2018 17:51	WG1153795
1,1,1-Trichloroethane	U		0.000296	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
1,1,2-Trichloroethane	U		0.000951	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
Trichloroethene	U		0.000431	0.00100	0.00108	1	08/17/2018 17:51	WG1153795
Trichlorofluoromethane	U		0.000539	0.00250	0.00269	1	08/17/2018 17:51	WG1153795
1,2,3-Trichloropropane	U		0.00549	0.0125	0.0135	1	08/17/2018 17:51	WG1153795
1,2,4-Trimethylbenzene	0.0153		0.00125	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
1,2,3-Trimethylbenzene	0.00624		0.00124	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
Vinyl chloride	U		0.000736	0.00250	0.00269	1	08/19/2018 17:08	WG1154430
1,3,5-Trimethylbenzene	0.00591		0.00116	0.00500	0.00539	1	08/17/2018 17:51	WG1153795
Xylenes, Total	0.00700	J	0.00515	0.00650	0.00700	1	08/17/2018 17:51	WG1153795
(S) Toluene-d8	*111*				*80.0-120*		*08/17/2018 17:51*	WG1153795
(S) Toluene-d8	*113*				*80.0-120*		*08/19/2018 17:08*	WG1154430
(S) Dibromofluoromethane	*93.6*				*74.0-131*		*08/17/2018 17:51*	WG1153795
(S) Dibromofluoromethane	*95.6*				*74.0-131*		*08/19/2018 17:08*	WG1154430
(S) 4-Bromofluorobenzene	*104*				*64.0-132*		*08/17/2018 17:51*	WG1153795
(S) 4-Bromofluorobenzene	*99.1*				*64.0-132*		*08/19/2018 17:08*	WG1154430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	79.0		1.43	4.00	4.31	1	08/20/2018 19:14	WG1153557
Residual Range Organics (RRO)	127		3.59	10.0	10.8	1	08/20/2018 19:14	WG1153557
(S) o-Terphenyl	*78.8*				*18.0-148*		*08/20/2018 19:14*	WG1153557

B-3 (10)
Collected date/time: 08/14/18 10:10

SAMPLE RESULTS - 06
L1017897

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.0		1	08/20/2018 14:20	WG1154707

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.00690	J	0.00292	0.0200	0.0208	1	08/17/2018 12:04	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.68		0.677	2.00	2.08	1	08/19/2018 12:10	WG1153500
Barium	52.3		0.177	0.500	0.521	1	08/19/2018 12:10	WG1153500
Cadmium	U		0.0729	0.500	0.521	1	08/19/2018 12:10	WG1153500
Chromium	16.3		0.146	1.00	1.04	1	08/19/2018 12:10	WG1153500
Lead	1.80		0.198	0.500	0.521	1	08/19/2018 12:10	WG1153500
Selenium	U		0.770	2.00	2.08	1	08/19/2018 12:10	WG1153500
Silver	U		0.292	1.00	1.04	1	08/19/2018 12:10	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.944	0.100	2.79	26.75	08/17/2018 14:05	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*08/17/2018 14:05*	WG1153735

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0153	0.0250	0.0279	1.07	08/19/2018 17:28	WG1154430
Acrylonitrile	U		0.00212	0.0125	0.0139	1.07	08/17/2018 18:12	WG1153795
Benzene	0.000521	J	0.000446	0.00100	0.00111	1.07	08/17/2018 18:12	WG1153795
Bromobenzene	U		0.00117	0.0125	0.0139	1.07	08/17/2018 18:12	WG1153795
Bromodichloromethane	U		0.000878	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
Bromoform	U		0.00666	0.0250	0.0279	1.07	08/17/2018 18:12	WG1153795
Bromomethane	U		0.00412	0.0125	0.0139	1.07	08/17/2018 18:12	WG1153795
n-Butylbenzene	U		0.00428	0.0125	0.0139	1.07	08/17/2018 18:12	WG1153795
sec-Butylbenzene	U		0.00282	0.0125	0.0139	1.07	08/17/2018 18:12	WG1153795
tert-Butylbenzene	U		0.00173	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
Carbon tetrachloride	U		0.00120	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
Chlorobenzene	U		0.000638	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
Chlorodibromomethane	U		0.000501	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
Chloroethane	U		0.00120	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
Chloroform	U		0.000462	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
Chloromethane	U		0.00155	0.0125	0.0139	1.07	08/17/2018 18:12	WG1153795
2-Chlorotoluene	U		0.00102	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
4-Chlorotoluene	U		0.00126	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
1,2-Dibromo-3-Chloropropane	U		0.00568	0.0250	0.0279	1.07	08/17/2018 18:12	WG1153795
1,2-Dibromoethane	U		0.000585	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
Dibromomethane	U		0.00111	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
1,2-Dichlorobenzene	U		0.00162	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
1,3-Dichlorobenzene	U		0.00189	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
1,4-Dichlorobenzene	U		0.00219	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
Dichlorodifluoromethane	U		0.000911	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
1,1-Dichloroethane	U		0.000641	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
1,2-Dichloroethane	U		0.000529	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000557	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
cis-1,2-Dichloroethene	U		0.000769	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
trans-1,2-Dichloroethene	U		0.00159	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
1,2-Dichloropropane	U		0.00141	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
1,1-Dichloropropene	U		0.000780	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
1,3-Dichloropropane	U	J4	0.00195	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
cis-1,3-Dichloropropene	U		0.000755	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
trans-1,3-Dichloropropene	U		0.00170	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
2,2-Dichloropropane	U		0.000883	0.00250	0.00279	1.07	08/19/2018 17:28	WG1154430
Di-isopropyl ether	U		0.000390	0.00100	0.00111	1.07	08/17/2018 18:12	WG1153795
Ethylbenzene	U		0.000590	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
Hexachloro-1,3-butadiene	U		0.0141	0.0250	0.0279	1.07	08/17/2018 18:12	WG1153795
Isopropylbenzene	U		0.000961	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
p-Isopropyltoluene	U		0.00260	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
2-Butanone (MEK)	U		0.0139	0.0250	0.0279	1.07	08/19/2018 17:28	WG1154430
Methylene Chloride	U		0.00740	0.0250	0.0279	1.07	08/17/2018 18:12	WG1153795
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0250	0.0279	1.07	08/17/2018 18:12	WG1153795
Methyl tert-butyl ether	U		0.000329	0.00100	0.00111	1.07	08/17/2018 18:12	WG1153795
Naphthalene	U		0.00348	0.0125	0.0139	1.07	08/17/2018 18:12	WG1153795
n-Propylbenzene	U		0.00131	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
Styrene	U		0.00304	0.0125	0.0139	1.07	08/17/2018 18:12	WG1153795
1,1,1,2-Tetrachloroethane	U		0.000557	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
1,1,2,2-Tetrachloroethane	U		0.000434	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
1,1,2-Trichlorotrifluoroethane	U		0.000752	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
Tetrachloroethene	0.00130	J	0.000780	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
Toluene	0.0114		0.00139	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
1,2,3-Trichlorobenzene	U		0.000696	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
1,2,4-Trichlorobenzene	U		0.00537	0.0125	0.0139	1.07	08/17/2018 18:12	WG1153795
1,1,1-Trichloroethane	U		0.000306	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
1,1,2-Trichloroethane	U		0.000984	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
Trichloroethene	U		0.000446	0.00100	0.00111	1.07	08/17/2018 18:12	WG1153795
Trichlorofluoromethane	U		0.000557	0.00250	0.00279	1.07	08/17/2018 18:12	WG1153795
1,2,3-Trichloropropane	U		0.00568	0.0125	0.0139	1.07	08/17/2018 18:12	WG1153795
1,2,4-Trimethylbenzene	0.00145	J	0.00129	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
1,2,3-Trimethylbenzene	U		0.00128	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
Vinyl chloride	U		0.000761	0.00250	0.00279	1.07	08/19/2018 17:28	WG1154430
1,3,5-Trimethylbenzene	U		0.00120	0.00500	0.00557	1.07	08/17/2018 18:12	WG1153795
Xylenes, Total	U		0.00533	0.00650	0.00724	1.07	08/17/2018 18:12	WG1153795
(S) Toluene-d8	*114*				*80.0-120*		*08/17/2018 18:12*	WG1153795
(S) Toluene-d8	*114*				*80.0-120*		*08/19/2018 17:28*	WG1154430
(S) Dibromofluoromethane	*93.2*				*74.0-131*		*08/17/2018 18:12*	WG1153795
(S) Dibromofluoromethane	*94.2*				*74.0-131*		*08/19/2018 17:28*	WG1154430
(S) 4-Bromofluorobenzene	*106*				*64.0-132*		*08/17/2018 18:12*	WG1153795
(S) 4-Bromofluorobenzene	*102*				*64.0-132*		*08/19/2018 17:28*	WG1154430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.38	4.00	4.16	1	08/20/2018 17:17	WG1153557
Residual Range Organics (RRO)	U		3.47	10.0	10.4	1	08/20/2018 17:17	WG1153557
(S) o-Terphenyl	*71.0*				*18.0-148*		*08/20/2018 17:17*	WG1153557

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.3		1	08/20/2018 14:20	WG1154707

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0117	J	0.00297	0.0200	0.0212	1	08/17/2018 12:07	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.40		0.690	2.00	2.12	1	08/19/2018 12:12	WG1153500
Barium	96.4		0.180	0.500	0.530	1	08/19/2018 12:12	WG1153500
Cadmium	U		0.0743	0.500	0.530	1	08/19/2018 12:12	WG1153500
Chromium	36.6		0.149	1.00	1.06	1	08/19/2018 12:12	WG1153500
Lead	2.13		0.202	0.500	0.530	1	08/19/2018 12:12	WG1153500
Selenium	U		0.785	2.00	2.12	1	08/19/2018 12:12	WG1153500
Silver	U		0.297	1.00	1.06	1	08/19/2018 12:12	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.899	0.100	2.65	25	08/17/2018 14:26	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*08/17/2018 14:26*	WG1153735

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0145	0.0250	0.0265	1	08/19/2018 17:48	WG1154430
Acrylonitrile	U		0.00202	0.0125	0.0133	1	08/17/2018 18:33	WG1153795
Benzene	U		0.000424	0.00100	0.00106	1	08/17/2018 18:33	WG1153795
Bromobenzene	U		0.00111	0.0125	0.0133	1	08/17/2018 18:33	WG1153795
Bromodichloromethane	U		0.000836	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
Bromoform	U		0.00634	0.0250	0.0265	1	08/17/2018 18:33	WG1153795
Bromomethane	U		0.00393	0.0125	0.0133	1	08/17/2018 18:33	WG1153795
n-Butylbenzene	U		0.00407	0.0125	0.0133	1	08/17/2018 18:33	WG1153795
sec-Butylbenzene	U		0.00268	0.0125	0.0133	1	08/17/2018 18:33	WG1153795
tert-Butylbenzene	U		0.00164	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
Carbon tetrachloride	U		0.00115	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
Chlorobenzene	U		0.000608	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
Chlorodibromomethane	U		0.000477	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
Chloroethane	U		0.00115	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
Chloroform	U		0.000440	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
Chloromethane	U		0.00147	0.0125	0.0133	1	08/17/2018 18:33	WG1153795
2-Chlorotoluene	U		0.000976	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
4-Chlorotoluene	U		0.00120	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
1,2-Dibromo-3-Chloropropane	U		0.00541	0.0250	0.0265	1	08/17/2018 18:33	WG1153795
1,2-Dibromoethane	U		0.000557	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
Dibromomethane	U		0.00106	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
1,2-Dichlorobenzene	U		0.00154	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
1,3-Dichlorobenzene	U		0.00180	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
1,4-Dichlorobenzene	U		0.00209	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
Dichlorodifluoromethane	U		0.000868	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
1,1-Dichloroethane	U		0.000610	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
1,2-Dichloroethane	U		0.000504	0.00250	0.00265	1	08/17/2018 18:33	WG1153795

B-4 (3)

SAMPLE RESULTS - 07

Collected date/time: 08/14/18 10:30

L1017897

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000530	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
cis-1,2-Dichloroethene	U		0.000732	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
trans-1,2-Dichloroethene	U		0.00152	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
1,2-Dichloropropane	U		0.00135	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
1,1-Dichloropropene	U		0.000743	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
1,3-Dichloropropane	U	J4	0.00186	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
cis-1,3-Dichloropropene	U		0.000719	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
trans-1,3-Dichloropropene	U		0.00162	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
2,2-Dichloropropane	U		0.000841	0.00250	0.00265	1	08/19/2018 17:48	WG1154430
Di-isopropyl ether	U		0.000371	0.00100	0.00106	1	08/17/2018 18:33	WG1153795
Ethylbenzene	U		0.000562	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
Hexachloro-1,3-butadiene	U		0.0135	0.0250	0.0265	1	08/17/2018 18:33	WG1153795
Isopropylbenzene	U		0.000916	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
p-Isopropyltoluene	U		0.00247	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
2-Butanone (MEK)	U		0.0133	0.0250	0.0265	1	08/19/2018 17:48	WG1154430
Methylene Chloride	U		0.00704	0.0250	0.0265	1	08/17/2018 18:33	WG1153795
4-Methyl-2-pentanone (MIBK)	U		0.0106	0.0250	0.0265	1	08/17/2018 18:33	WG1153795
Methyl tert-butyl ether	U		0.000313	0.00100	0.00106	1	08/17/2018 18:33	WG1153795
Naphthalene	U		0.00331	0.0125	0.0133	1	08/17/2018 18:33	WG1153795
n-Propylbenzene	U		0.00125	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
Styrene	U		0.00290	0.0125	0.0133	1	08/17/2018 18:33	WG1153795
1,1,1,2-Tetrachloroethane	U		0.000530	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
1,1,2,2-Tetrachloroethane	U		0.000414	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
1,1,2-Trichlorotrifluoroethane	U		0.000716	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
Tetrachloroethene	0.00138	J	0.000743	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
Toluene	0.00638		0.00133	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
1,2,3-Trichlorobenzene	U		0.000663	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
1,2,4-Trichlorobenzene	U		0.00511	0.0125	0.0133	1	08/17/2018 18:33	WG1153795
1,1,1-Trichloroethane	U		0.000292	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
1,1,2-Trichloroethane	U		0.000937	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
Trichloroethene	U		0.000424	0.00100	0.00106	1	08/17/2018 18:33	WG1153795
Trichlorofluoromethane	U		0.000530	0.00250	0.00265	1	08/17/2018 18:33	WG1153795
1,2,3-Trichloropropane	U		0.00541	0.0125	0.0133	1	08/17/2018 18:33	WG1153795
1,2,4-Trimethylbenzene	U		0.00123	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
1,2,3-Trimethylbenzene	U		0.00122	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
Vinyl chloride	U		0.000725	0.00250	0.00265	1	08/19/2018 17:48	WG1154430
1,3,5-Trimethylbenzene	U		0.00115	0.00500	0.00530	1	08/17/2018 18:33	WG1153795
Xylenes, Total	U		0.00507	0.00650	0.00690	1	08/17/2018 18:33	WG1153795
(S) Toluene-d8	*115*				*80.0-120*		*08/17/2018 18:33*	WG1153795
(S) Toluene-d8	*113*				*80.0-120*		*08/19/2018 17:48*	WG1154430
(S) Dibromofluoromethane	*90.6*				*74.0-131*		*08/17/2018 18:33*	WG1153795
(S) Dibromofluoromethane	*95.4*				*74.0-131*		*08/19/2018 17:48*	WG1154430
(S) 4-Bromofluorobenzene	*103*				*64.0-132*		*08/17/2018 18:33*	WG1153795
(S) 4-Bromofluorobenzene	*89.1*				*64.0-132*		*08/19/2018 17:48*	WG1154430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.41	4.00	4.24	1	08/20/2018 15:47	WG1153557
Residual Range Organics (RRO)	U		3.53	10.0	10.6	1	08/20/2018 15:47	WG1153557
(S) o-Terphenyl	*68.4*				*18.0-148*		*08/20/2018 15:47*	WG1153557

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.1		1	08/20/2018 14:20	WG1154707

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.00538	J	0.00292	0.0200	0.0208	1	08/17/2018 12:09	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.93		0.677	2.00	2.08	1	08/19/2018 12:15	WG1153500
Barium	83.9		0.177	0.500	0.521	1	08/19/2018 12:15	WG1153500
Cadmium	U		0.0729	0.500	0.521	1	08/19/2018 12:15	WG1153500
Chromium	44.8		0.146	1.00	1.04	1	08/19/2018 12:15	WG1153500
Lead	6.73		0.198	0.500	0.521	1	08/19/2018 12:15	WG1153500
Selenium	U		0.770	2.00	2.08	1	08/19/2018 12:15	WG1153500
Silver	U		0.292	1.00	1.04	1	08/19/2018 12:15	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.882	0.100	2.60	25	08/17/2018 14:48	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*08/17/2018 14:48*	WG1153735

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0143	0.0250	0.0260	1	08/18/2018 14:16	WG1154260
Acrylonitrile	U		0.00198	0.0125	0.0130	1	08/18/2018 14:16	WG1154260
Benzene	U		0.000416	0.00100	0.00104	1	08/18/2018 14:16	WG1154260
Bromobenzene	U		0.00109	0.0125	0.0130	1	08/18/2018 14:16	WG1154260
Bromodichloromethane	U		0.000820	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
Bromoform	U		0.00623	0.0250	0.0260	1	08/18/2018 14:16	WG1154260
Bromomethane	U		0.00385	0.0125	0.0130	1	08/18/2018 14:16	WG1154260
n-Butylbenzene	U		0.00400	0.0125	0.0130	1	08/18/2018 14:16	WG1154260
sec-Butylbenzene	U		0.00263	0.0125	0.0130	1	08/18/2018 14:16	WG1154260
tert-Butylbenzene	U		0.00161	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
Carbon tetrachloride	U		0.00112	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
Chlorobenzene	U		0.000597	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
Chlorodibromomethane	U		0.000468	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
Chloroethane	U		0.00112	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
Chloroform	U		0.000432	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
Chloromethane	U		0.00145	0.0125	0.0130	1	08/18/2018 14:16	WG1154260
2-Chlorotoluene	U		0.000958	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
4-Chlorotoluene	U		0.00118	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00531	0.0250	0.0260	1	08/18/2018 14:16	WG1154260
1,2-Dibromoethane	U		0.000547	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
Dibromomethane	U		0.00104	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
1,2-Dichlorobenzene	U		0.00151	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
1,3-Dichlorobenzene	U		0.00177	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
1,4-Dichlorobenzene	U		0.00205	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
Dichlorodifluoromethane	U		0.000852	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
1,1-Dichloroethane	U		0.000599	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
1,2-Dichloroethane	U		0.000495	0.00250	0.00260	1	08/18/2018 14:16	WG1154260

B-4 (6)
Collected date/time: 08/14/18 10:35

SAMPLE RESULTS - 08

L1017897

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000521	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
cis-1,2-Dichloroethene	U		0.000718	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
trans-1,2-Dichloroethene	U		0.00149	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
1,2-Dichloropropane	U		0.00132	0.00500	0.00521	1	08/19/2018 12:50	WG1154491
1,1-Dichloropropene	U		0.000729	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
1,3-Dichloropropane	U		0.00182	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
cis-1,3-Dichloropropene	U		0.000706	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
trans-1,3-Dichloropropene	U		0.00159	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
2,2-Dichloropropane	U		0.000826	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
Di-isopropyl ether	U		0.000364	0.00100	0.00104	1	08/18/2018 14:16	WG1154260
Ethylbenzene	0.00101	J	0.000552	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
Hexachloro-1,3-butadiene	U		0.0132	0.0250	0.0260	1	08/19/2018 12:50	WG1154491
Isopropylbenzene	U		0.000898	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
p-Isopropyltoluene	U		0.00243	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
2-Butanone (MEK)	0.0306		0.0130	0.0250	0.0260	1	08/19/2018 12:50	WG1154491
Methylene Chloride	U		0.00691	0.0250	0.0260	1	08/18/2018 14:16	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0104	0.0250	0.0260	1	08/18/2018 14:16	WG1154260
Methyl tert-butyl ether	U		0.000307	0.00100	0.00104	1	08/18/2018 14:16	WG1154260
Naphthalene	U		0.00325	0.0125	0.0130	1	08/18/2018 14:16	WG1154260
n-Propylbenzene	U		0.00123	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
Styrene	U		0.00284	0.0125	0.0130	1	08/18/2018 14:16	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000521	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000406	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.000703	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
Tetrachloroethene	0.00463		0.000729	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
Toluene	0.00668		0.00130	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
1,2,3-Trichlorobenzene	U		0.000651	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
1,2,4-Trichlorobenzene	U		0.00502	0.0125	0.0130	1	08/18/2018 14:16	WG1154260
1,1,1-Trichloroethane	U		0.000286	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
1,1,2-Trichloroethane	U		0.000919	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
Trichloroethene	U		0.000416	0.00100	0.00104	1	08/18/2018 14:16	WG1154260
Trichlorofluoromethane	U		0.000521	0.00250	0.00260	1	08/18/2018 14:16	WG1154260
1,2,3-Trichloropropane	U		0.00531	0.0125	0.0130	1	08/18/2018 14:16	WG1154260
1,2,4-Trimethylbenzene	0.00394	J	0.00121	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
1,2,3-Trimethylbenzene	0.00161	J	0.00120	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
Vinyl chloride	U		0.000711	0.00250	0.00260	1	08/19/2018 12:50	WG1154491
1,3,5-Trimethylbenzene	0.00181	J	0.00112	0.00500	0.00521	1	08/18/2018 14:16	WG1154260
Xylenes, Total	0.0118		0.00498	0.00650	0.00677	1	08/18/2018 14:16	WG1154260
(S) Toluene-d8	*107*				*80.0-120*		*08/18/2018 14:16*	WG1154260
(S) Toluene-d8	*109*				*80.0-120*		*08/19/2018 12:50*	WG1154491
(S) Dibromofluoromethane	*99.2*				*74.0-131*		*08/18/2018 14:16*	WG1154260
(S) Dibromofluoromethane	*105*				*74.0-131*		*08/19/2018 12:50*	WG1154491
(S) 4-Bromofluorobenzene	*97.6*				*64.0-132*		*08/18/2018 14:16*	WG1154260
(S) 4-Bromofluorobenzene	*98.7*				*64.0-132*		*08/19/2018 12:50*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	6.89		1.38	4.00	4.16	1	08/20/2018 17:30	WG1153557
Residual Range Organics (RRO)	10.7		3.47	10.0	10.4	1	08/20/2018 17:30	WG1153557
(S) o-Terphenyl	*68.8*				*18.0-148*		*08/20/2018 17:30*	WG1153557

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.0		1	08/20/2018 11:13	WG1154708

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0107	J	0.00295	0.0200	0.0211	1	08/17/2018 12:12	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.51		0.684	2.00	2.11	1	08/19/2018 12:17	WG1153500
Barium	63.9		0.179	0.500	0.526	1	08/19/2018 12:17	WG1153500
Cadmium	U		0.0737	0.500	0.526	1	08/19/2018 12:17	WG1153500
Chromium	23.8		0.147	1.00	1.05	1	08/19/2018 12:17	WG1153500
Lead	1.90		0.200	0.500	0.526	1	08/19/2018 12:17	WG1153500
Selenium	U		0.779	2.00	2.11	1	08/19/2018 12:17	WG1153500
Silver	U		0.295	1.00	1.05	1	08/19/2018 12:17	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.892	0.100	2.63	25	08/17/2018 15:10	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*08/17/2018 15:10*	WG1153735

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0144	0.0250	0.0263	1	08/18/2018 14:36	WG1154260
Acrylonitrile	U		0.00200	0.0125	0.0132	1	08/18/2018 14:36	WG1154260
Benzene	U		0.000421	0.00100	0.00105	1	08/18/2018 14:36	WG1154260
Bromobenzene	U		0.00111	0.0125	0.0132	1	08/18/2018 14:36	WG1154260
Bromodichloromethane	U		0.000830	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
Bromoform	U		0.00630	0.0250	0.0263	1	08/18/2018 14:36	WG1154260
Bromomethane	U		0.00390	0.0125	0.0132	1	08/18/2018 14:36	WG1154260
n-Butylbenzene	U		0.00404	0.0125	0.0132	1	08/18/2018 14:36	WG1154260
sec-Butylbenzene	U		0.00266	0.0125	0.0132	1	08/18/2018 14:36	WG1154260
tert-Butylbenzene	U		0.00163	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
Carbon tetrachloride	U		0.00114	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
Chlorobenzene	U		0.000603	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
Chlorodibromomethane	U		0.000474	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
Chloroethane	U		0.00114	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
Chloroform	U		0.000437	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
Chloromethane	U		0.00146	0.0125	0.0132	1	08/18/2018 14:36	WG1154260
2-Chlorotoluene	U		0.000969	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
4-Chlorotoluene	U		0.00119	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00537	0.0250	0.0263	1	08/18/2018 14:36	WG1154260
1,2-Dibromoethane	U		0.000553	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
Dibromomethane	U		0.00105	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
1,2-Dichlorobenzene	U		0.00153	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
1,3-Dichlorobenzene	U		0.00179	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
1,4-Dichlorobenzene	U		0.00207	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
Dichlorodifluoromethane	U		0.000861	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
1,1-Dichloroethane	U		0.000605	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
1,2-Dichloroethane	U		0.000500	0.00250	0.00263	1	08/18/2018 14:36	WG1154260

B-5 (4)

Collected date/time: 08/14/18 11:05

SAMPLE RESULTS - 09

L1017897

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000526	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
cis-1,2-Dichloroethene	U		0.000727	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
trans-1,2-Dichloroethene	U		0.00151	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
1,2-Dichloropropane	U		0.00134	0.00500	0.00526	1	08/19/2018 13:08	WG1154491
1,1-Dichloropropene	U		0.000737	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
1,3-Dichloropropane	U		0.00184	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
cis-1,3-Dichloropropene	U		0.000714	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
trans-1,3-Dichloropropene	U		0.00161	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
2,2-Dichloropropane	U		0.000835	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
Di-isopropyl ether	U		0.000369	0.00100	0.00105	1	08/18/2018 14:36	WG1154260
Ethylbenzene	U		0.000558	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
Hexachloro-1,3-butadiene	U		0.0134	0.0250	0.0263	1	08/19/2018 13:08	WG1154491
Isopropylbenzene	U		0.000909	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
p-Isopropyltoluene	U		0.00245	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
2-Butanone (MEK)	U		0.0132	0.0250	0.0263	1	08/19/2018 13:08	WG1154491
Methylene Chloride	U		0.00699	0.0250	0.0263	1	08/18/2018 14:36	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0105	0.0250	0.0263	1	08/18/2018 14:36	WG1154260
Methyl tert-butyl ether	U		0.000311	0.00100	0.00105	1	08/18/2018 14:36	WG1154260
Naphthalene	U		0.00329	0.0125	0.0132	1	08/18/2018 14:36	WG1154260
n-Propylbenzene	U		0.00124	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
Styrene	U		0.00287	0.0125	0.0132	1	08/18/2018 14:36	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000526	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000411	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.000711	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
Tetrachloroethene	0.00133	J	0.000737	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
Toluene	0.00420	J	0.00132	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
1,2,3-Trichlorobenzene	U		0.000658	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
1,2,4-Trichlorobenzene	U		0.00508	0.0125	0.0132	1	08/18/2018 14:36	WG1154260
1,1,1-Trichloroethane	U		0.000290	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
1,1,2-Trichloroethane	U		0.000930	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
Trichloroethene	U		0.000421	0.00100	0.00105	1	08/18/2018 14:36	WG1154260
Trichlorofluoromethane	U		0.000526	0.00250	0.00263	1	08/18/2018 14:36	WG1154260
1,2,3-Trichloropropane	U		0.00537	0.0125	0.0132	1	08/18/2018 14:36	WG1154260
1,2,4-Trimethylbenzene	0.00172	J	0.00122	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
1,2,3-Trimethylbenzene	U		0.00121	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
Vinyl chloride	U		0.000719	0.00250	0.00263	1	08/19/2018 13:08	WG1154491
1,3,5-Trimethylbenzene	U		0.00114	0.00500	0.00526	1	08/18/2018 14:36	WG1154260
Xylenes, Total	U		0.00503	0.00650	0.00684	1	08/18/2018 14:36	WG1154260
(S) Toluene-d8	*108*				*80.0-120*		*08/18/2018 14:36*	WG1154260
(S) Toluene-d8	*109*				*80.0-120*		*08/19/2018 13:08*	WG1154491
(S) Dibromofluoromethane	*97.2*				*74.0-131*		*08/18/2018 14:36*	WG1154260
(S) Dibromofluoromethane	*96.2*				*74.0-131*		*08/19/2018 13:08*	WG1154491
(S) 4-Bromofluorobenzene	*105*				*64.0-132*		*08/18/2018 14:36*	WG1154260
(S) 4-Bromofluorobenzene	*99.9*				*64.0-132*		*08/19/2018 13:08*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.40	4.00	4.21	1	08/20/2018 17:43	WG1153557
Residual Range Organics (RRO)	U		3.51	10.0	10.5	1	08/20/2018 17:43	WG1153557
(S) o-Terphenyl	*80.3*				*18.0-148*		*08/20/2018 17:43*	WG1153557

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	81.3		1	08/20/2018 11:13	WG1154708

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.00966	J	0.00345	0.0200	0.0246	1	08/17/2018 12:14	WG1153486

Metals (ICP) by Method 6010C

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	3.35		0.800	2.00	2.46	1	08/19/2018 11:40	WG1153500
Barium	184	J5 O1	0.209	0.500	0.615	1	08/19/2018 11:40	WG1153500
Cadmium	0.0950	J	0.0861	0.500	0.615	1	08/19/2018 11:40	WG1153500
Chromium	21.5	O1	0.172	1.00	1.23	1	08/19/2018 11:40	WG1153500
Lead	2.70		0.234	0.500	0.615	1	08/19/2018 11:40	WG1153500
Selenium	U		0.911	2.00	2.46	1	08/19/2018 11:40	WG1153500
Silver	U		0.345	1.00	1.23	1	08/19/2018 11:40	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.04	0.100	3.08	25	08/17/2018 15:32	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*08/17/2018 15:32*	WG1153735

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0169	0.0250	0.0308	1	08/18/2018 14:57	WG1154260
Acrylonitrile	U		0.00234	0.0125	0.0154	1	08/18/2018 14:57	WG1154260
Benzene	U		0.000492	0.00100	0.00123	1	08/18/2018 14:57	WG1154260
Bromobenzene	U		0.00129	0.0125	0.0154	1	08/18/2018 14:57	WG1154260
Bromodichloromethane	U		0.000970	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
Bromoform	U		0.00736	0.0250	0.0308	1	08/18/2018 14:57	WG1154260
Bromomethane	U		0.00455	0.0125	0.0154	1	08/18/2018 14:57	WG1154260
n-Butylbenzene	U		0.00473	0.0125	0.0154	1	08/18/2018 14:57	WG1154260
sec-Butylbenzene	U		0.00311	0.0125	0.0154	1	08/18/2018 14:57	WG1154260
tert-Butylbenzene	U		0.00191	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
Carbon tetrachloride	U		0.00133	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
Chlorobenzene	U		0.000705	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
Chlorodibromomethane	U		0.000554	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
Chloroethane	U		0.00133	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
Chloroform	U		0.000511	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
Chloromethane	U		0.00171	0.0125	0.0154	1	08/18/2018 14:57	WG1154260
2-Chlorotoluene	U		0.00113	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
4-Chlorotoluene	U		0.00139	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00628	0.0250	0.0308	1	08/18/2018 14:57	WG1154260
1,2-Dibromoethane	U		0.000646	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
Dibromomethane	U		0.00123	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
1,2-Dichlorobenzene	U		0.00178	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
1,3-Dichlorobenzene	U		0.00209	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
1,4-Dichlorobenzene	U		0.00242	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
Dichlorodifluoromethane	U		0.00101	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
1,1-Dichloroethane	U		0.000708	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
1,2-Dichloroethane	U		0.000585	0.00250	0.00308	1	08/18/2018 14:57	WG1154260

B-5 (9)

Collected date/time: 08/14/18 11:30

SAMPLE RESULTS - 10

L1017897

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000615	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
cis-1,2-Dichloroethene	U		0.000849	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
trans-1,2-Dichloroethene	U		0.00176	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
1,2-Dichloropropane	U		0.00156	0.00500	0.00615	1	08/19/2018 13:27	WG1154491
1,1-Dichloropropene	U		0.000861	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
1,3-Dichloropropane	U		0.00215	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
cis-1,3-Dichloropropene	U		0.000834	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
trans-1,3-Dichloropropene	U		0.00188	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
2,2-Dichloropropane	U		0.000976	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
Di-isopropyl ether	U		0.000431	0.00100	0.00123	1	08/18/2018 14:57	WG1154260
Ethylbenzene	U		0.000652	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
Hexachloro-1,3-butadiene	U		0.0156	0.0250	0.0308	1	08/19/2018 13:27	WG1154491
Isopropylbenzene	U		0.00106	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
p-Isopropyltoluene	U		0.00287	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
2-Butanone (MEK)	U		0.0154	0.0250	0.0308	1	08/19/2018 13:27	WG1154491
Methylene Chloride	U		0.00817	0.0250	0.0308	1	08/18/2018 14:57	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0123	0.0250	0.0308	1	08/18/2018 14:57	WG1154260
Methyl tert-butyl ether	U		0.000363	0.00100	0.00123	1	08/18/2018 14:57	WG1154260
Naphthalene	U		0.00384	0.0125	0.0154	1	08/18/2018 14:57	WG1154260
n-Propylbenzene	U		0.00145	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
Styrene	U		0.00336	0.0125	0.0154	1	08/18/2018 14:57	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000615	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000480	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.000831	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
Tetrachloroethene	0.00292	J	0.000861	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
Toluene	0.00247	J	0.00154	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
1,2,3-Trichlorobenzene	U		0.000769	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
1,2,4-Trichlorobenzene	U		0.00593	0.0125	0.0154	1	08/18/2018 14:57	WG1154260
1,1,1-Trichloroethane	U		0.000338	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
1,1,2-Trichloroethane	U		0.00109	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
Trichloroethene	U		0.000492	0.00100	0.00123	1	08/18/2018 14:57	WG1154260
Trichlorofluoromethane	U		0.000615	0.00250	0.00308	1	08/18/2018 14:57	WG1154260
1,2,3-Trichloropropane	U		0.00628	0.0125	0.0154	1	08/18/2018 14:57	WG1154260
1,2,4-Trimethylbenzene	U		0.00143	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
1,2,3-Trimethylbenzene	U		0.00142	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
Vinyl chloride	U		0.000840	0.00250	0.00308	1	08/19/2018 13:27	WG1154491
1,3,5-Trimethylbenzene	U		0.00133	0.00500	0.00615	1	08/18/2018 14:57	WG1154260
Xylenes, Total	U		0.00588	0.00650	0.00800	1	08/18/2018 14:57	WG1154260
(S) Toluene-d8	*106*				*80.0-120*		*08/18/2018 14:57*	WG1154260
(S) Toluene-d8	*108*				*80.0-120*		*08/19/2018 13:27*	WG1154491
(S) Dibromofluoromethane	*97.2*				*74.0-131*		*08/18/2018 14:57*	WG1154260
(S) Dibromofluoromethane	*96.9*				*74.0-131*		*08/19/2018 13:27*	WG1154491
(S) 4-Bromofluorobenzene	*106*				*64.0-132*		*08/18/2018 14:57*	WG1154260
(S) 4-Bromofluorobenzene	*98.1*				*64.0-132*		*08/19/2018 13:27*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.64	4.00	4.92	1	08/20/2018 17:57	WG1153557
Residual Range Organics (RRO)	U		4.10	10.0	12.3	1	08/20/2018 17:57	WG1153557
(S) o-Terphenyl	*52.8*				*18.0-148*		*08/20/2018 17:57*	WG1153557

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.6		1	08/20/2018 11:13	WG1154708

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0110	J	0.00293	0.0200	0.0209	1	08/17/2018 12:17	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.21		0.680	2.00	2.09	1	08/19/2018 12:20	WG1153500
Barium	41.7		0.178	0.500	0.523	1	08/19/2018 12:20	WG1153500
Cadmium	U		0.0733	0.500	0.523	1	08/19/2018 12:20	WG1153500
Chromium	18.2		0.147	1.00	1.05	1	08/19/2018 12:20	WG1153500
Lead	1.90		0.199	0.500	0.523	1	08/19/2018 12:20	WG1153500
Selenium	U		0.774	2.00	2.09	1	08/19/2018 12:20	WG1153500
Silver	U		0.293	1.00	1.05	1	08/19/2018 12:20	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.887	0.100	2.62	25	08/17/2018 15:53	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*08/17/2018 15:53*	WG1153735

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0143	0.0250	0.0262	1	08/18/2018 15:17	WG1154260
Acrylonitrile	U		0.00199	0.0125	0.0131	1	08/18/2018 15:17	WG1154260
Benzene	U		0.000419	0.00100	0.00105	1	08/18/2018 15:17	WG1154260
Bromobenzene	U		0.00110	0.0125	0.0131	1	08/18/2018 15:17	WG1154260
Bromodichloromethane	U		0.000825	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
Bromoform	U		0.00626	0.0250	0.0262	1	08/18/2018 15:17	WG1154260
Bromomethane	U		0.00387	0.0125	0.0131	1	08/18/2018 15:17	WG1154260
n-Butylbenzene	U		0.00402	0.0125	0.0131	1	08/18/2018 15:17	WG1154260
sec-Butylbenzene	U		0.00265	0.0125	0.0131	1	08/18/2018 15:17	WG1154260
tert-Butylbenzene	U		0.00162	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
Carbon tetrachloride	U		0.00113	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
Chlorobenzene	U		0.000600	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
Chlorodibromomethane	U		0.000471	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
Chloroethane	U		0.00113	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
Chloroform	U		0.000434	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
Chloromethane	U		0.00145	0.0125	0.0131	1	08/18/2018 15:17	WG1154260
2-Chlorotoluene	U		0.000963	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
4-Chlorotoluene	U		0.00118	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00534	0.0250	0.0262	1	08/18/2018 15:17	WG1154260
1,2-Dibromoethane	U		0.000549	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
Dibromomethane	U		0.00105	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
1,2-Dichlorobenzene	U		0.00152	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
1,3-Dichlorobenzene	U		0.00178	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
1,4-Dichlorobenzene	U		0.00206	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
Dichlorodifluoromethane	U		0.000856	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
1,1-Dichloroethane	U		0.000602	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
1,2-Dichloroethane	U		0.000497	0.00250	0.00262	1	08/18/2018 15:17	WG1154260

B-6 (3)

Collected date/time: 08/14/18 11:45

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000523	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
cis-1,2-Dichloroethene	U		0.000722	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
trans-1,2-Dichloroethene	U		0.00150	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
1,2-Dichloropropane	U		0.00133	0.00500	0.00523	1	08/19/2018 13:46	WG1154491
1,1-Dichloropropene	U		0.000733	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
1,3-Dichloropropane	U		0.00183	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
cis-1,3-Dichloropropene	U		0.000710	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
trans-1,3-Dichloropropene	U		0.00160	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
2,2-Dichloropropane	U		0.000830	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
Di-isopropyl ether	U		0.000366	0.00100	0.00105	1	08/18/2018 15:17	WG1154260
Ethylbenzene	0.000801	J	0.000555	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
Hexachloro-1,3-butadiene	U		0.0133	0.0250	0.0262	1	08/19/2018 13:46	WG1154491
Isopropylbenzene	U		0.000903	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
p-Isopropyltoluene	U		0.00244	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
2-Butanone (MEK)	U		0.0131	0.0250	0.0262	1	08/19/2018 13:46	WG1154491
Methylene Chloride	U		0.00695	0.0250	0.0262	1	08/18/2018 15:17	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0105	0.0250	0.0262	1	08/18/2018 15:17	WG1154260
Methyl tert-butyl ether	U		0.000309	0.00100	0.00105	1	08/18/2018 15:17	WG1154260
Naphthalene	U		0.00327	0.0125	0.0131	1	08/18/2018 15:17	WG1154260
n-Propylbenzene	U		0.00123	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
Styrene	U		0.00286	0.0125	0.0131	1	08/18/2018 15:17	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000523	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000408	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.000706	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
Tetrachloroethene	0.00267		0.000733	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
Toluene	0.00493	J	0.00131	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
1,2,3-Trichlorobenzene	U		0.000654	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
1,2,4-Trichlorobenzene	U		0.00504	0.0125	0.0131	1	08/18/2018 15:17	WG1154260
1,1,1-Trichloroethane	U		0.000288	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
1,1,2-Trichloroethane	U		0.000924	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
Trichloroethene	U		0.000419	0.00100	0.00105	1	08/18/2018 15:17	WG1154260
Trichlorofluoromethane	U		0.000523	0.00250	0.00262	1	08/18/2018 15:17	WG1154260
1,2,3-Trichloropropane	U		0.00534	0.0125	0.0131	1	08/18/2018 15:17	WG1154260
1,2,4-Trimethylbenzene	U		0.00121	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
1,2,3-Trimethylbenzene	U		0.00120	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
Vinyl chloride	U		0.000715	0.00250	0.00262	1	08/19/2018 13:46	WG1154491
1,3,5-Trimethylbenzene	U		0.00113	0.00500	0.00523	1	08/18/2018 15:17	WG1154260
Xylenes, Total	U		0.00500	0.00650	0.00680	1	08/18/2018 15:17	WG1154260
(S) Toluene-d8	*109*				*80.0-120*		*08/18/2018 15:17*	WG1154260
(S) Toluene-d8	*108*				*80.0-120*		*08/19/2018 13:46*	WG1154491
(S) Dibromofluoromethane	*97.4*				*74.0-131*		*08/18/2018 15:17*	WG1154260
(S) Dibromofluoromethane	*96.4*				*74.0-131*		*08/19/2018 13:46*	WG1154491
(S) 4-Bromofluorobenzene	*103*				*64.0-132*		*08/18/2018 15:17*	WG1154260
(S) 4-Bromofluorobenzene	*101*				*64.0-132*		*08/19/2018 13:46*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.39	4.00	4.19	1	08/20/2018 18:09	WG1153557
Residual Range Organics (RRO)	U		3.48	10.0	10.5	1	08/20/2018 18:09	WG1153557
(S) o-Terphenyl	*84.3*				*18.0-148*		*08/20/2018 18:09*	WG1153557

B-6 (6)
Collected date/time: 08/14/18 11:55

SAMPLE RESULTS - 12

L1017897

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.6		1	08/20/2018 11:13	WG1154708

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.00800	J	0.00293	0.0200	0.0209	1	08/17/2018 12:20	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.76		0.680	2.00	2.09	1	08/19/2018 12:22	WG1153500
Barium	91.0		0.178	0.500	0.523	1	08/19/2018 12:22	WG1153500
Cadmium	U		0.0733	0.500	0.523	1	08/19/2018 12:22	WG1153500
Chromium	42.4		0.147	1.00	1.05	1	08/19/2018 12:22	WG1153500
Lead	3.28		0.199	0.500	0.523	1	08/19/2018 12:22	WG1153500
Selenium	U		0.774	2.00	2.09	1	08/19/2018 12:22	WG1153500
Silver	U		0.293	1.00	1.05	1	08/19/2018 12:22	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.02	0.100	3.01	28.75	08/17/2018 16:15	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*08/17/2018 16:15*	WG1153735

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0166	0.0250	0.0304	1.16	08/18/2018 15:37	WG1154260
Acrylonitrile	U		0.00231	0.0125	0.0152	1.16	08/18/2018 15:37	WG1154260
Benzene	U		0.000486	0.00100	0.00121	1.16	08/18/2018 15:37	WG1154260
Bromobenzene	U		0.00127	0.0125	0.0152	1.16	08/18/2018 15:37	WG1154260
Bromodichloromethane	U		0.000957	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
Bromoform	U		0.00726	0.0250	0.0304	1.16	08/18/2018 15:37	WG1154260
Bromomethane	U		0.00449	0.0125	0.0152	1.16	08/18/2018 15:37	WG1154260
n-Butylbenzene	U		0.00466	0.0125	0.0152	1.16	08/18/2018 15:37	WG1154260
sec-Butylbenzene	U		0.00307	0.0125	0.0152	1.16	08/18/2018 15:37	WG1154260
tert-Butylbenzene	U		0.00188	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
Carbon tetrachloride	U		0.00131	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
Chlorobenzene	U		0.000696	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
Chlorodibromomethane	U		0.000546	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
Chloroethane	U		0.00131	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
Chloroform	U		0.000504	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
Chloromethane	U		0.00169	0.0125	0.0152	1.16	08/18/2018 15:37	WG1154260
2-Chlorotoluene	U		0.00112	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
4-Chlorotoluene	U		0.00137	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00619	0.0250	0.0304	1.16	08/18/2018 15:37	WG1154260
1,2-Dibromoethane	U		0.000637	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
Dibromomethane	U		0.00121	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
1,2-Dichlorobenzene	U		0.00176	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
1,3-Dichlorobenzene	U		0.00206	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
1,4-Dichlorobenzene	U		0.00239	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
Dichlorodifluoromethane	U		0.000993	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
1,1-Dichloroethane	U		0.000698	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
1,2-Dichloroethane	U		0.000577	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260

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

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000607	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
cis-1,2-Dichloroethene	U		0.000838	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
trans-1,2-Dichloroethene	U		0.00174	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
1,2-Dichloropropane	U		0.00154	0.00500	0.00607	1.16	08/19/2018 14:05	WG1154491
1,1-Dichloropropene	U		0.000850	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
1,3-Dichloropropane	U		0.00212	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
cis-1,3-Dichloropropene	U		0.000823	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
trans-1,3-Dichloropropene	U		0.00186	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
2,2-Dichloropropane	U		0.000963	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
Di-isopropyl ether	U		0.000425	0.00100	0.00121	1.16	08/18/2018 15:37	WG1154260
Ethylbenzene	0.00132	J	0.000643	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
Hexachloro-1,3-butadiene	U		0.0154	0.0250	0.0304	1.16	08/19/2018 14:05	WG1154491
Isopropylbenzene	U		0.00105	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
p-Isopropyltoluene	U		0.00283	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
2-Butanone (MEK)	U		0.0152	0.0250	0.0304	1.16	08/19/2018 14:05	WG1154491
Methylene Chloride	U		0.00806	0.0250	0.0304	1.16	08/18/2018 15:37	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0121	0.0250	0.0304	1.16	08/18/2018 15:37	WG1154260
Methyl tert-butyl ether	U		0.000358	0.00100	0.00121	1.16	08/18/2018 15:37	WG1154260
Naphthalene	U		0.00379	0.0125	0.0152	1.16	08/18/2018 15:37	WG1154260
n-Propylbenzene	U		0.00143	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
Styrene	U		0.00331	0.0125	0.0152	1.16	08/18/2018 15:37	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000607	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000473	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.000819	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
Tetrachloroethene	0.00190	J	0.000850	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
Toluene	0.00912		0.00152	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
1,2,3-Trichlorobenzene	U		0.000759	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
1,2,4-Trichlorobenzene	U		0.00585	0.0125	0.0152	1.16	08/18/2018 15:37	WG1154260
1,1,1-Trichloroethane	U		0.000334	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
1,1,2-Trichloroethane	U		0.00107	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
Trichloroethene	U		0.000486	0.00100	0.00121	1.16	08/18/2018 15:37	WG1154260
Trichlorofluoromethane	U		0.000607	0.00250	0.00304	1.16	08/18/2018 15:37	WG1154260
1,2,3-Trichloropropane	U		0.00619	0.0125	0.0152	1.16	08/18/2018 15:37	WG1154260
1,2,4-Trimethylbenzene	U		0.00141	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
1,2,3-Trimethylbenzene	U		0.00140	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
Vinyl chloride	U		0.000829	0.00250	0.00304	1.16	08/19/2018 14:05	WG1154491
1,3,5-Trimethylbenzene	U		0.00131	0.00500	0.00607	1.16	08/18/2018 15:37	WG1154260
Xylenes, Total	0.00612	J	0.00580	0.00650	0.00789	1.16	08/18/2018 15:37	WG1154260
(S) Toluene-d8	*103*				*80.0-120*		*08/18/2018 15:37*	WG1154260
(S) Toluene-d8	*108*				*80.0-120*		*08/19/2018 14:05*	WG1154491
(S) Dibromofluoromethane	*99.6*				*74.0-131*		*08/18/2018 15:37*	WG1154260
(S) Dibromofluoromethane	*94.7*				*74.0-131*		*08/19/2018 14:05*	WG1154491
(S) 4-Bromofluorobenzene	*104*				*64.0-132*		*08/18/2018 15:37*	WG1154260
(S) 4-Bromofluorobenzene	*99.2*				*64.0-132*		*08/19/2018 14:05*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	6.13		1.39	4.00	4.19	1	08/20/2018 18:22	WG1153557
Residual Range Organics (RRO)	14.7		3.49	10.0	10.5	1	08/20/2018 18:22	WG1153557
(S) o-Terphenyl	*67.2*				*18.0-148*		*08/20/2018 18:22*	WG1153557

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.9		1	08/20/2018 11:13	WG1154708

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0279		0.00298	0.0200	0.0213	1	08/17/2018 12:27	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.73		0.692	2.00	2.13	1	08/19/2018 12:25	WG1153500
Barium	70.7		0.181	0.500	0.532	1	08/19/2018 12:25	WG1153500
Cadmium	U		0.0745	0.500	0.532	1	08/19/2018 12:25	WG1153500
Chromium	26.2		0.149	1.00	1.06	1	08/19/2018 12:25	WG1153500
Lead	1.66		0.202	0.500	0.532	1	08/19/2018 12:25	WG1153500
Selenium	U		0.788	2.00	2.13	1	08/19/2018 12:25	WG1153500
Silver	U		0.298	1.00	1.06	1	08/19/2018 12:25	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.03	0.100	3.03	28.5	08/17/2018 16:37	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*08/17/2018 16:37*	WG1153735

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0166	0.0250	0.0303	1.14	08/18/2018 15:57	WG1154260
Acrylonitrile	U		0.00231	0.0125	0.0152	1.14	08/18/2018 15:57	WG1154260
Benzene	U		0.000485	0.00100	0.00121	1.14	08/18/2018 15:57	WG1154260
Bromobenzene	U		0.00127	0.0125	0.0152	1.14	08/18/2018 15:57	WG1154260
Bromodichloromethane	U		0.000956	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
Bromoform	U		0.00726	0.0250	0.0303	1.14	08/18/2018 15:57	WG1154260
Bromomethane	U		0.00449	0.0125	0.0152	1.14	08/18/2018 15:57	WG1154260
n-Butylbenzene	U		0.00466	0.0125	0.0152	1.14	08/18/2018 15:57	WG1154260
sec-Butylbenzene	U		0.00307	0.0125	0.0152	1.14	08/18/2018 15:57	WG1154260
tert-Butylbenzene	U		0.00188	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
Carbon tetrachloride	U		0.00131	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
Chlorobenzene	U		0.000695	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
Chlorodibromomethane	U		0.000546	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
Chloroethane	U		0.00131	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
Chloroform	U		0.000504	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
Chloromethane	U		0.00169	0.0125	0.0152	1.14	08/18/2018 15:57	WG1154260
2-Chlorotoluene	U		0.00112	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
4-Chlorotoluene	U		0.00137	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00619	0.0250	0.0303	1.14	08/18/2018 15:57	WG1154260
1,2-Dibromoethane	U		0.000637	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
Dibromomethane	U		0.00121	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
1,2-Dichlorobenzene	U		0.00176	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
1,3-Dichlorobenzene	U		0.00206	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
1,4-Dichlorobenzene	U		0.00239	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
Dichlorodifluoromethane	U		0.000993	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
1,1-Dichloroethane	U		0.000698	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
1,2-Dichloroethane	U		0.000577	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000607	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
cis-1,2-Dichloroethene	U		0.000837	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
trans-1,2-Dichloroethene	U		0.00174	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
1,2-Dichloropropane	U		0.00154	0.00500	0.00607	1.14	08/19/2018 14:23	WG1154491
1,1-Dichloropropene	U		0.000850	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
1,3-Dichloropropane	U		0.00212	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
cis-1,3-Dichloropropene	U		0.000823	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
trans-1,3-Dichloropropene	U		0.00186	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
2,2-Dichloropropane	U		0.000962	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
Di-isopropyl ether	U		0.000425	0.00100	0.00121	1.14	08/18/2018 15:57	WG1154260
Ethylbenzene	U		0.000643	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
Hexachloro-1,3-butadiene	U		0.0154	0.0250	0.0303	1.14	08/19/2018 14:23	WG1154491
Isopropylbenzene	U		0.00105	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
p-Isopropyltoluene	U		0.00283	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
2-Butanone (MEK)	U		0.0152	0.0250	0.0303	1.14	08/19/2018 14:23	WG1154491
Methylene Chloride	U		0.00806	0.0250	0.0303	1.14	08/18/2018 15:57	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0121	0.0250	0.0303	1.14	08/18/2018 15:57	WG1154260
Methyl tert-butyl ether	U		0.000358	0.00100	0.00121	1.14	08/18/2018 15:57	WG1154260
Naphthalene	U		0.00379	0.0125	0.0152	1.14	08/18/2018 15:57	WG1154260
n-Propylbenzene	U		0.00143	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
Styrene	U		0.00331	0.0125	0.0152	1.14	08/18/2018 15:57	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000607	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000473	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.000819	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
Tetrachloroethene	U		0.000850	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
Toluene	U		0.00152	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
1,2,3-Trichlorobenzene	U		0.000759	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
1,2,4-Trichlorobenzene	U		0.00585	0.0125	0.0152	1.14	08/18/2018 15:57	WG1154260
1,1,1-Trichloroethane	U		0.000334	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
1,1,2-Trichloroethane	U		0.00107	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
Trichloroethene	U		0.000485	0.00100	0.00121	1.14	08/18/2018 15:57	WG1154260
Trichlorofluoromethane	U		0.000607	0.00250	0.00303	1.14	08/18/2018 15:57	WG1154260
1,2,3-Trichloropropane	U		0.00619	0.0125	0.0152	1.14	08/18/2018 15:57	WG1154260
1,2,4-Trimethylbenzene	U		0.00141	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
1,2,3-Trimethylbenzene	U		0.00140	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
Vinyl chloride	U		0.000829	0.00250	0.00303	1.14	08/19/2018 14:23	WG1154491
1,3,5-Trimethylbenzene	U		0.00131	0.00500	0.00607	1.14	08/18/2018 15:57	WG1154260
Xylenes, Total	U		0.00580	0.00650	0.00789	1.14	08/18/2018 15:57	WG1154260
(S) Toluene-d8	*108*				*80.0-120*		*08/18/2018 15:57*	WG1154260
(S) Toluene-d8	*107*				*80.0-120*		*08/19/2018 14:23*	WG1154491
(S) Dibromofluoromethane	*100*				*74.0-131*		*08/18/2018 15:57*	WG1154260
(S) Dibromofluoromethane	*97.2*				*74.0-131*		*08/19/2018 14:23*	WG1154491
(S) 4-Bromofluorobenzene	*103*				*64.0-132*		*08/18/2018 15:57*	WG1154260
(S) 4-Bromofluorobenzene	*98.5*				*64.0-132*		*08/19/2018 14:23*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.42	4.00	4.26	1	08/20/2018 18:35	WG1153557
Residual Range Organics (RRO)	U		3.55	10.0	10.6	1	08/20/2018 18:35	WG1153557
(S) o-Terphenyl	*78.1*				*18.0-148*		*08/20/2018 18:35*	WG1153557

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	08/20/2018 11:13	WG1154708

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.00890	J	0.00296	0.0200	0.0212	1	08/17/2018 12:30	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	2.01	J	0.687	2.00	2.12	1	08/19/2018 12:33	WG1153500
Barium	59.1		0.180	0.500	0.529	1	08/19/2018 12:33	WG1153500
Cadmium	U		0.0740	0.500	0.529	1	08/19/2018 12:33	WG1153500
Chromium	25.5		0.148	1.00	1.06	1	08/19/2018 12:33	WG1153500
Lead	1.57		0.201	0.500	0.529	1	08/19/2018 12:33	WG1153500
Selenium	U		0.783	2.00	2.12	1	08/19/2018 12:33	WG1153500
Silver	U		0.296	1.00	1.06	1	08/19/2018 12:33	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.896	0.100	2.64	25	08/17/2018 16:58	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*08/17/2018 16:58*	WG1153735

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0145	0.0250	0.0264	1	08/18/2018 16:18	WG1154260
Acrylonitrile	U		0.00201	0.0125	0.0132	1	08/18/2018 16:18	WG1154260
Benzene	U		0.000423	0.00100	0.00106	1	08/18/2018 16:18	WG1154260
Bromobenzene	U		0.00111	0.0125	0.0132	1	08/18/2018 16:18	WG1154260
Bromodichloromethane	U		0.000833	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
Bromoform	U		0.00632	0.0250	0.0264	1	08/18/2018 16:18	WG1154260
Bromomethane	U		0.00391	0.0125	0.0132	1	08/18/2018 16:18	WG1154260
n-Butylbenzene	U		0.00406	0.0125	0.0132	1	08/18/2018 16:18	WG1154260
sec-Butylbenzene	U		0.00268	0.0125	0.0132	1	08/18/2018 16:18	WG1154260
tert-Butylbenzene	U		0.00164	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
Carbon tetrachloride	U		0.00114	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
Chlorobenzene	U		0.000606	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
Chlorodibromomethane	U		0.000476	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
Chloroethane	U		0.00114	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
Chloroform	U		0.000439	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
Chloromethane	U		0.00147	0.0125	0.0132	1	08/18/2018 16:18	WG1154260
2-Chlorotoluene	U		0.000973	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
4-Chlorotoluene	U		0.00120	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00539	0.0250	0.0264	1	08/18/2018 16:18	WG1154260
1,2-Dibromoethane	U		0.000555	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
Dibromomethane	U		0.00106	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
1,2-Dichlorobenzene	U		0.00153	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
1,3-Dichlorobenzene	U		0.00180	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
1,4-Dichlorobenzene	U		0.00208	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
Dichlorodifluoromethane	U		0.000865	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
1,1-Dichloroethane	U		0.000608	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
1,2-Dichloroethane	U		0.000502	0.00250	0.00264	1	08/18/2018 16:18	WG1154260

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000529	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
cis-1,2-Dichloroethene	U		0.000730	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
trans-1,2-Dichloroethene	U		0.00151	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
1,2-Dichloropropane	U		0.00134	0.00500	0.00529	1	08/19/2018 14:42	WG1154491
1,1-Dichloropropene	U		0.000740	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
1,3-Dichloropropane	U		0.00185	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
cis-1,3-Dichloropropene	U		0.000717	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
trans-1,3-Dichloropropene	U		0.00162	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
2,2-Dichloropropane	U		0.000839	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
Di-isopropyl ether	U		0.000370	0.00100	0.00106	1	08/18/2018 16:18	WG1154260
Ethylbenzene	U		0.000561	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
Hexachloro-1,3-butadiene	U		0.0134	0.0250	0.0264	1	08/19/2018 14:42	WG1154491
Isopropylbenzene	U		0.000913	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
p-Isopropyltoluene	U		0.00246	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
2-Butanone (MEK)	U		0.0132	0.0250	0.0264	1	08/19/2018 14:42	WG1154491
Methylene Chloride	U		0.00702	0.0250	0.0264	1	08/18/2018 16:18	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0106	0.0250	0.0264	1	08/18/2018 16:18	WG1154260
Methyl tert-butyl ether	U		0.000312	0.00100	0.00106	1	08/18/2018 16:18	WG1154260
Naphthalene	U		0.00330	0.0125	0.0132	1	08/18/2018 16:18	WG1154260
n-Propylbenzene	U		0.00125	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
Styrene	U		0.00289	0.0125	0.0132	1	08/18/2018 16:18	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000529	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000412	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.000714	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
Tetrachloroethene	U		0.000740	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
Toluene	0.00174	J	0.00132	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
1,2,3-Trichlorobenzene	U		0.000661	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
1,2,4-Trichlorobenzene	U		0.00510	0.0125	0.0132	1	08/18/2018 16:18	WG1154260
1,1,1-Trichloroethane	U		0.000291	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
1,1,2-Trichloroethane	U		0.000934	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
Trichloroethene	U		0.000423	0.00100	0.00106	1	08/18/2018 16:18	WG1154260
Trichlorofluoromethane	U		0.000529	0.00250	0.00264	1	08/18/2018 16:18	WG1154260
1,2,3-Trichloropropane	U		0.00539	0.0125	0.0132	1	08/18/2018 16:18	WG1154260
1,2,4-Trimethylbenzene	U		0.00123	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
1,2,3-Trimethylbenzene	U		0.00122	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
Vinyl chloride	U		0.000722	0.00250	0.00264	1	08/19/2018 14:42	WG1154491
1,3,5-Trimethylbenzene	U		0.00114	0.00500	0.00529	1	08/18/2018 16:18	WG1154260
Xylenes, Total	U		0.00506	0.00650	0.00687	1	08/18/2018 16:18	WG1154260
(S) Toluene-d8	*109*				*80.0-120*		*08/18/2018 16:18*	WG1154260
(S) Toluene-d8	*108*				*80.0-120*		*08/19/2018 14:42*	WG1154491
(S) Dibromofluoromethane	*97.0*				*74.0-131*		*08/18/2018 16:18*	WG1154260
(S) Dibromofluoromethane	*98.2*				*74.0-131*		*08/19/2018 14:42*	WG1154491
(S) 4-Bromofluorobenzene	*104*				*64.0-132*		*08/18/2018 16:18*	WG1154260
(S) 4-Bromofluorobenzene	*99.5*				*64.0-132*		*08/19/2018 14:42*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	U		1.41	4.00	4.23	1	08/20/2018 18:47	WG1153557
Residual Range Organics (RRO)	U		3.52	10.0	10.6	1	08/20/2018 18:47	WG1153557
(S) o-Terphenyl	*74.1*				*18.0-148*		*08/20/2018 18:47*	WG1153557

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.6		1	08/20/2018 11:13	WG1154708

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.00838	J	0.00306	0.0200	0.0218	1	08/17/2018 12:32	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.05	J	0.710	2.00	2.18	1	08/19/2018 12:35	WG1153500
Barium	44.5		0.186	0.500	0.546	1	08/19/2018 12:35	WG1153500
Cadmium	0.0822	J	0.0764	0.500	0.546	1	08/19/2018 12:35	WG1153500
Chromium	26.5		0.153	1.00	1.09	1	08/19/2018 12:35	WG1153500
Lead	4.95		0.207	0.500	0.546	1	08/19/2018 12:35	WG1153500
Selenium	U		0.808	2.00	2.18	1	08/19/2018 12:35	WG1153500
Silver	U		0.306	1.00	1.09	1	08/19/2018 12:35	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.925	0.100	2.73	25	08/17/2018 17:20	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*08/17/2018 17:20*	WG1153735

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0150	0.0250	0.0273	1	08/18/2018 16:38	WG1154260
Acrylonitrile	U		0.00207	0.0125	0.0136	1	08/18/2018 16:38	WG1154260
Benzene	U		0.000437	0.00100	0.00109	1	08/18/2018 16:38	WG1154260
Bromobenzene	U		0.00115	0.0125	0.0136	1	08/18/2018 16:38	WG1154260
Bromodichloromethane	U		0.000860	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
Bromoform	U		0.00653	0.0250	0.0273	1	08/18/2018 16:38	WG1154260
Bromomethane	U		0.00404	0.0125	0.0136	1	08/18/2018 16:38	WG1154260
n-Butylbenzene	U		0.00419	0.0125	0.0136	1	08/18/2018 16:38	WG1154260
sec-Butylbenzene	U		0.00276	0.0125	0.0136	1	08/18/2018 16:38	WG1154260
tert-Butylbenzene	U		0.00169	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
Carbon tetrachloride	U		0.00118	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
Chlorobenzene	U		0.000626	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
Chlorodibromomethane	U		0.000491	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
Chloroethane	U		0.00118	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
Chloroform	U		0.000453	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
Chloromethane	U		0.00152	0.0125	0.0136	1	08/18/2018 16:38	WG1154260
2-Chlorotoluene	U		0.00100	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
4-Chlorotoluene	U		0.00123	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00557	0.0250	0.0273	1	08/18/2018 16:38	WG1154260
1,2-Dibromoethane	U		0.000573	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
Dibromomethane	U		0.00109	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
1,2-Dichlorobenzene	U		0.00158	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
1,3-Dichlorobenzene	U		0.00186	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
1,4-Dichlorobenzene	U		0.00215	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
Dichlorodifluoromethane	U		0.000893	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
1,1-Dichloroethane	U		0.000628	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
1,2-Dichloroethane	U		0.000519	0.00250	0.00273	1	08/18/2018 16:38	WG1154260

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000546	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
cis-1,2-Dichloroethene	U		0.000753	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
trans-1,2-Dichloroethene	U		0.00156	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
1,2-Dichloropropane	U		0.00139	0.00500	0.00546	1	08/19/2018 15:01	WG1154491
1,1-Dichloropropene	U		0.000764	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
1,3-Dichloropropane	U		0.00191	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
cis-1,3-Dichloropropene	U		0.000740	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
trans-1,3-Dichloropropene	U		0.00167	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
2,2-Dichloropropane	U		0.000866	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
Di-isopropyl ether	U		0.000382	0.00100	0.00109	1	08/18/2018 16:38	WG1154260
Ethylbenzene	U		0.000579	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0273	1	08/19/2018 15:01	WG1154491
Isopropylbenzene	U		0.000942	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
p-Isopropyltoluene	U		0.00254	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
2-Butanone (MEK)	U		0.0136	0.0250	0.0273	1	08/19/2018 15:01	WG1154491
Methylene Chloride	U		0.00725	0.0250	0.0273	1	08/18/2018 16:38	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0273	1	08/18/2018 16:38	WG1154260
Methyl tert-butyl ether	U		0.000322	0.00100	0.00109	1	08/18/2018 16:38	WG1154260
Naphthalene	U		0.00341	0.0125	0.0136	1	08/18/2018 16:38	WG1154260
n-Propylbenzene	U		0.00129	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
Styrene	U		0.00298	0.0125	0.0136	1	08/18/2018 16:38	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000546	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000426	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.000737	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
Tetrachloroethene	0.00175	J	0.000764	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
Toluene	0.00288	J	0.00136	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
1,2,3-Trichlorobenzene	U		0.000682	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
1,2,4-Trichlorobenzene	U		0.00526	0.0125	0.0136	1	08/18/2018 16:38	WG1154260
1,1,1-Trichloroethane	U		0.000300	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
1,1,2-Trichloroethane	U		0.000964	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
Trichloroethene	U		0.000437	0.00100	0.00109	1	08/18/2018 16:38	WG1154260
Trichlorofluoromethane	U		0.000546	0.00250	0.00273	1	08/18/2018 16:38	WG1154260
1,2,3-Trichloropropane	U		0.00557	0.0125	0.0136	1	08/18/2018 16:38	WG1154260
1,2,4-Trimethylbenzene	U		0.00127	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
1,2,3-Trimethylbenzene	U		0.00126	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
Vinyl chloride	U		0.000746	0.00250	0.00273	1	08/19/2018 15:01	WG1154491
1,3,5-Trimethylbenzene	U		0.00118	0.00500	0.00546	1	08/18/2018 16:38	WG1154260
Xylenes, Total	U		0.00522	0.00650	0.00710	1	08/18/2018 16:38	WG1154260
(S) Toluene-d8	*107*				*80.0-120*		*08/18/2018 16:38*	WG1154260
(S) Toluene-d8	*107*				*80.0-120*		*08/19/2018 15:01*	WG1154491
(S) Dibromofluoromethane	*99.4*				*74.0-131*		*08/18/2018 16:38*	WG1154260
(S) Dibromofluoromethane	*97.3*				*74.0-131*		*08/19/2018 15:01*	WG1154491
(S) 4-Bromofluorobenzene	*102*				*64.0-132*		*08/18/2018 16:38*	WG1154260
(S) 4-Bromofluorobenzene	*99.7*				*64.0-132*		*08/19/2018 15:01*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	2.23	J	1.45	4.00	4.37	1	08/20/2018 19:39	WG1153557
Residual Range Organics (RRO)	12.8		3.64	10.0	10.9	1	08/20/2018 19:39	WG1153557
(S) o-Terphenyl	*72.9*				*18.0-148*		*08/20/2018 19:39*	WG1153557

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.9		1	08/20/2018 11:13	WG1154708

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.00635	J	0.00298	0.0200	0.0213	1	08/17/2018 12:35	WG1153486

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.26		0.693	2.00	2.13	1	08/19/2018 12:38	WG1153500
Barium	64.7		0.181	0.500	0.533	1	08/19/2018 12:38	WG1153500
Cadmium	U		0.0746	0.500	0.533	1	08/19/2018 12:38	WG1153500
Chromium	20.1		0.149	1.00	1.07	1	08/19/2018 12:38	WG1153500
Lead	2.37		0.202	0.500	0.533	1	08/19/2018 12:38	WG1153500
Selenium	U		0.788	2.00	2.13	1	08/19/2018 12:38	WG1153500
Silver	U		0.298	1.00	1.07	1	08/19/2018 12:38	WG1153500

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.903	0.100	2.66	25	08/17/2018 17:41	WG1153735
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*08/17/2018 17:41*	WG1153735

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0146	0.0250	0.0266	1	08/18/2018 16:58	WG1154260
Acrylonitrile	U		0.00202	0.0125	0.0133	1	08/18/2018 16:58	WG1154260
Benzene	U		0.000426	0.00100	0.00107	1	08/18/2018 16:58	WG1154260
Bromobenzene	U		0.00112	0.0125	0.0133	1	08/18/2018 16:58	WG1154260
Bromodichloromethane	U		0.000840	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
Bromoform	U		0.00637	0.0250	0.0266	1	08/18/2018 16:58	WG1154260
Bromomethane	U		0.00394	0.0125	0.0133	1	08/18/2018 16:58	WG1154260
n-Butylbenzene	U		0.00409	0.0125	0.0133	1	08/18/2018 16:58	WG1154260
sec-Butylbenzene	U		0.00270	0.0125	0.0133	1	08/18/2018 16:58	WG1154260
tert-Butylbenzene	U		0.00165	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
Carbon tetrachloride	U		0.00115	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
Chlorobenzene	U		0.000611	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
Chlorodibromomethane	U		0.000479	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
Chloroethane	U		0.00115	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
Chloroform	U		0.000442	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
Chloromethane	U		0.00148	0.0125	0.0133	1	08/18/2018 16:58	WG1154260
2-Chlorotoluene	U		0.000980	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
4-Chlorotoluene	U		0.00120	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00543	0.0250	0.0266	1	08/18/2018 16:58	WG1154260
1,2-Dibromoethane	U		0.000559	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
Dibromomethane	U		0.00107	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
1,2-Dichlorobenzene	U		0.00155	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
1,3-Dichlorobenzene	U		0.00181	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
1,4-Dichlorobenzene	U		0.00210	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
Dichlorodifluoromethane	U		0.000872	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
1,1-Dichloroethane	U		0.000613	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
1,2-Dichloroethane	U		0.000506	0.00250	0.00266	1	08/18/2018 16:58	WG1154260

B-8 (7)

Collected date/time: 08/14/18 13:00

SAMPLE RESULTS - 16

L1017897

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000533	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
cis-1,2-Dichloroethene	U		0.000735	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
trans-1,2-Dichloroethene	U		0.00152	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
1,2-Dichloropropane	U		0.00135	0.00500	0.00533	1	08/19/2018 15:20	WG1154491
1,1-Dichloropropene	U		0.000746	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
1,3-Dichloropropane	U		0.00186	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
cis-1,3-Dichloropropene	U		0.000722	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
trans-1,3-Dichloropropene	U		0.00163	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
2,2-Dichloropropane	U		0.000845	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
Di-isopropyl ether	U		0.000373	0.00100	0.00107	1	08/18/2018 16:58	WG1154260
Ethylbenzene	U		0.000565	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
Hexachloro-1,3-butadiene	U		0.0135	0.0250	0.0266	1	08/19/2018 15:20	WG1154491
Isopropylbenzene	U		0.000920	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
p-Isopropyltoluene	U		0.00248	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
2-Butanone (MEK)	U		0.0133	0.0250	0.0266	1	08/19/2018 15:20	WG1154491
Methylene Chloride	U		0.00708	0.0250	0.0266	1	08/18/2018 16:58	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0250	0.0266	1	08/18/2018 16:58	WG1154260
Methyl tert-butyl ether	U		0.000314	0.00100	0.00107	1	08/18/2018 16:58	WG1154260
Naphthalene	U		0.00332	0.0125	0.0133	1	08/18/2018 16:58	WG1154260
n-Propylbenzene	U		0.00126	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
Styrene	U		0.00291	0.0125	0.0133	1	08/18/2018 16:58	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000533	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000416	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.000719	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
Tetrachloroethene	0.00120	J	0.000746	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
Toluene	0.00142	J	0.00133	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
1,2,3-Trichlorobenzene	U		0.000666	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
1,2,4-Trichlorobenzene	U		0.00514	0.0125	0.0133	1	08/18/2018 16:58	WG1154260
1,1,1-Trichloroethane	U		0.000293	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
1,1,2-Trichloroethane	U		0.000941	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
Trichloroethene	U		0.000426	0.00100	0.00107	1	08/18/2018 16:58	WG1154260
Trichlorofluoromethane	U		0.000533	0.00250	0.00266	1	08/18/2018 16:58	WG1154260
1,2,3-Trichloropropane	U		0.00543	0.0125	0.0133	1	08/18/2018 16:58	WG1154260
1,2,4-Trimethylbenzene	U		0.00124	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
1,2,3-Trimethylbenzene	U		0.00123	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
Vinyl chloride	U		0.000728	0.00250	0.00266	1	08/19/2018 15:20	WG1154491
1,3,5-Trimethylbenzene	U		0.00115	0.00500	0.00533	1	08/18/2018 16:58	WG1154260
Xylenes, Total	U		0.00509	0.00650	0.00693	1	08/18/2018 16:58	WG1154260
(S) Toluene-d8	*107*				*80.0-120*		*08/18/2018 16:58*	WG1154260
(S) Toluene-d8	*109*				*80.0-120*		*08/19/2018 15:20*	WG1154491
(S) Dibromofluoromethane	*102*				*74.0-131*		*08/18/2018 16:58*	WG1154260
(S) Dibromofluoromethane	*99.7*				*74.0-131*		*08/19/2018 15:20*	WG1154491
(S) 4-Bromofluorobenzene	*103*				*64.0-132*		*08/18/2018 16:58*	WG1154260
(S) 4-Bromofluorobenzene	*98.0*				*64.0-132*		*08/19/2018 15:20*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.42	4.00	4.26	1	08/20/2018 19:01	WG1153557
Residual Range Organics (RRO)	U		3.55	10.0	10.7	1	08/20/2018 19:01	WG1153557
(S) o-Terphenyl	*77.4*				*18.0-148*		*08/20/2018 19:01*	WG1153557

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

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

Method Blank (MB)

(MB) R3335233-1 08/20/18 14:20

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1017897-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1017897-03 08/20/18 14:20 • (DUP) R3335233-3 08/20/18 14:20

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.5	94.1	1	0.376		10

Laboratory Control Sample (LCS)

(LCS) R3335233-2 08/20/18 14:20

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) R3335227-1 08/20/18 11:13

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1017897-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1017897-11 08/20/18 11:13 • (DUP) R3335227-3 08/20/18 11:13

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	95.6	95.5	1	0.0205		10

Laboratory Control Sample (LCS)

(LCS) R3335227-2 08/20/18 11:13

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) R3334561-1 08/17/18 11:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.00280	0.0200

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

(LCS) R3334561-2 08/17/18 11:29 • (LCSD) R3334561-3 08/17/18 11:31

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 %
Mercury	0.300	0.267	0.268	88.9	89.4	80.0-120			0.575	20

L1017695-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1017695-01 08/17/18 11:34 • (MS) R3334561-4 08/17/18 11:36 • (MSD) R3334561-5 08/17/18 11:39

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	ND	0.283	0.258	90.4	82.1	1	75.0-125			9.22	20

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

Method Blank (MB)

(MB) R3334886-1 08/19/18 11:33

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Arsenic	U		0.650	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.740	2.00
Silver	U		0.280	1.00

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

(LCS) R3334886-2 08/19/18 11:35 • (LCSD) R3334886-3 08/19/18 11:37

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Arsenic	100	94.4	103	94.4	103	80.0-120			8.52	20
Barium	100	97.5	107	97.5	107	80.0-120			8.99	20
Cadmium	100	93.7	102	93.7	102	80.0-120			8.63	20
Chromium	100	95.1	104	95.1	104	80.0-120			8.57	20
Lead	100	96.1	105	96.1	105	80.0-120			8.76	20
Selenium	100	93.9	102	93.9	102	80.0-120			8.64	20
Silver	20.0	17.7	19.1	88.7	95.7	80.0-120			7.52	20

L1017897-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1017897-10 08/19/18 11:40 • (MS) R3334886-6 08/19/18 11:47 • (MSD) R3334886-7 08/19/18 11:50

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	123	3.35	118	125	93.5	98.8	1	75.0-125			5.29	20
Barium	123	184	316	340	108	127	1	75.0-125		J5	7.18	20
Cadmium	123	0.0950	116	123	94.2	99.5	1	75.0-125			5.50	20
Chromium	123	21.5	132	138	89.5	94.5	1	75.0-125			4.55	20
Lead	123	2.70	126	134	100	106	1	75.0-125			5.75	20
Selenium	123	U	110	117	89.7	95.0	1	75.0-125			5.74	20
Silver	24.6	U	20.7	22.1	84.2	89.7	1	75.0-125			6.27	20

Method Blank (MB)

(MB) R3334815-3 08/16/18 22:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*

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

(LCS) R3334815-1 08/16/18 21:41 • (LCSD) R3334815-2 08/16/18 22:02

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 %
TPHG C6 - C12	5.50	5.51	5.38	100	97.7	70.0-133			2.41	20
(S) a,a,a-Trifluorotoluene(FID)				*92.0*	*93.3*	*77.0-120*				

L1017897-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1017897-02 08/17/18 06:09 • (MS) R3334815-4 08/17/18 06:30 • (MSD) R3334815-5 08/17/18 06:51

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 %
TPHG C6 - C12	5.74	U	96.8	92.2	67.5	64.3	25	10.0-146			4.89	30
(S) a,a,a-Trifluorotoluene(FID)					*104*	*104*		*77.0-120*				

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

WG1153735

Volatile Organic Compounds (GC) by Method NWTPHGX

QUALITY CONTROL SUMMARY

L1017897-03,04,05,06,07,08,09,10,11,12,13,14,15,16

Method Blank (MB)

(MB) R3334819-3 08/17/18 11:32

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)	*102*			*77.0-120*

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

(LCS) R3334819-1 08/17/18 10:27 • (LCSD) R3334819-2 08/17/18 10:48

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 %
Gasoline Range Organics-NWTPH	5.50	4.89	4.89	88.8	88.9	70.0-133			0.0463	20
(S) a,a,a-Trifluorotoluene(FID)				*101*	*101*	*77.0-120*				

L1017897-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1017897-03 08/17/18 12:59 • (MS) R3334819-4 08/17/18 19:29 • (MSD) R3334819-5 08/17/18 19:51

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	5.82	U	140	126	92.7	83.6	26	10.0-146			10.3	30
(S) a,a,a-Trifluorotoluene(FID)					*103*	*102*		*77.0-120*				

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

Method Blank (MB)

(MB) R3334767-2 08/17/18 12:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.00100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
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 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
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
Di-isopropyl ether	U		0.000350	0.00100
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250
p-Isopropyltoluene	U		0.00233	0.00500
Methylene Chloride	U		0.00664	0.0250

Method Blank (MB)

(MB) R3334767-2 08/17/18 12:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
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	0.00250
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
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*117*			*80.0-120*
(S) Dibromofluoromethane	*92.9*			*74.0-131*
(S) 4-Bromofluorobenzene	*98.8*			*64.0-132*

Laboratory Control Sample (LCS)

(LCS) R3334767-1 08/17/18 10:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acrylonitrile	0.625	0.554	88.6	57.8-143	
Benzene	0.125	0.122	98.0	72.6-120	
Bromobenzene	0.125	0.122	97.4	80.3-115	
Bromodichloromethane	0.125	0.144	115	75.3-119	
Bromoform	0.125	0.126	101	69.1-135	
Bromomethane	0.125	0.117	93.5	23.0-191	
n-Butylbenzene	0.125	0.122	97.9	74.2-134	
sec-Butylbenzene	0.125	0.131	104	77.8-129	
tert-Butylbenzene	0.125	0.122	97.9	77.2-129	

Laboratory Control Sample (LCS)

(LCS) R3334767-1 08/17/18 10:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Carbon tetrachloride	0.125	0.130	104	69.4-129	
Chlorobenzene	0.125	0.126	101	78.9-122	
Chlorodibromomethane	0.125	0.115	92.0	76.4-126	
Chloroethane	0.125	0.123	98.2	47.2-147	
Chloroform	0.125	0.129	103	73.3-122	
Chloromethane	0.125	0.126	101	53.1-135	
2-Chlorotoluene	0.125	0.129	103	74.6-127	
4-Chlorotoluene	0.125	0.123	98.7	79.5-123	
1,2-Dibromo-3-Chloropropane	0.125	0.126	101	64.9-131	
1,2-Dibromoethane	0.125	0.131	105	78.7-123	
Dibromomethane	0.125	0.137	109	78.5-117	
1,2-Dichlorobenzene	0.125	0.122	97.7	83.6-119	
1,3-Dichlorobenzene	0.125	0.127	101	75.9-129	
1,4-Dichlorobenzene	0.125	0.116	93.0	81.0-115	
Dichlorodifluoromethane	0.125	0.121	96.5	50.9-139	
1,1-Dichloroethane	0.125	0.128	103	71.7-125	
1,2-Dichloroethane	0.125	0.121	97.0	67.2-121	
1,1-Dichloroethene	0.125	0.121	97.2	60.6-133	
cis-1,2-Dichloroethene	0.125	0.121	96.9	76.1-121	
trans-1,2-Dichloroethene	0.125	0.135	108	70.7-124	
1,2-Dichloropropane	0.125	0.112	89.8	76.9-123	
1,1-Dichloropropene	0.125	0.125	99.9	71.2-126	
1,3-Dichloropropane	0.125	0.148	119	80.3-114	J4
cis-1,3-Dichloropropene	0.125	0.130	104	77.3-123	
trans-1,3-Dichloropropene	0.125	0.130	104	73.0-127	
Di-isopropyl ether	0.125	0.111	88.6	67.2-131	
Ethylbenzene	0.125	0.130	104	78.6-124	
Hexachloro-1,3-butadiene	0.125	0.126	101	69.2-136	
Isopropylbenzene	0.125	0.104	83.0	79.4-126	
p-Isopropyltoluene	0.125	0.124	99.1	75.4-132	
Methylene Chloride	0.125	0.117	93.7	68.2-119	
4-Methyl-2-pentanone (MIBK)	0.625	0.638	102	61.1-138	
Methyl tert-butyl ether	0.125	0.120	96.0	70.2-122	
Naphthalene	0.125	0.119	95.1	69.9-132	
n-Propylbenzene	0.125	0.119	94.9	80.2-124	
Styrene	0.125	0.131	104	79.4-124	
1,1,1,2-Tetrachloroethane	0.125	0.111	88.8	76.7-127	
1,1,2,2-Tetrachloroethane	0.125	0.136	109	78.8-124	
Tetrachloroethene	0.125	0.113	90.3	71.1-133	
Toluene	0.125	0.127	101	76.7-116	

Laboratory Control Sample (LCS)

(LCS) R3334767-1 08/17/18 10:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,1,2-Trichlorotrifluoroethane	0.125	0.127	102	62.6-138	
1,2,3-Trichlorobenzene	0.125	0.120	96.2	72.5-137	
1,2,4-Trichlorobenzene	0.125	0.118	94.1	74.0-137	
1,1,1-Trichloroethane	0.125	0.132	105	69.9-127	
1,1,2-Trichloroethane	0.125	0.142	114	81.9-119	
Trichloroethene	0.125	0.128	102	77.2-122	
Trichlorofluoromethane	0.125	0.110	87.7	51.5-151	
1,2,3-Trichloropropane	0.125	0.126	101	74.0-124	
1,2,3-Trimethylbenzene	0.125	0.125	100	79.4-118	
1,2,4-Trimethylbenzene	0.125	0.126	100	77.1-124	
1,3,5-Trimethylbenzene	0.125	0.130	104	79.0-125	
Xylenes, Total	0.375	0.373	99.5	78.1-123	
(S) Toluene-d8			*105*	*80.0-120*	
(S) Dibromofluoromethane			*99.5*	*74.0-131*	
(S) 4-Bromofluorobenzene			*104*	*64.0-132*	

L1017857-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1017857-02 08/17/18 14:25 • (MS) R3334767-3 08/17/18 20:57 • (MSD) R3334767-4 08/17/18 21:18

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acrylonitrile	0.625	ND	0.356	0.319	57.0	51.0	1	39.3-152			11.1	27.2
Benzene	0.125	ND	0.0582	0.0268	46.5	21.5	1	47.8-131	J6	J3 J6	73.7	22.8
Bromobenzene	0.125	ND	0.0803	0.0590	64.3	47.2	1	40.0-130		J3	30.6	27.4
Bromodichloromethane	0.125	ND	0.0879	0.0548	70.3	43.9	1	50.6-128		J3 J6	46.4	22.8
Bromoform	0.125	ND	0.0775	0.0630	62.0	50.4	1	43.3-139			20.7	25.9
Bromomethane	0.125	ND	0.0264	0.0140	21.1	11.2	1	5.00-189		J3	61.4	26.7
n-Butylbenzene	0.125	ND	0.0886	0.0385	70.9	30.8	1	23.6-146		J3	78.9	39.2
sec-Butylbenzene	0.125	ND	0.0912	0.0383	72.9	30.6	1	31.0-142		J3 J6	81.7	34.7
tert-Butylbenzene	0.125	ND	0.0861	0.0383	68.9	30.7	1	36.9-142		J3 J6	76.8	31.7
Carbon tetrachloride	0.125	ND	0.0602	0.0191	48.2	15.2	1	46.0-140		J3 J6	104	27.2
Chlorobenzene	0.125	ND	0.0862	0.0494	68.9	39.5	1	44.1-134		J3 J6	54.2	25.7
Chlorodibromomethane	0.125	ND	0.0739	0.0597	59.1	47.8	1	49.7-134		J6	21.2	24
Chloroethane	0.125	ND	0.0337	0.0161	27.0	12.9	1	5.00-164		J3	70.6	28.4
Chloroform	0.125	ND	0.0820	0.0436	65.6	34.9	1	51.2-133		J3 J6	61.1	22.8
Chloromethane	0.125	ND	0.0231	0.0108	18.5	8.62	1	31.4-141	J6	J3 J6	72.7	24.6
2-Chlorotoluene	0.125	ND	0.0821	0.0474	65.7	37.9	1	36.1-137		J3	53.7	28.9
4-Chlorotoluene	0.125	ND	0.0836	0.0490	66.8	39.2	1	35.4-137		J3	52.1	29.8
1,2-Dibromo-3-Chloropropane	0.125	ND	0.0817	0.0749	65.4	59.9	1	40.4-138			8.78	30.8

L1017857-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1017857-02 08/17/18 14:25 • (MS) R3334767-3 08/17/18 20:57 • (MSD) R3334767-4 08/17/18 21:18

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
1,2-Dibromoethane	0.125	ND	0.0811	0.0651	64.9	52.1	1	50.2-133			21.8	23.6
Dibromomethane	0.125	ND	0.0784	0.0542	62.7	43.3	1	52.4-128		J3 J6	36.5	23
1,2-Dichlorobenzene	0.125	ND	0.0875	0.0625	70.0	50.0	1	34.6-139		J3	33.3	29.9
1,3-Dichlorobenzene	0.125	ND	0.0880	0.0558	70.4	44.7	1	28.4-142		J3	44.8	31.2
1,4-Dichlorobenzene	0.125	ND	0.0812	0.0586	65.0	46.9	1	35.0-133		J3	32.3	31.1
Dichlorodifluoromethane	0.125	ND	0.0411	0.00877	32.9	7.02	1	31.2-144		J3 J6	130	30.2
1,1-Dichloroethane	0.125	ND	0.0735	0.0333	58.8	26.7	1	49.1-136		J3 J6	75.2	22.9
1,2-Dichloroethane	0.125	ND	0.0698	0.0498	55.8	39.8	1	47.1-129		J3 J6	33.4	22.7
1,1-Dichloroethene	0.125	ND	0.0405	0.0137	32.4	11.0	1	36.1-142	J6	J3 J6	98.8	25.6
cis-1,2-Dichloroethene	0.125	ND	0.0639	0.0348	51.1	27.8	1	50.6-133		J3 J6	59.0	23
trans-1,2-Dichloroethene	0.125	ND	0.0393	0.0181	31.5	14.5	1	43.8-135	J6	J3 J6	73.9	24.8
1,2-Dichloropropane	0.125	ND	0.0708	0.0411	56.6	32.9	1	50.3-134		J3 J6	52.9	22.7
1,1-Dichloropropene	0.125	ND	0.0487	0.0171	38.9	13.7	1	43.0-137	J6	J3 J6	95.8	26.4
1,3-Dichloropropane	0.125	ND	0.0962	0.0722	76.9	57.7	1	51.4-127		J3	28.5	23.1
cis-1,3-Dichloropropene	0.125	ND	0.0873	0.0561	69.8	44.9	1	48.4-134		J3 J6	43.6	23.6
trans-1,3-Dichloropropene	0.125	ND	0.0742	0.0560	59.3	44.8	1	46.6-135		J3 J6	27.9	25.3
Di-isopropyl ether	0.125	ND	0.0696	0.0474	55.7	37.9	1	46.7-140		J3 J6	37.8	23.5
Ethylbenzene	0.125	ND	0.0808	0.0402	64.7	32.2	1	44.8-135		J3 J6	67.1	26.9
Hexachloro-1,3-butadiene	0.125	ND	0.0947	0.0480	75.8	38.4	1	10.0-149		J3	65.5	40
Isopropylbenzene	0.125	ND	0.0656	0.0307	52.5	24.5	1	41.9-139		J3 J6	72.6	29.3
p-Isopropyltoluene	0.125	ND	0.0833	0.0394	66.6	31.6	1	27.3-146		J3	71.4	35.1
Methylene Chloride	0.125	ND	0.0566	0.0340	45.3	27.2	1	46.7-125	J6	J3 J6	49.8	22.2
4-Methyl-2-pentanone (MIBK)	0.625	ND	0.451	0.410	72.2	65.6	1	42.4-146			9.48	26.7
Methyl tert-butyl ether	0.125	ND	0.0706	0.0573	56.5	45.8	1	50.4-131		J6	20.8	24.8
Naphthalene	0.125	ND	0.0808	0.0761	64.6	60.9	1	18.4-145			5.92	34
n-Propylbenzene	0.125	ND	0.0718	0.0326	57.5	26.1	1	35.2-139		J3 J6	75.0	31.9
Styrene	0.125	ND	0.0822	0.0515	65.7	41.2	1	39.7-137		J3	45.9	28.2
1,1,1,2-Tetrachloroethane	0.125	ND	0.0826	0.0519	66.1	41.6	1	48.8-136		J3 J6	45.6	25.5
1,1,2,2-Tetrachloroethane	0.125	ND	0.0781	0.0765	62.5	61.2	1	45.7-140			2.11	26.4
Tetrachloroethene	0.125	ND	0.0528	0.0240	42.2	19.2	1	37.7-140		J3 J6	74.9	29.2
Toluene	0.125	ND	0.0706	0.0354	54.6	26.5	1	47.8-127		J3 J6	66.4	24.3
1,2,3-Trichlorobenzene	0.125	ND	0.0911	0.0750	72.9	60.0	1	10.0-150			19.4	38.5
1,1,2-Trichlorotrifluoroethane	0.125	ND	0.0589	0.0151	47.1	12.1	1	35.7-146		J3 J6	118	28.8
1,2,4-Trichlorobenzene	0.125	ND	0.0853	0.0645	68.2	51.6	1	10.0-153			27.7	39.3
1,1,1-Trichloroethane	0.125	ND	0.0737	0.0254	58.9	20.3	1	49.0-138		J3 J6	97.6	25.3
1,1,2-Trichloroethane	0.125	ND	0.103	0.0735	82.5	58.8	1	52.3-132		J3	33.5	23.4
Trichloroethene	0.125	ND	0.0735	0.0324	58.8	25.9	1	48.0-132		J3 J6	77.6	24.8
Trichlorofluoromethane	0.125	ND	0.0465	0.0121	37.2	9.72	1	12.8-169		J3 J6	117	29.7
1,2,3-Trichloropropane	0.125	ND	0.0969	0.0796	77.5	63.6	1	44.4-138			19.7	26.3
1,2,4-Trimethylbenzene	0.125	ND	0.0823	0.0486	65.9	38.9	1	32.9-139		J3	51.5	30.6

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

L1017857-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1017857-02 08/17/18 14:25 • (MS) R3334767-3 08/17/18 20:57 • (MSD) R3334767-4 08/17/18 21:18

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2,3-Trimethylbenzene	0.125	ND	0.0866	0.0533	69.3	42.6	1	41.0-133		J3	47.7	27.6
1,3,5-Trimethylbenzene	0.125	ND	0.0839	0.0416	67.1	33.3	1	37.1-138		J3 J6	67.5	30.6
Xylenes, Total	0.375	ND	0.235	0.116	62.6	30.9	1	42.7-135		J3 J6	67.9	26.6
(S) Toluene-d8					*112*	*113*		*80.0-120*				
(S) Dibromofluoromethane					*95.5*	*96.7*		*74.0-131*				
(S) 4-Bromofluorobenzene					*102*	*106*		*64.0-132*				

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

Method Blank (MB)

(MB) R3334775-2 08/18/18 13:42

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	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
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 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
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
1,1-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
Ethylbenzene	U		0.000530	0.00250
Isopropylbenzene	U		0.000863	0.00250
p-Isopropyltoluene	U		0.00233	0.00500
Methylene Chloride	U		0.00664	0.0250

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

Method Blank (MB)

(MB) R3334775-2 08/18/18 13:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
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	0.00250
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
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*110*			*80.0-120*
(S) Dibromofluoromethane	*94.6*			*74.0-131*
(S) 4-Bromofluorobenzene	*104*			*64.0-132*

Laboratory Control Sample (LCS)

(LCS) R3334775-1 08/18/18 11:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.769	123	25.3-178	
Acrylonitrile	0.625	0.676	108	57.8-143	
Benzene	0.125	0.117	93.8	72.6-120	
Bromobenzene	0.125	0.121	96.8	80.3-115	
Bromodichloromethane	0.125	0.125	100	75.3-119	
Bromoform	0.125	0.120	95.8	69.1-135	
Bromomethane	0.125	0.127	102	23.0-191	
n-Butylbenzene	0.125	0.139	111	74.2-134	
sec-Butylbenzene	0.125	0.125	99.6	77.8-129	

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

Laboratory Control Sample (LCS)

(LCS) R3334775-1 08/18/18 11:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
tert-Butylbenzene	0.125	0.125	99.8	77.2-129	
Carbon tetrachloride	0.125	0.130	104	69.4-129	
Chlorobenzene	0.125	0.124	99.3	78.9-122	
Chlorodibromomethane	0.125	0.115	91.8	76.4-126	
Chloroethane	0.125	0.127	101	47.2-147	
Chloroform	0.125	0.121	97.1	73.3-122	
Chloromethane	0.125	0.145	116	53.1-135	
2-Chlorotoluene	0.125	0.136	109	74.6-127	
4-Chlorotoluene	0.125	0.124	98.9	79.5-123	
1,2-Dibromo-3-Chloropropane	0.125	0.131	104	64.9-131	
1,2-Dibromoethane	0.125	0.124	99.0	78.7-123	
Dibromomethane	0.125	0.127	102	78.5-117	
1,2-Dichlorobenzene	0.125	0.118	94.4	83.6-119	
1,3-Dichlorobenzene	0.125	0.117	93.8	75.9-129	
1,4-Dichlorobenzene	0.125	0.119	95.3	81.0-115	
Dichlorodifluoromethane	0.125	0.128	103	50.9-139	
1,1-Dichloroethane	0.125	0.129	104	71.7-125	
1,2-Dichloroethane	0.125	0.131	105	67.2-121	
1,1-Dichloroethene	0.125	0.136	109	60.6-133	
cis-1,2-Dichloroethene	0.125	0.0952	76.1	76.1-121	
trans-1,2-Dichloroethene	0.125	0.122	97.2	70.7-124	
1,1-Dichloropropene	0.125	0.140	112	71.2-126	
1,3-Dichloropropane	0.125	0.126	101	80.3-114	
cis-1,3-Dichloropropene	0.125	0.111	88.5	77.3-123	
trans-1,3-Dichloropropene	0.125	0.125	99.7	73.0-127	
2,2-Dichloropropane	0.125	0.136	109	61.9-132	
Di-isopropyl ether	0.125	0.121	96.9	67.2-131	
Ethylbenzene	0.125	0.131	105	78.6-124	
Isopropylbenzene	0.125	0.115	92.2	79.4-126	
p-Isopropyltoluene	0.125	0.126	101	75.4-132	
Methylene Chloride	0.125	0.125	100	68.2-119	
4-Methyl-2-pentanone (MIBK)	0.625	0.672	108	61.1-138	
Methyl tert-butyl ether	0.125	0.147	117	70.2-122	
Naphthalene	0.125	0.137	109	69.9-132	
n-Propylbenzene	0.125	0.118	94.7	80.2-124	
Styrene	0.125	0.126	101	79.4-124	
1,1,1,2-Tetrachloroethane	0.125	0.109	87.0	76.7-127	
1,1,2,2-Tetrachloroethane	0.125	0.103	82.2	78.8-124	
Tetrachloroethene	0.125	0.129	103	71.1-133	
Toluene	0.125	0.126	100	76.7-116	

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

Laboratory Control Sample (LCS)

(LCS) R3334775-1 08/18/18 11:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,1,2-Trichlorotrifluoroethane	0.125	0.138	110	62.6-138	
1,2,3-Trichlorobenzene	0.125	0.155	124	72.5-137	
1,2,4-Trichlorobenzene	0.125	0.129	103	74.0-137	
1,1,1-Trichloroethane	0.125	0.133	106	69.9-127	
1,1,2-Trichloroethane	0.125	0.111	88.9	81.9-119	
Trichloroethene	0.125	0.138	110	77.2-122	
Trichlorofluoromethane	0.125	0.135	108	51.5-151	
1,2,3-Trichloropropane	0.125	0.130	104	74.0-124	
1,2,3-Trimethylbenzene	0.125	0.127	102	79.4-118	
1,2,4-Trimethylbenzene	0.125	0.121	96.6	77.1-124	
1,3,5-Trimethylbenzene	0.125	0.122	97.6	79.0-125	
Xylenes, Total	0.375	0.362	96.5	78.1-123	
(S) Toluene-d8			*104*	*80.0-120*	
(S) Dibromofluoromethane			*102*	*74.0-131*	
(S) 4-Bromofluorobenzene			*100*	*64.0-132*	

L1018606-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1018606-01 08/18/18 18:40 • (MS) R3334775-3 08/18/18 21:00 • (MSD) R3334775-4 08/18/18 21:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	3.13	U	1.10	1.08	35.2	34.5	1	10.0-130	J5	J5	2.12	31.5
Acrylonitrile	3.13	U	1.57	1.53	50.4	49.1	1	39.3-152	J5	J5	2.56	27.2
Benzene	0.625	U	0.295	0.290	47.2	46.3	1	47.8-131	J5	J5	1.76	22.8
Bromobenzene	0.625	U	0.389	0.390	62.2	62.4	1	40.0-130	J5	J5	0.364	27.4
Bromodichloromethane	0.625	U	0.475	0.469	76.0	75.1	1	50.6-128	J5	J5	1.14	22.8
Bromoform	0.625	U	0.471	0.480	75.4	76.9	1	43.3-139	J5	J5	1.89	25.9
Bromomethane	0.625	U	0.121	0.128	19.4	20.5	1	5.00-189			5.25	26.7
n-Butylbenzene	0.625	U	0.368	0.405	58.8	64.8	1	23.6-146	J5	J5	9.67	39.2
sec-Butylbenzene	0.625	U	0.340	0.370	54.4	59.2	1	31.0-142	J5	J5	8.48	34.7
tert-Butylbenzene	0.625	U	0.365	0.400	58.5	64.0	1	36.9-142	J5	J5	9.01	31.7
Carbon tetrachloride	0.625	U	0.343	0.348	54.9	55.6	1	46.0-140	J5	J5	1.25	27.2
Chlorobenzene	0.625	U	0.236	0.233	37.7	37.3	1	44.1-134	J5	J5	1.16	25.7
Chlorodibromomethane	0.625	U	0.267	0.261	42.7	41.8	1	49.7-134	J5	J5	1.96	24
Chloroethane	0.625	U	0.156	0.165	24.9	26.4	1	5.00-164			5.80	28.4
Chloroform	0.625	U	0.402	0.399	64.3	63.8	1	51.2-133	J5	J5	0.676	22.8
Chloromethane	0.625	U	0.146	0.144	23.3	23.0	1	31.4-141			1.35	24.6
2-Chlorotoluene	0.625	U	0.415	0.424	66.4	67.9	1	36.1-137	J5	J5	2.09	28.9
4-Chlorotoluene	0.625	U	0.405	0.354	64.8	56.7	1	35.4-137	J5	J5	13.3	29.8

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

L1018606-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1018606-01 08/18/18 18:40 • (MS) R3334775-3 08/18/18 21:00 • (MSD) R3334775-4 08/18/18 21:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2-Dibromo-3-Chloropropane	0.625	U	0.339	0.389	54.3	62.2	1	40.4-138	J5	J5	13.6	30.8
1,2-Dibromoethane	0.625	U	0.240	0.237	38.4	37.9	1	50.2-133	J5	J5	1.33	23.6
Dibromomethane	0.625	U	0.376	0.349	60.1	55.8	1	52.4-128	J5	J5	7.43	23
1,2-Dichlorobenzene	0.625	U	0.392	0.409	62.7	65.4	1	34.6-139	J5	J5	4.16	29.9
1,3-Dichlorobenzene	0.625	U	0.389	0.412	62.2	65.9	1	28.4-142	J5	J5	5.72	31.2
1,4-Dichlorobenzene	0.625	U	0.391	0.407	62.6	65.1	1	35.0-133	J5	J5	3.78	31.1
Dichlorodifluoromethane	0.625	U	0.307	0.289	49.1	46.3	1	31.2-144	J5	J5	5.85	30.2
1,1-Dichloroethane	0.625	U	0.395	0.388	63.2	62.1	1	49.1-136	J5	J5	1.82	22.9
1,2-Dichloroethane	0.625	U	0.364	0.353	58.2	56.5	1	47.1-129	J5	J5	2.94	22.7
1,1-Dichloroethene	0.625	U	0.250	0.242	40.1	38.7	1	36.1-142	J5	J5	3.47	25.6
cis-1,2-Dichloroethene	0.625	U	0.272	0.271	43.5	43.3	1	50.6-133	J5	J5	0.371	23
trans-1,2-Dichloroethene	0.625	U	0.196	0.189	31.3	30.2	1	43.8-135	J5	J5	3.49	24.8
1,1-Dichloropropene	0.625	U	0.260	0.264	41.6	42.3	1	43.0-137	J5	J5	1.59	26.4
1,3-Dichloropropane	0.625	U	0.275	0.271	44.0	43.3	1	51.4-127	J5	J5	1.63	23.1
cis-1,3-Dichloropropene	0.625	U	0.216	0.212	34.6	34.0	1	48.4-134	J5	J5	1.70	23.6
trans-1,3-Dichloropropene	0.625	U	0.263	0.258	42.1	41.3	1	46.6-135	J5	J5	2.09	25.3
2,2-Dichloropropane	0.625	U	0.290	0.297	46.4	47.6	1	45.2-141	J5	J5	2.55	26.6
Di-isopropyl ether	0.625	U	0.429	0.438	68.6	70.1	1	46.7-140	J5	J5	2.15	23.5
Ethylbenzene	0.625	U	0.238	0.234	38.1	37.5	1	44.8-135	J5	J5	1.77	26.9
Isopropylbenzene	0.625	U	0.373	0.390	59.7	62.4	1	41.9-139	J5	J5	4.40	29.3
p-Isopropyltoluene	0.625	U	0.358	0.390	57.2	62.5	1	27.3-146	J5	J5	8.71	35.1
Methylene Chloride	0.625	U	0.316	0.322	50.6	51.5	1	46.7-125	J5	J5	1.83	22.2
4-Methyl-2-pentanone (MIBK)	3.13	U	1.22	1.24	39.1	39.8	1	42.4-146	J5	J5	1.73	26.7
Methyl tert-butyl ether	0.625	U	0.409	0.458	65.4	73.2	1	50.4-131	J5	J5	11.3	24.8
Naphthalene	0.625	U	0.339	0.409	54.2	65.5	1	18.4-145	J5	J5	18.9	34
n-Propylbenzene	0.625	U	0.343	0.363	54.8	58.1	1	35.2-139	J5	J5	5.87	31.9
Styrene	0.625	U	0.451	0.465	72.2	74.4	1	39.7-137	J5	J5	3.07	28.2
1,1,1,2-Tetrachloroethane	0.625	U	0.231	0.229	37.0	36.7	1	48.8-136	J5	J5	0.709	25.5
1,1,2,2-Tetrachloroethane	0.625	U	0.353	0.370	56.5	59.2	1	45.7-140	J5	J5	4.68	26.4
Tetrachloroethene	0.625	U	0.174	0.169	27.9	27.1	1	37.7-140			3.07	29.2
Toluene	0.625	U	0.209	0.202	33.4	32.3	1	47.8-127	J5	J5	3.36	24.3
1,1,2-Trichlorotrifluoroethane	0.625	U	0.341	0.341	54.6	54.6	1	35.7-146	J5	J5	0.130	28.8
1,2,3-Trichlorobenzene	0.625	U	0.412	0.502	66.0	80.3	1	10.0-150	J5	J5	19.5	38.5
1,2,4-Trichlorobenzene	0.625	U	0.355	0.406	56.8	65.0	1	10.0-153	J5	J5	13.5	39.3
1,1,1-Trichloroethane	0.625	U	0.380	0.380	60.9	60.8	1	49.0-138	J5	J5	0.0352	25.3
1,1,2-Trichloroethane	0.625	U	0.254	0.252	40.6	40.3	1	52.3-132	J5	J5	0.886	23.4
Trichloroethene	0.625	U	0.332	0.335	53.1	53.7	1	48.0-132	J5	J5	0.994	24.8
Trichlorofluoromethane	0.625	U	0.217	0.212	34.7	33.9	1	12.8-169	J5	J5	2.38	29.7
1,2,3-Trichloropropane	0.625	U	0.423	0.441	67.7	70.6	1	44.4-138	J5	J5	4.08	26.3
1,2,3-Trimethylbenzene	0.625	U	0.385	0.409	61.6	65.5	1	41.0-133	J5	J5	6.03	27.6

L1018606-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1018606-01 08/18/18 18:40 • (MS) R3334775-3 08/18/18 21:00 • (MSD) R3334775-4 08/18/18 21:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2,4-Trimethylbenzene	0.625	U	0.370	0.393	59.3	62.9	1	32.9-139	J5	J5	5.91	30.6
1,3,5-Trimethylbenzene	0.625	U	0.360	0.378	57.6	60.6	1	37.1-138	J5	J5	5.09	30.6
Xylenes, Total	1.88	U	0.644	0.644	34.3	34.3	1	42.7-135	J5	J5	0.000	26.6
(S) Toluene-d8					*64.9*	*63.2*		*80.0-120*	J2	J2		
(S) Dibromofluoromethane					*97.4*	*96.9*		*74.0-131*				
(S) 4-Bromofluorobenzene					*100*	*102*		*64.0-132*				

Method Blank (MB)

(MB) R3335060-2 08/19/18 10:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
2,2-Dichloropropane	U		0.000793	0.00250
2-Butanone (MEK)	U		0.0125	0.0250
Vinyl chloride	U		0.000683	0.00250
(S) Toluene-d8	*113*			*80.0-120*
(S) Dibromofluoromethane	*94.0*			*74.0-131*
(S) 4-Bromofluorobenzene	*97.7*			*64.0-132*

Laboratory Control Sample (LCS)

(LCS) R3335060-1 08/19/18 09:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.659	105	25.3-178	
2,2-Dichloropropane	0.125	0.0971	77.7	61.9-132	
2-Butanone (MEK)	0.625	0.957	153	44.5-154	
Vinyl chloride	0.125	0.149	119	58.4-134	
(S) Toluene-d8			*105*	*80.0-120*	
(S) Dibromofluoromethane			*103*	*74.0-131*	
(S) 4-Bromofluorobenzene			*93.3*	*64.0-132*	

Method Blank (MB)

(MB) R3335028-2 08/19/18 12:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
1,2-Dichloropropane	U		0.00127	0.00500
Hexachloro-1,3-butadiene	U		0.0127	0.0250
2-Butanone (MEK)	U		0.0125	0.0250
Vinyl chloride	U		0.000683	0.00250
(S) Toluene-d8	*108*			*80.0-120*
(S) Dibromofluoromethane	*95.0*			*74.0-131*
(S) 4-Bromofluorobenzene	*97.9*			*64.0-132*

Laboratory Control Sample (LCS)

(LCS) R3335028-1 08/19/18 11:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,2-Dichloropropane	0.125	0.129	103	76.9-123	
Hexachloro-1,3-butadiene	0.125	0.124	99.0	69.2-136	
2-Butanone (MEK)	0.625	0.805	129	44.5-154	
Vinyl chloride	0.125	0.105	83.9	58.4-134	
(S) Toluene-d8			*109*	*80.0-120*	
(S) Dibromofluoromethane			*91.5*	*74.0-131*	
(S) 4-Bromofluorobenzene			*98.7*	*64.0-132*	

Method Blank (MB)

(MB) R3335144-1 08/20/18 13:42

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	*75.7*			*18.0-148*

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

(LCS) R3335144-2 08/20/18 13:56 • (LCSD) R3335144-3 08/20/18 14:47

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 %
Diesel Range Organics (DRO)	25.0	20.6	21.1	82.4	84.4	50.0-150			2.40	20
Residual Range Organics (RRO)	25.0	17.4	16.7	69.6	66.8	50.0-150			4.11	20
(S) o-Terphenyl				*74.6*	*77.6*	*18.0-148*				

L1017897-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1017897-07 08/20/18 15:47 • (MS) R3335144-4 08/20/18 16:01 • (MSD) R3335144-5 08/20/18 16:14

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)	26.5	U	20.6	23.1	77.6	87.2	1	50.0-150			11.7	20
Residual Range Organics (RRO)	26.5	U	18.6	18.7	70.0	70.4	1	50.0-150			0.570	20
(S) o-Terphenyl					*70.0*	*76.4*		*18.0-148*				

GLOSSARY OF TERMS

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

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.

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
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.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
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.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1 6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1 4]	2006
Texas	T 104704245-17-14
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

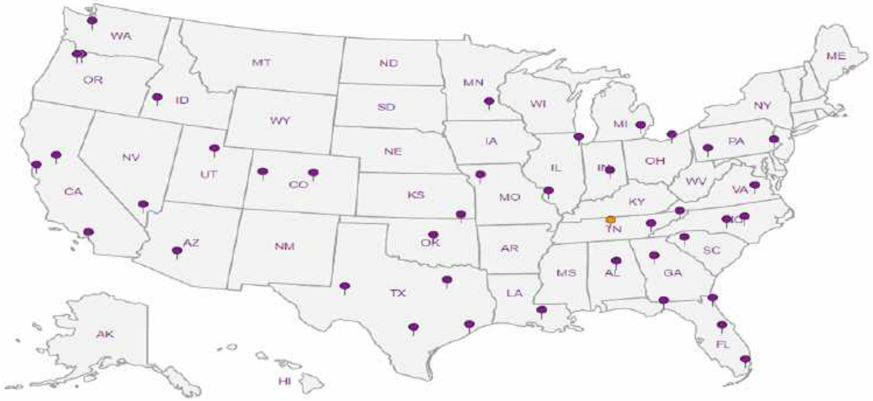
A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

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

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com,**

Project Description: **Future Federal Way Hospital**

City/State Collected:

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.06**

Lab Project # **TGERESHTX-R13411**

L# L1617897

E240

Collected by (print): TIM CRUMP

Site/Facility ID #

P.O. # **8162**

Collected by (signature):

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

Immediately Packed on Ice N ___ Y X

Acctnum: **TGERESHTX**
Template: **T139025**
Prelogin: **P665046**
TSR: **134 - Mark W. Beasley**
PB: T08-2-18
Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 4ozClr-NoPres	NWTPHDXNOSGT,TS 4ozClr-NoPres	SV8082,SV8270PAHSIMD 4ozClr-NoPres	V8260C, Gx 40ml/NaHSO4/Syr/MeOH	Remarks	Sample # (lab only)
B-1 (4)	Grab	SS	4	8/14/18	0850	5	X	X		X		-01
B-1 (9)	Grab	SS	9	8/14/18	0900	5	X	X		X		02
B-2 (4)	Grab	SS	4	8/14/18	0930	5	X	X		X		03
B-2 (8)	Grab	SS	8	8/14/18	0940	5	X	X		X		04
B-3 (4)	Grab	SS	4	8/14/18	0955	5	X	X		X		05
B-3 (10)	Grab	SS	10	8/14/18	1010	5	X	X		X		06
B-4 (3)	Grab	SS	3	8/14/18	1030	5	X	X		X		07
B-4 (6)	Grab	SS	6	8/14/18	1035	5	X	X		X		08
B-5 (4)	Grab	SS	4	8/14/18	1105	5	X	X		X		09
B-5 (9)	Grab	SS	9	8/14/18	1130	5	X	X		X		10

* 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 # 4492 6220 9340/9351

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

< 0.5 MR/HR

Relinquished by : (Signature)
Date: 08/14/18
Time: 1440
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
2 [✓ HCL] / MeoH
TBR

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

Temp: 6.5 3 °C
Bottles Received: 80

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature) 861

Date: 8/15/18
Time: 8:45

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

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

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com,** [illegible]

Project Description: **Future Federal Way Hospital**

City/State Collected:

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.06**

Lab Project # **TGERESHTX-R13411**

Collected by (print): TIM CRUMP

Site/Facility ID #

P.O. # **8162**

Collected by (signature):

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

Immediately Packed on Ice N___ Y ✓

L# L1017897

Table #

Acctnum: **TGERESHTX**
Template: **T139025**
Prelogin: **P665046**
TSR: **134 - Mark W. Beasley**
PB: Tb 8-2-18
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 4ozClr-NoPres	NWTPHDXNOSGT,TS 4ozClr-NoPres	SV8082,SV8270PAHSIMD 4ozClr-NoPres	V8260C, Gx 40ml/NaHSO4/Syr/MeOH	Remarks	Sample # (lab only)
B-6 (3)	Grab	SS	3	8/14/18	1145	5	X	X		X		-11
B-6 (6)	Grab	SS	6	8/14/18	1155	5	X	X		X		12
B-7 (4)	Grab	SS	4	8/14/18	1230	5	X	X		X		13
B-7 (9)	Grab	SS	9	8/14/18	1240	5	X	X		X		14
B-8 (4)	Grab	SS	4	8/14/18	1250	5	X	X		X		15
B-8 (7)	Grab	SS	7	8/14/18	13[illegible]	5	X	X		X		16
		SS										
		SS										
		SS										
		SS										

* 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
Lois Mariah

Relinquished by : (Signature)
Date: 08/14/18
Time: 1440
Received by: (Signature)

Trip Blank Received: [✓ Yes] No
2 [✓ HCL] / MeoH
TBR

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

Temp: 0.5 3 °C Bottles Received: 80

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature) 861
Date: 8/15/18
Time: 8:45

Hold:

Condition: NCF / [✓ OK]

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

August 22, 2018

TGE Resources

Sample Delivery Group:	L1018176
Samples Received:	08/16/2018
Project Number:	R13411.06
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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 National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

1 Cp
2 Tc
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5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

B-9(4) L1018176-01 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/15/18 08:40	08/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154901	1	08/21/18 09:24	08/21/18 09:35	JD
Mercury by Method 7471A	WG1154469	1	08/21/18 08:35	08/21/18 14:35	ABL
Metals (ICP) by Method 6010C	WG1154959	1	08/20/18 18:05	08/21/18 09:34	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1154557	25	08/15/18 08:40	08/19/18 21:45	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1	08/15/18 08:40	08/18/18 17:19	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1	08/15/18 08:40	08/19/18 15:38	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1154904	1	08/20/18 21:24	08/21/18 10:29	MG

B-9(10) L1018176-02 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/15/18 08:50	08/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154901	1	08/21/18 09:24	08/21/18 09:35	JD
Mercury by Method 7471A	WG1154469	1	08/21/18 08:35	08/21/18 15:20	ABL
Metals (ICP) by Method 6010C	WG1154959	1	08/20/18 18:05	08/21/18 09:36	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1154557	25	08/15/18 08:50	08/19/18 22:06	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1	08/15/18 08:50	08/18/18 18:00	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1	08/15/18 08:50	08/19/18 15:57	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1154904	1	08/20/18 21:24	08/21/18 11:23	MG

B-10 (3) L1018176-03 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/15/18 10:30	08/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154901	1	08/21/18 09:24	08/21/18 09:35	JD
Mercury by Method 7471A	WG1154469	1	08/21/18 08:35	08/21/18 15:23	ABL
Metals (ICP) by Method 6010C	WG1154959	1	08/20/18 18:05	08/21/18 09:44	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1154557	41.75	08/15/18 10:30	08/19/18 22:27	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1.68	08/15/18 10:30	08/18/18 17:39	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1.68	08/15/18 10:30	08/19/18 16:15	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1154904	1	08/20/18 21:24	08/21/18 10:42	MG

B-10(10) L1018176-04 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/15/18 10:35	08/16/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154901	1	08/21/18 09:24	08/21/18 09:35	JD
Mercury by Method 7471A	WG1154469	1	08/21/18 08:35	08/21/18 15:25	ABL
Metals (ICP) by Method 6010C	WG1154959	1	08/20/18 18:05	08/21/18 09:46	CCE
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1154557	25	08/15/18 10:35	08/19/18 22:48	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154260	1	08/15/18 10:35	08/18/18 18:20	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1154491	1	08/15/18 10:35	08/19/18 16:34	JHH
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1154904	1	08/20/18 21:24	08/21/18 10:56	MG

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: ESC Lab Sciences	LRC Date: 08/22/2018 13:21
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1018176-01, 02, 03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1154260, WG1154491, WG1154557, WG1154904, WG1154959, WG1154469 and WG1154901

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: ESC Lab Sciences	LRC Date: 08/22/2018 13:21
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1018176-01, 02, 03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1154260, WG1154491, WG1154557, WG1154904, WG1154959, WG1154469 and WG1154901

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			3
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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Laboratory Review Checklist: Exception Reports

Laboratory Name: ESC Lab Sciences	LRC Date: 08/22/2018 13:21
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1018176-01, 02, 03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1154260, WG1154491, WG1154557, WG1154904, WG1154959, WG1154469 and WG1154901

ER #[1]	Description
1	WG1154260 Toluene-d8 R3334775-3 and 4: Percent Recovery is outside of established control limits.
2	8260C WG1154260 Acetone, Acrylonitrile, Benzene, Bromobenzene, Bromodichloromethane, Bromoform, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chlorodibromomethane, Chloroform, 2-Chlorotoluene, 4-Chlorotoluene, 1,2-Dibromo-3-Chloropropane, 1,2-Dibromoethane, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,1-Dichloropropene, 1,3-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 2,2-Dichloropropane, Di-isopropyl ether, Ethylbenzene, Isopropylbenzene, p-Isopropyltoluene, Methylene Chloride, 4-Methyl-2-pentanone (MIBK), Methyl tert-butyl ether, Naphthalene, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Toluene, 1,1,2-Trichlorotrifluoroethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, Trichlorofluoromethane, 1,2,3-Trichloropropane, 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Xylenes, Total: Percent Recovery is outside of established control limits.
3	6010C WG1154959 Barium, Lead: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.4		1	08/21/2018 09:35	WG1154901

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0141	J	0.00290	0.0200	0.0207	1	08/21/2018 14:35	WG1154469

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.25		0.674	2.00	2.07	1	08/21/2018 09:34	WG1154959
Barium	53.0		0.176	0.500	0.519	1	08/21/2018 09:34	WG1154959
Cadmium	U		0.0726	0.500	0.519	1	08/21/2018 09:34	WG1154959
Chromium	12.7		0.145	1.00	1.04	1	08/21/2018 09:34	WG1154959
Lead	1.54		0.197	0.500	0.519	1	08/21/2018 09:34	WG1154959
Selenium	U		0.768	2.00	2.07	1	08/21/2018 09:34	WG1154959
Silver	U		0.290	1.00	1.04	1	08/21/2018 09:34	WG1154959

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.879	0.100	2.59	25	08/19/2018 21:45	WG1154557
(S) a,a,a-Trifluorotoluene(FID)	*113*				*77.0-120*		*08/19/2018 21:45*	WG1154557

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0142	0.0250	0.0259	1	08/18/2018 17:19	WG1154260
Acrylonitrile	U		0.00197	0.0125	0.0130	1	08/18/2018 17:19	WG1154260
Benzene	U		0.000415	0.00100	0.00104	1	08/18/2018 17:19	WG1154260
Bromobenzene	U		0.00109	0.0125	0.0130	1	08/18/2018 17:19	WG1154260
Bromodichloromethane	U		0.000817	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
Bromoform	U		0.00620	0.0250	0.0259	1	08/18/2018 17:19	WG1154260
Bromomethane	U		0.00384	0.0125	0.0130	1	08/18/2018 17:19	WG1154260
n-Butylbenzene	U		0.00398	0.0125	0.0130	1	08/18/2018 17:19	WG1154260
sec-Butylbenzene	U		0.00262	0.0125	0.0130	1	08/18/2018 17:19	WG1154260
tert-Butylbenzene	U		0.00161	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
Carbon tetrachloride	U		0.00112	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
Chlorobenzene	U		0.000594	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
Chlorodibromomethane	U		0.000467	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
Chloroethane	U		0.00112	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
Chloroform	U		0.000430	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
Chloromethane	U		0.00144	0.0125	0.0130	1	08/18/2018 17:19	WG1154260
2-Chlorotoluene	U		0.000954	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
4-Chlorotoluene	U		0.00117	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00529	0.0250	0.0259	1	08/18/2018 17:19	WG1154260
1,2-Dibromoethane	U		0.000545	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
Dibromomethane	U		0.00104	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
1,2-Dichlorobenzene	U		0.00150	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
1,3-Dichlorobenzene	U		0.00176	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
1,4-Dichlorobenzene	U		0.00204	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
Dichlorodifluoromethane	U		0.000848	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
1,1-Dichloroethane	U		0.000596	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
1,2-Dichloroethane	U		0.000493	0.00250	0.00259	1	08/18/2018 17:19	WG1154260

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000519	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
cis-1,2-Dichloroethene	U		0.000716	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
trans-1,2-Dichloroethene	U		0.00148	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
1,2-Dichloropropane	U		0.00132	0.00500	0.00519	1	08/19/2018 15:38	WG1154491
1,1-Dichloropropene	U		0.000726	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
1,3-Dichloropropane	U		0.00182	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
cis-1,3-Dichloropropene	U		0.000703	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
trans-1,3-Dichloropropene	U		0.00159	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
2,2-Dichloropropane	U		0.000823	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
Di-isopropyl ether	U		0.000363	0.00100	0.00104	1	08/18/2018 17:19	WG1154260
Ethylbenzene	U		0.000550	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
Hexachloro-1,3-butadiene	U		0.0132	0.0250	0.0259	1	08/19/2018 15:38	WG1154491
Isopropylbenzene	U		0.000895	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
p-Isopropyltoluene	U		0.00242	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
2-Butanone (MEK)	U		0.0130	0.0250	0.0259	1	08/19/2018 15:38	WG1154491
Methylene Chloride	U		0.00689	0.0250	0.0259	1	08/18/2018 17:19	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0104	0.0250	0.0259	1	08/18/2018 17:19	WG1154260
Methyl tert-butyl ether	U		0.000306	0.00100	0.00104	1	08/18/2018 17:19	WG1154260
Naphthalene	U		0.00324	0.0125	0.0130	1	08/18/2018 17:19	WG1154260
n-Propylbenzene	U		0.00122	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
Styrene	U		0.00283	0.0125	0.0130	1	08/18/2018 17:19	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000519	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000405	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.000700	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
Tetrachloroethene	U		0.000726	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
Toluene	U		0.00130	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
1,2,3-Trichlorobenzene	U		0.000648	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
1,2,4-Trichlorobenzene	U		0.00500	0.0125	0.0130	1	08/18/2018 17:19	WG1154260
1,1,1-Trichloroethane	U		0.000285	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
1,1,2-Trichloroethane	U		0.000916	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
Trichloroethene	U		0.000415	0.00100	0.00104	1	08/18/2018 17:19	WG1154260
Trichlorofluoromethane	U		0.000519	0.00250	0.00259	1	08/18/2018 17:19	WG1154260
1,2,3-Trichloropropane	U		0.00529	0.0125	0.0130	1	08/18/2018 17:19	WG1154260
1,2,4-Trimethylbenzene	0.00124	J	0.00120	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
1,2,3-Trimethylbenzene	0.00132	J	0.00119	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
Vinyl chloride	U		0.000708	0.00250	0.00259	1	08/19/2018 15:38	WG1154491
1,3,5-Trimethylbenzene	U		0.00112	0.00500	0.00519	1	08/18/2018 17:19	WG1154260
Xylenes, Total	U		0.00496	0.00650	0.00674	1	08/18/2018 17:19	WG1154260
(S) Toluene-d8	*106*				*80.0-120*		*08/18/2018 17:19*	WG1154260
(S) Toluene-d8	*108*				*80.0-120*		*08/19/2018 15:38*	WG1154491
(S) Dibromofluoromethane	*96.3*				*74.0-131*		*08/18/2018 17:19*	WG1154260
(S) Dibromofluoromethane	*95.3*				*74.0-131*		*08/19/2018 15:38*	WG1154491
(S) 4-Bromofluorobenzene	*103*				*64.0-132*		*08/18/2018 17:19*	WG1154260
(S) 4-Bromofluorobenzene	*100*				*64.0-132*		*08/19/2018 15:38*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.38	4.00	4.15	1	08/21/2018 10:29	WG1154904
Residual Range Organics (RRO)	U		3.45	10.0	10.4	1	08/21/2018 10:29	WG1154904
(S) o-Terphenyl	*83.9*				*18.0-148*		*08/21/2018 10:29*	WG1154904

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	90.2		1	08/21/2018 09:35	WG1154901

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0111	J	0.00310	0.0200	0.0222	1	08/21/2018 15:20	WG1154469

Metals (ICP) by Method 6010C

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	2.15	J	0.720	2.00	2.22	1	08/21/2018 09:36	WG1154959
Barium	45.8		0.188	0.500	0.554	1	08/21/2018 09:36	WG1154959
Cadmium	U		0.0776	0.500	0.554	1	08/21/2018 09:36	WG1154959
Chromium	14.8		0.155	1.00	1.11	1	08/21/2018 09:36	WG1154959
Lead	2.05		0.211	0.500	0.554	1	08/21/2018 09:36	WG1154959
Selenium	U		0.820	2.00	2.22	1	08/21/2018 09:36	WG1154959
Silver	U		0.310	1.00	1.11	1	08/21/2018 09:36	WG1154959

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.939	0.100	2.77	25	08/19/2018 22:06	WG1154557
(S) a,a,a-Trifluorotoluene(FID)	*115*				*77.0-120*		*08/19/2018 22:06*	WG1154557

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0152	0.0250	0.0277	1	08/18/2018 18:00	WG1154260
Acrylonitrile	U		0.00211	0.0125	0.0139	1	08/18/2018 18:00	WG1154260
Benzene	U		0.000443	0.00100	0.00111	1	08/18/2018 18:00	WG1154260
Bromobenzene	U		0.00116	0.0125	0.0139	1	08/18/2018 18:00	WG1154260
Bromodichloromethane	U		0.000873	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
Bromoform	U		0.00663	0.0250	0.0277	1	08/18/2018 18:00	WG1154260
Bromomethane	U		0.00410	0.0125	0.0139	1	08/18/2018 18:00	WG1154260
n-Butylbenzene	U		0.00426	0.0125	0.0139	1	08/18/2018 18:00	WG1154260
sec-Butylbenzene	U		0.00280	0.0125	0.0139	1	08/18/2018 18:00	WG1154260
tert-Butylbenzene	U		0.00172	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
Carbon tetrachloride	U		0.00120	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
Chlorobenzene	U		0.000635	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
Chlorodibromomethane	U		0.000499	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
Chloroethane	U		0.00120	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
Chloroform	U		0.000460	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
Chloromethane	U		0.00154	0.0125	0.0139	1	08/18/2018 18:00	WG1154260
2-Chlorotoluene	U		0.00102	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
4-Chlorotoluene	U		0.00125	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00565	0.0250	0.0277	1	08/18/2018 18:00	WG1154260
1,2-Dibromoethane	U		0.000582	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
Dibromomethane	U		0.00111	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
1,2-Dichlorobenzene	U		0.00161	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
1,3-Dichlorobenzene	U		0.00188	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
1,4-Dichlorobenzene	U		0.00218	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
Dichlorodifluoromethane	U		0.000907	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
1,1-Dichloroethane	U		0.000637	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
1,2-Dichloroethane	U		0.000526	0.00250	0.00277	1	08/18/2018 18:00	WG1154260

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000554	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
cis-1,2-Dichloroethene	U		0.000765	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
trans-1,2-Dichloroethene	U		0.00158	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
1,2-Dichloropropane	U		0.00141	0.00500	0.00554	1	08/19/2018 15:57	WG1154491
1,1-Dichloropropene	U		0.000776	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
1,3-Dichloropropane	U		0.00194	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
cis-1,3-Dichloropropene	U		0.000751	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
trans-1,3-Dichloropropene	U		0.00170	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
2,2-Dichloropropane	U		0.000879	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
Di-isopropyl ether	U		0.000388	0.00100	0.00111	1	08/18/2018 18:00	WG1154260
Ethylbenzene	U		0.000587	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
Hexachloro-1,3-butadiene	U		0.0141	0.0250	0.0277	1	08/19/2018 15:57	WG1154491
Isopropylbenzene	U		0.000956	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
p-Isopropyltoluene	U		0.00258	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
2-Butanone (MEK)	U		0.0139	0.0250	0.0277	1	08/19/2018 15:57	WG1154491
Methylene Chloride	U		0.00736	0.0250	0.0277	1	08/18/2018 18:00	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0250	0.0277	1	08/18/2018 18:00	WG1154260
Methyl tert-butyl ether	U		0.000327	0.00100	0.00111	1	08/18/2018 18:00	WG1154260
Naphthalene	U		0.00346	0.0125	0.0139	1	08/18/2018 18:00	WG1154260
n-Propylbenzene	U		0.00131	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
Styrene	U		0.00303	0.0125	0.0139	1	08/18/2018 18:00	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000554	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000432	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.000748	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
Tetrachloroethene	U		0.000776	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
Toluene	U		0.00139	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
1,2,3-Trichlorobenzene	U		0.000693	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
1,2,4-Trichlorobenzene	U		0.00534	0.0125	0.0139	1	08/18/2018 18:00	WG1154260
1,1,1-Trichloroethane	U		0.000305	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
1,1,2-Trichloroethane	U		0.000979	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
Trichloroethene	U		0.000443	0.00100	0.00111	1	08/18/2018 18:00	WG1154260
Trichlorofluoromethane	U		0.000554	0.00250	0.00277	1	08/18/2018 18:00	WG1154260
1,2,3-Trichloropropane	U		0.00565	0.0125	0.0139	1	08/18/2018 18:00	WG1154260
1,2,4-Trimethylbenzene	0.00142	J	0.00129	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
1,2,3-Trimethylbenzene	U		0.00127	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
Vinyl chloride	U		0.000757	0.00250	0.00277	1	08/19/2018 15:57	WG1154491
1,3,5-Trimethylbenzene	U		0.00120	0.00500	0.00554	1	08/18/2018 18:00	WG1154260
Xylenes, Total	U		0.00530	0.00650	0.00720	1	08/18/2018 18:00	WG1154260
(S) Toluene-d8	*107*				*80.0-120*		*08/18/2018 18:00*	WG1154260
(S) Toluene-d8	*110*				*80.0-120*		*08/19/2018 15:57*	WG1154491
(S) Dibromofluoromethane	*97.8*				*74.0-131*		*08/18/2018 18:00*	WG1154260
(S) Dibromofluoromethane	*95.3*				*74.0-131*		*08/19/2018 15:57*	WG1154491
(S) 4-Bromofluorobenzene	*104*				*64.0-132*		*08/18/2018 18:00*	WG1154260
(S) 4-Bromofluorobenzene	*100*				*64.0-132*		*08/19/2018 15:57*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	U		1.47	4.00	4.43	1	08/21/2018 11:23	WG1154904
Residual Range Organics (RRO)	16.4		3.69	10.0	11.1	1	08/21/2018 11:23	WG1154904
(S) o-Terphenyl	*82.4*				*18.0-148*		*08/21/2018 11:23*	WG1154904

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.2		1	08/21/2018 09:35	WG1154901

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0111	J	0.00317	0.0200	0.0227	1	08/21/2018 15:23	WG1154469

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.20		0.737	2.00	2.27	1	08/21/2018 09:44	WG1154959
Barium	68.9		0.193	0.500	0.567	1	08/21/2018 09:44	WG1154959
Cadmium	U		0.0794	0.500	0.567	1	08/21/2018 09:44	WG1154959
Chromium	33.7		0.159	1.00	1.13	1	08/21/2018 09:44	WG1154959
Lead	3.43		0.215	0.500	0.567	1	08/21/2018 09:44	WG1154959
Selenium	U		0.839	2.00	2.27	1	08/21/2018 09:44	WG1154959
Silver	U		0.317	1.00	1.13	1	08/21/2018 09:44	WG1154959

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.60	0.100	4.73	41.75	08/19/2018 22:27	WG1154557
(S) a,a,a-Trifluorotoluene(FID)	*116*				*77.0-120*		*08/19/2018 22:27*	WG1154557

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0261	0.0250	0.0476	1.68	08/18/2018 17:39	WG1154260
Acrylonitrile	U		0.00362	0.0125	0.0238	1.68	08/18/2018 17:39	WG1154260
Benzene	U		0.000762	0.00100	0.00190	1.68	08/18/2018 17:39	WG1154260
Bromobenzene	U		0.00200	0.0125	0.0238	1.68	08/18/2018 17:39	WG1154260
Bromodichloromethane	U		0.00150	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
Bromoform	U		0.0114	0.0250	0.0476	1.68	08/18/2018 17:39	WG1154260
Bromomethane	U		0.00705	0.0125	0.0238	1.68	08/18/2018 17:39	WG1154260
n-Butylbenzene	U		0.00731	0.0125	0.0238	1.68	08/18/2018 17:39	WG1154260
sec-Butylbenzene	U		0.00482	0.0125	0.0238	1.68	08/18/2018 17:39	WG1154260
tert-Butylbenzene	U		0.00295	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
Carbon tetrachloride	U		0.00206	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
Chlorobenzene	U		0.00109	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
Chlorodibromomethane	U		0.000857	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
Chloroethane	U		0.00206	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
Chloroform	U		0.000790	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
Chloromethane	U		0.00265	0.0125	0.0238	1.68	08/18/2018 17:39	WG1154260
2-Chlorotoluene	U		0.00175	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
4-Chlorotoluene	U		0.00215	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00971	0.0250	0.0476	1.68	08/18/2018 17:39	WG1154260
1,2-Dibromoethane	U		0.00100	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
Dibromomethane	U		0.00190	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
1,2-Dichlorobenzene	U		0.00276	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
1,3-Dichlorobenzene	U		0.00324	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
1,4-Dichlorobenzene	U		0.00375	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
Dichlorodifluoromethane	U		0.00156	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
1,1-Dichloroethane	U		0.00110	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
1,2-Dichloroethane	U		0.000905	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260

B-10 (3)

Collected date/time: 08/15/18 10:30

SAMPLE RESULTS - 03

L1018176

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000952	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
cis-1,2-Dichloroethene	U		0.00131	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
trans-1,2-Dichloroethene	U		0.00272	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
1,2-Dichloropropane	U		0.00242	0.00500	0.00952	1.68	08/19/2018 16:15	WG1154491
1,1-Dichloropropene	U		0.00133	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
1,3-Dichloropropane	U		0.00333	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
cis-1,3-Dichloropropene	U		0.00129	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
trans-1,3-Dichloropropene	U		0.00291	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
2,2-Dichloropropane	U		0.00151	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
Di-isopropyl ether	U		0.000667	0.00100	0.00190	1.68	08/18/2018 17:39	WG1154260
Ethylbenzene	0.00132	J	0.00101	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
Hexachloro-1,3-butadiene	U		0.0242	0.0250	0.0476	1.68	08/19/2018 16:15	WG1154491
Isopropylbenzene	U		0.00164	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
p-Isopropyltoluene	U		0.00444	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
2-Butanone (MEK)	U		0.0238	0.0250	0.0476	1.68	08/19/2018 16:15	WG1154491
Methylene Chloride	U		0.0126	0.0250	0.0476	1.68	08/18/2018 17:39	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0190	0.0250	0.0476	1.68	08/18/2018 17:39	WG1154260
Methyl tert-butyl ether	U		0.000562	0.00100	0.00190	1.68	08/18/2018 17:39	WG1154260
Naphthalene	U		0.00594	0.0125	0.0238	1.68	08/18/2018 17:39	WG1154260
n-Propylbenzene	U		0.00225	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
Styrene	U		0.00520	0.0125	0.0238	1.68	08/18/2018 17:39	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000952	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000743	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.00129	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
Tetrachloroethene	U		0.00133	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
Toluene	0.00939	J	0.00238	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
1,2,3-Trichlorobenzene	U		0.00119	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
1,2,4-Trichlorobenzene	U		0.00918	0.0125	0.0238	1.68	08/18/2018 17:39	WG1154260
1,1,1-Trichloroethane	U		0.000524	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
1,1,2-Trichloroethane	U		0.00168	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
Trichloroethene	U		0.000762	0.00100	0.00190	1.68	08/18/2018 17:39	WG1154260
Trichlorofluoromethane	U		0.000952	0.00250	0.00476	1.68	08/18/2018 17:39	WG1154260
1,2,3-Trichloropropane	U		0.00971	0.0125	0.0238	1.68	08/18/2018 17:39	WG1154260
1,2,4-Trimethylbenzene	0.00405	J	0.00221	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
1,2,3-Trimethylbenzene	0.00258	J	0.00219	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
Vinyl chloride	U		0.00130	0.00250	0.00476	1.68	08/19/2018 16:15	WG1154491
1,3,5-Trimethylbenzene	U		0.00206	0.00500	0.00952	1.68	08/18/2018 17:39	WG1154260
Xylenes, Total	U		0.00910	0.00650	0.0124	1.68	08/18/2018 17:39	WG1154260
(S) Toluene-d8	*108*				*80.0-120*		*08/18/2018 17:39*	WG1154260
(S) Toluene-d8	*109*				*80.0-120*		*08/19/2018 16:15*	WG1154491
(S) Dibromofluoromethane	*98.4*				*74.0-131*		*08/18/2018 17:39*	WG1154260
(S) Dibromofluoromethane	*93.0*				*74.0-131*		*08/19/2018 16:15*	WG1154491
(S) 4-Bromofluorobenzene	*107*				*64.0-132*		*08/18/2018 17:39*	WG1154260
(S) 4-Bromofluorobenzene	*100*				*64.0-132*		*08/19/2018 16:15*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.51	4.00	4.53	1	08/21/2018 10:42	WG1154904
Residual Range Organics (RRO)	U		3.77	10.0	11.3	1	08/21/2018 10:42	WG1154904
(S) o-Terphenyl	*50.0*				*18.0-148*		*08/21/2018 10:42*	WG1154904

B-10(10)

Collected date/time: 08/15/18 10:35

SAMPLE RESULTS - 04

L1018176

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	95.4		1	08/21/2018 09:35	WG1154901

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0234		0.00293	0.0200	0.0210	1	08/21/2018 15:25	WG1154469

Metals (ICP) by Method 6010C

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	2.04	J	0.681	2.00	2.10	1	08/21/2018 09:46	WG1154959
Barium	38.8		0.178	0.500	0.524	1	08/21/2018 09:46	WG1154959
Cadmium	U		0.0734	0.500	0.524	1	08/21/2018 09:46	WG1154959
Chromium	18.2		0.147	1.00	1.05	1	08/21/2018 09:46	WG1154959
Lead	1.67		0.199	0.500	0.524	1	08/21/2018 09:46	WG1154959
Selenium	U		0.776	2.00	2.10	1	08/21/2018 09:46	WG1154959
Silver	U		0.293	1.00	1.05	1	08/21/2018 09:46	WG1154959

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.888	0.100	2.62	25	08/19/2018 22:48	WG1154557
(S) a,a,a-Trifluorotoluene(FID)	*107*				*77.0-120*		*08/19/2018 22:48*	WG1154557

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0144	0.0250	0.0262	1	08/18/2018 18:20	WG1154260
Acrylonitrile	U		0.00199	0.0125	0.0131	1	08/18/2018 18:20	WG1154260
Benzene	U		0.000419	0.00100	0.00105	1	08/18/2018 18:20	WG1154260
Bromobenzene	U		0.00110	0.0125	0.0131	1	08/18/2018 18:20	WG1154260
Bromodichloromethane	U		0.000826	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
Bromoform	U		0.00627	0.0250	0.0262	1	08/18/2018 18:20	WG1154260
Bromomethane	U		0.00388	0.0125	0.0131	1	08/18/2018 18:20	WG1154260
n-Butylbenzene	U		0.00402	0.0125	0.0131	1	08/18/2018 18:20	WG1154260
sec-Butylbenzene	U		0.00265	0.0125	0.0131	1	08/18/2018 18:20	WG1154260
tert-Butylbenzene	U		0.00162	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
Carbon tetrachloride	U		0.00113	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
Chlorobenzene	U		0.000601	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
Chlorodibromomethane	U		0.000472	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
Chloroethane	U		0.00113	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
Chloroform	U		0.000435	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
Chloromethane	U		0.00146	0.0125	0.0131	1	08/18/2018 18:20	WG1154260
2-Chlorotoluene	U		0.000964	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
4-Chlorotoluene	U		0.00118	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
1,2-Dibromo-3-Chloropropane	U		0.00535	0.0250	0.0262	1	08/18/2018 18:20	WG1154260
1,2-Dibromoethane	U		0.000550	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
Dibromomethane	U		0.00105	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
1,2-Dichlorobenzene	U		0.00152	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
1,3-Dichlorobenzene	U		0.00178	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
1,4-Dichlorobenzene	U		0.00206	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
Dichlorodifluoromethane	U		0.000857	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
1,1-Dichloroethane	U		0.000603	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
1,2-Dichloroethane	U		0.000498	0.00250	0.00262	1	08/18/2018 18:20	WG1154260

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000524	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
cis-1,2-Dichloroethene	U		0.000723	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
trans-1,2-Dichloroethene	U		0.00150	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
1,2-Dichloropropane	U		0.00133	0.00500	0.00524	1	08/19/2018 16:34	WG1154491
1,1-Dichloropropene	U		0.000734	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
1,3-Dichloropropane	U		0.00183	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
cis-1,3-Dichloropropene	U		0.000711	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
trans-1,3-Dichloropropene	U		0.00160	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
2,2-Dichloropropane	U		0.000831	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
Di-isopropyl ether	U		0.000367	0.00100	0.00105	1	08/18/2018 18:20	WG1154260
Ethylbenzene	U		0.000555	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
Hexachloro-1,3-butadiene	U		0.0133	0.0250	0.0262	1	08/19/2018 16:34	WG1154491
Isopropylbenzene	U		0.000905	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
p-Isopropyltoluene	U		0.00244	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
2-Butanone (MEK)	U		0.0131	0.0250	0.0262	1	08/19/2018 16:34	WG1154491
Methylene Chloride	U		0.00696	0.0250	0.0262	1	08/18/2018 18:20	WG1154260
4-Methyl-2-pentanone (MIBK)	U		0.0105	0.0250	0.0262	1	08/18/2018 18:20	WG1154260
Methyl tert-butyl ether	U		0.000309	0.00100	0.00105	1	08/18/2018 18:20	WG1154260
Naphthalene	U		0.00327	0.0125	0.0131	1	08/18/2018 18:20	WG1154260
n-Propylbenzene	U		0.00124	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
Styrene	U		0.00286	0.0125	0.0131	1	08/18/2018 18:20	WG1154260
1,1,1,2-Tetrachloroethane	U		0.000524	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
1,1,2,2-Tetrachloroethane	U		0.000409	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
1,1,2-Trichlorotrifluoroethane	U		0.000707	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
Tetrachloroethene	0.00215	J	0.000734	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
Toluene	U		0.00131	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
1,2,3-Trichlorobenzene	U		0.000655	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
1,2,4-Trichlorobenzene	U		0.00505	0.0125	0.0131	1	08/18/2018 18:20	WG1154260
1,1,1-Trichloroethane	U		0.000288	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
1,1,2-Trichloroethane	U		0.000925	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
Trichloroethene	U		0.000419	0.00100	0.00105	1	08/18/2018 18:20	WG1154260
Trichlorofluoromethane	U		0.000524	0.00250	0.00262	1	08/18/2018 18:20	WG1154260
1,2,3-Trichloropropane	U		0.00535	0.0125	0.0131	1	08/18/2018 18:20	WG1154260
1,2,4-Trimethylbenzene	0.00130	J	0.00122	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
1,2,3-Trimethylbenzene	U		0.00121	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
Vinyl chloride	U		0.000716	0.00250	0.00262	1	08/19/2018 16:34	WG1154491
1,3,5-Trimethylbenzene	U		0.00113	0.00500	0.00524	1	08/18/2018 18:20	WG1154260
Xylenes, Total	U		0.00501	0.00650	0.00681	1	08/18/2018 18:20	WG1154260
(S) Toluene-d8	*110*				*80.0-120*		*08/18/2018 18:20*	WG1154260
(S) Toluene-d8	*108*				*80.0-120*		*08/19/2018 16:34*	WG1154491
(S) Dibromofluoromethane	*98.8*				*74.0-131*		*08/18/2018 18:20*	WG1154260
(S) Dibromofluoromethane	*97.4*				*74.0-131*		*08/19/2018 16:34*	WG1154491
(S) 4-Bromofluorobenzene	*103*				*64.0-132*		*08/18/2018 18:20*	WG1154260
(S) 4-Bromofluorobenzene	*100*				*64.0-132*		*08/19/2018 16:34*	WG1154491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.39	4.00	4.19	1	08/21/2018 10:56	WG1154904
Residual Range Organics (RRO)	U		3.49	10.0	10.5	1	08/21/2018 10:56	WG1154904
(S) o-Terphenyl	*83.0*				*18.0-148*		*08/21/2018 10:56*	WG1154904

Method Blank (MB)

(MB) R3335520-1 08/21/18 09:35

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1018176-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1018176-02 08/21/18 09:35 • (DUP) R3335520-3 08/21/18 09:35

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	90.2	91.8	1	1.76		10

Laboratory Control Sample (LCS)

(LCS) R3335520-2 08/21/18 09:35

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) R3335493-1 08/21/18 14:22

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.00280	0.0200

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

(LCS) R3335493-2 08/21/18 14:25 • (LCSD) R3335493-3 08/21/18 14:27

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 %
Mercury	0.300	0.307	0.306	102	102	80.0-120			0.411	20

L1018176-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1018176-01 08/21/18 14:35 • (MS) R3335493-4 08/21/18 14:38 • (MSD) R3335493-5 08/21/18 14:40

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 %
Mercury	0.311	0.0141	0.315	0.326	96.6	100	1	75.0-125			3.60	20

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

Method Blank (MB)

(MB) R3335273-1 08/21/18 09:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.650	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.740	2.00
Silver	U		0.280	1.00

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

(LCS) R3335273-2 08/21/18 09:16 • (LCSD) R3335273-3 08/21/18 09:18

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 %
Arsenic	100	94.9	96.0	94.9	96.0	80.0-120			1.18	20
Barium	100	101	103	101	103	80.0-120			1.85	20
Cadmium	100	94.6	96.8	94.6	96.8	80.0-120			2.33	20
Chromium	100	93.6	96.3	93.6	96.3	80.0-120			2.90	20
Lead	100	92.8	96.0	92.8	96.0	80.0-120			3.40	20
Selenium	100	97.6	99.9	97.6	99.9	80.0-120			2.41	20
Silver	20.0	18.0	18.5	90.1	92.3	80.0-120			2.34	20

L1018667-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1018667-01 08/21/18 09:21 • (MS) R3335273-6 08/21/18 09:29 • (MSD) R3335273-7 08/21/18 09:31

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	3.62	101	103	97.8	99.1	1	75.0-125			1.28	20
Barium	100	79.9	174	191	93.7	111	1	75.0-125			9.72	20
Cadmium	100	ND	99.6	101	99.4	100	1	75.0-125			0.911	20
Chromium	100	5.18	99.4	102	94.3	96.5	1	75.0-125			2.22	20
Lead	100	15.9	108	111	92.0	95.1	1	75.0-125			2.81	20
Selenium	100	ND	104	105	104	105	1	75.0-125			1.11	20
Silver	20.0	ND	19.1	19.3	95.6	96.5	1	75.0-125			0.927	20

Method Blank (MB)

(MB) R3335034-3 08/19/18 20:55

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)	*103*			*77.0-120*

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

(LCS) R3335034-1 08/19/18 19:51 • (LCSD) R3335034-2 08/19/18 20:13

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 %
Gasoline Range Organics-NWTPH	5.50	5.66	5.68	103	103	70.0-133			0.338	20
(S) a,a,a-Trifluorotoluene(FID)				*91.0*	*91.7*	*77.0-120*				

Method Blank (MB)

(MB) R3334775-2 08/18/18 13:42

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
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 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
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
1,1-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
Ethylbenzene	U		0.000530	0.00250
Isopropylbenzene	U		0.000863	0.00250
p-Isopropyltoluene	U		0.00233	0.00500
Methylene Chloride	U		0.00664	0.0250

Method Blank (MB)

(MB) R3334775-2 08/18/18 13:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
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	0.00250
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
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*110*			*80.0-120*
(S) Dibromofluoromethane	*94.6*			*74.0-131*
(S) 4-Bromofluorobenzene	*104*			*64.0-132*

Laboratory Control Sample (LCS)

(LCS) R3334775-1 08/18/18 11:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.769	123	25.3-178	
Acrylonitrile	0.625	0.676	108	57.8-143	
Benzene	0.125	0.117	93.8	72.6-120	
Bromobenzene	0.125	0.121	96.8	80.3-115	
Bromodichloromethane	0.125	0.125	100	75.3-119	
Bromoform	0.125	0.120	95.8	69.1-135	
Bromomethane	0.125	0.127	102	23.0-191	
n-Butylbenzene	0.125	0.139	111	74.2-134	
sec-Butylbenzene	0.125	0.125	99.6	77.8-129	

Laboratory Control Sample (LCS)

(LCS) R3334775-1 08/18/18 11:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
tert-Butylbenzene	0.125	0.125	99.8	77.2-129	
Carbon tetrachloride	0.125	0.130	104	69.4-129	
Chlorobenzene	0.125	0.124	99.3	78.9-122	
Chlorodibromomethane	0.125	0.115	91.8	76.4-126	
Chloroethane	0.125	0.127	101	47.2-147	
Chloroform	0.125	0.121	97.1	73.3-122	
Chloromethane	0.125	0.145	116	53.1-135	
2-Chlorotoluene	0.125	0.136	109	74.6-127	
4-Chlorotoluene	0.125	0.124	98.9	79.5-123	
1,2-Dibromo-3-Chloropropane	0.125	0.131	104	64.9-131	
1,2-Dibromoethane	0.125	0.124	99.0	78.7-123	
Dibromomethane	0.125	0.127	102	78.5-117	
1,2-Dichlorobenzene	0.125	0.118	94.4	83.6-119	
1,3-Dichlorobenzene	0.125	0.117	93.8	75.9-129	
1,4-Dichlorobenzene	0.125	0.119	95.3	81.0-115	
Dichlorodifluoromethane	0.125	0.128	103	50.9-139	
1,1-Dichloroethane	0.125	0.129	104	71.7-125	
1,2-Dichloroethane	0.125	0.131	105	67.2-121	
1,1-Dichloroethene	0.125	0.136	109	60.6-133	
cis-1,2-Dichloroethene	0.125	0.0952	76.1	76.1-121	
trans-1,2-Dichloroethene	0.125	0.122	97.2	70.7-124	
1,1-Dichloropropene	0.125	0.140	112	71.2-126	
1,3-Dichloropropane	0.125	0.126	101	80.3-114	
cis-1,3-Dichloropropene	0.125	0.111	88.5	77.3-123	
trans-1,3-Dichloropropene	0.125	0.125	99.7	73.0-127	
2,2-Dichloropropane	0.125	0.136	109	61.9-132	
Di-isopropyl ether	0.125	0.121	96.9	67.2-131	
Ethylbenzene	0.125	0.131	105	78.6-124	
Isopropylbenzene	0.125	0.115	92.2	79.4-126	
p-Isopropyltoluene	0.125	0.126	101	75.4-132	
Methylene Chloride	0.125	0.125	100	68.2-119	
4-Methyl-2-pentanone (MIBK)	0.625	0.672	108	61.1-138	
Methyl tert-butyl ether	0.125	0.147	117	70.2-122	
Naphthalene	0.125	0.137	109	69.9-132	
n-Propylbenzene	0.125	0.118	94.7	80.2-124	
Styrene	0.125	0.126	101	79.4-124	
1,1,1,2-Tetrachloroethane	0.125	0.109	87.0	76.7-127	
1,1,2,2-Tetrachloroethane	0.125	0.103	82.2	78.8-124	
Tetrachloroethene	0.125	0.129	103	71.1-133	
Toluene	0.125	0.126	100	76.7-116	

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

Laboratory Control Sample (LCS)

(LCS) R3334775-1 08/18/18 11:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,1,2-Trichlorotrifluoroethane	0.125	0.138	110	62.6-138	
1,2,3-Trichlorobenzene	0.125	0.155	124	72.5-137	
1,2,4-Trichlorobenzene	0.125	0.129	103	74.0-137	
1,1,1-Trichloroethane	0.125	0.133	106	69.9-127	
1,1,2-Trichloroethane	0.125	0.111	88.9	81.9-119	
Trichloroethene	0.125	0.138	110	77.2-122	
Trichlorofluoromethane	0.125	0.135	108	51.5-151	
1,2,3-Trichloropropane	0.125	0.130	104	74.0-124	
1,2,3-Trimethylbenzene	0.125	0.127	102	79.4-118	
1,2,4-Trimethylbenzene	0.125	0.121	96.6	77.1-124	
1,3,5-Trimethylbenzene	0.125	0.122	97.6	79.0-125	
Xylenes, Total	0.375	0.362	96.5	78.1-123	
(S) Toluene-d8			*104*	*80.0-120*	
(S) Dibromofluoromethane			*102*	*74.0-131*	
(S) 4-Bromofluorobenzene			*100*	*64.0-132*	

L1018606-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1018606-01 08/18/18 18:40 • (MS) R3334775-3 08/18/18 21:00 • (MSD) R3334775-4 08/18/18 21:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	3.13	U	1.10	1.08	35.2	34.5	1	10.0-130	J5	J5	2.12	31.5
Acrylonitrile	3.13	U	1.57	1.53	50.4	49.1	1	39.3-152	J5	J5	2.56	27.2
Benzene	0.625	U	0.295	0.290	47.2	46.3	1	47.8-131	J5	J5	1.76	22.8
Bromobenzene	0.625	U	0.389	0.390	62.2	62.4	1	40.0-130	J5	J5	0.364	27.4
Bromodichloromethane	0.625	U	0.475	0.469	76.0	75.1	1	50.6-128	J5	J5	1.14	22.8
Bromoform	0.625	U	0.471	0.480	75.4	76.9	1	43.3-139	J5	J5	1.89	25.9
Bromomethane	0.625	U	0.121	0.128	19.4	20.5	1	5.00-189			5.25	26.7
n-Butylbenzene	0.625	U	0.368	0.405	58.8	64.8	1	23.6-146	J5	J5	9.67	39.2
sec-Butylbenzene	0.625	U	0.340	0.370	54.4	59.2	1	31.0-142	J5	J5	8.48	34.7
tert-Butylbenzene	0.625	U	0.365	0.400	58.5	64.0	1	36.9-142	J5	J5	9.01	31.7
Carbon tetrachloride	0.625	U	0.343	0.348	54.9	55.6	1	46.0-140	J5	J5	1.25	27.2
Chlorobenzene	0.625	U	0.236	0.233	37.7	37.3	1	44.1-134	J5	J5	1.16	25.7
Chlorodibromomethane	0.625	U	0.267	0.261	42.7	41.8	1	49.7-134	J5	J5	1.96	24
Chloroethane	0.625	U	0.156	0.165	24.9	26.4	1	5.00-164			5.80	28.4
Chloroform	0.625	U	0.402	0.399	64.3	63.8	1	51.2-133	J5	J5	0.676	22.8
Chloromethane	0.625	U	0.146	0.144	23.3	23.0	1	31.4-141			1.35	24.6
2-Chlorotoluene	0.625	U	0.415	0.424	66.4	67.9	1	36.1-137	J5	J5	2.09	28.9
4-Chlorotoluene	0.625	U	0.405	0.354	64.8	56.7	1	35.4-137	J5	J5	13.3	29.8

L1018606-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1018606-01 08/18/18 18:40 • (MS) R3334775-3 08/18/18 21:00 • (MSD) R3334775-4 08/18/18 21:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2-Dibromo-3-Chloropropane	0.625	U	0.339	0.389	54.3	62.2	1	40.4-138	J5	J5	13.6	30.8
1,2-Dibromoethane	0.625	U	0.240	0.237	38.4	37.9	1	50.2-133	J5	J5	1.33	23.6
Dibromomethane	0.625	U	0.376	0.349	60.1	55.8	1	52.4-128	J5	J5	7.43	23
1,2-Dichlorobenzene	0.625	U	0.392	0.409	62.7	65.4	1	34.6-139	J5	J5	4.16	29.9
1,3-Dichlorobenzene	0.625	U	0.389	0.412	62.2	65.9	1	28.4-142	J5	J5	5.72	31.2
1,4-Dichlorobenzene	0.625	U	0.391	0.407	62.6	65.1	1	35.0-133	J5	J5	3.78	31.1
Dichlorodifluoromethane	0.625	U	0.307	0.289	49.1	46.3	1	31.2-144	J5	J5	5.85	30.2
1,1-Dichloroethane	0.625	U	0.395	0.388	63.2	62.1	1	49.1-136	J5	J5	1.82	22.9
1,2-Dichloroethane	0.625	U	0.364	0.353	58.2	56.5	1	47.1-129	J5	J5	2.94	22.7
1,1-Dichloroethene	0.625	U	0.250	0.242	40.1	38.7	1	36.1-142	J5	J5	3.47	25.6
cis-1,2-Dichloroethene	0.625	U	0.272	0.271	43.5	43.3	1	50.6-133	J5	J5	0.371	23
trans-1,2-Dichloroethene	0.625	U	0.196	0.189	31.3	30.2	1	43.8-135	J5	J5	3.49	24.8
1,1-Dichloropropene	0.625	U	0.260	0.264	41.6	42.3	1	43.0-137	J5	J5	1.59	26.4
1,3-Dichloropropane	0.625	U	0.275	0.271	44.0	43.3	1	51.4-127	J5	J5	1.63	23.1
cis-1,3-Dichloropropene	0.625	U	0.216	0.212	34.6	34.0	1	48.4-134	J5	J5	1.70	23.6
trans-1,3-Dichloropropene	0.625	U	0.263	0.258	42.1	41.3	1	46.6-135	J5	J5	2.09	25.3
2,2-Dichloropropane	0.625	U	0.290	0.297	46.4	47.6	1	45.2-141	J5	J5	2.55	26.6
Di-isopropyl ether	0.625	U	0.429	0.438	68.6	70.1	1	46.7-140	J5	J5	2.15	23.5
Ethylbenzene	0.625	U	0.238	0.234	38.1	37.5	1	44.8-135	J5	J5	1.77	26.9
Isopropylbenzene	0.625	U	0.373	0.390	59.7	62.4	1	41.9-139	J5	J5	4.40	29.3
p-Isopropyltoluene	0.625	U	0.358	0.390	57.2	62.5	1	27.3-146	J5	J5	8.71	35.1
Methylene Chloride	0.625	U	0.316	0.322	50.6	51.5	1	46.7-125	J5	J5	1.83	22.2
4-Methyl-2-pentanone (MIBK)	3.13	U	1.22	1.24	39.1	39.8	1	42.4-146	J5	J5	1.73	26.7
Methyl tert-butyl ether	0.625	U	0.409	0.458	65.4	73.2	1	50.4-131	J5	J5	11.3	24.8
Naphthalene	0.625	U	0.339	0.409	54.2	65.5	1	18.4-145	J5	J5	18.9	34
n-Propylbenzene	0.625	U	0.343	0.363	54.8	58.1	1	35.2-139	J5	J5	5.87	31.9
Styrene	0.625	U	0.451	0.465	72.2	74.4	1	39.7-137	J5	J5	3.07	28.2
1,1,1,2-Tetrachloroethane	0.625	U	0.231	0.229	37.0	36.7	1	48.8-136	J5	J5	0.709	25.5
1,1,2,2-Tetrachloroethane	0.625	U	0.353	0.370	56.5	59.2	1	45.7-140	J5	J5	4.68	26.4
Tetrachloroethene	0.625	U	0.174	0.169	27.9	27.1	1	37.7-140			3.07	29.2
Toluene	0.625	U	0.209	0.202	33.4	32.3	1	47.8-127	J5	J5	3.36	24.3
1,1,2-Trichlorotrifluoroethane	0.625	U	0.341	0.341	54.6	54.6	1	35.7-146	J5	J5	0.130	28.8
1,2,3-Trichlorobenzene	0.625	U	0.412	0.502	66.0	80.3	1	10.0-150	J5	J5	19.5	38.5
1,2,4-Trichlorobenzene	0.625	U	0.355	0.406	56.8	65.0	1	10.0-153	J5	J5	13.5	39.3
1,1,1-Trichloroethane	0.625	U	0.380	0.380	60.9	60.8	1	49.0-138	J5	J5	0.0352	25.3
1,1,2-Trichloroethane	0.625	U	0.254	0.252	40.6	40.3	1	52.3-132	J5	J5	0.886	23.4
Trichloroethene	0.625	U	0.332	0.335	53.1	53.7	1	48.0-132	J5	J5	0.994	24.8
Trichlorofluoromethane	0.625	U	0.217	0.212	34.7	33.9	1	12.8-169	J5	J5	2.38	29.7
1,2,3-Trichloropropane	0.625	U	0.423	0.441	67.7	70.6	1	44.4-138	J5	J5	4.08	26.3
1,2,3-Trimethylbenzene	0.625	U	0.385	0.409	61.6	65.5	1	41.0-133	J5	J5	6.03	27.6

L1018606-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1018606-01 08/18/18 18:40 • (MS) R3334775-3 08/18/18 21:00 • (MSD) R3334775-4 08/18/18 21:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2,4-Trimethylbenzene	0.625	U	0.370	0.393	59.3	62.9	1	32.9-139	J5	J5	5.91	30.6
1,3,5-Trimethylbenzene	0.625	U	0.360	0.378	57.6	60.6	1	37.1-138	J5	J5	5.09	30.6
Xylenes, Total	1.88	U	0.644	0.644	34.3	34.3	1	42.7-135	J5	J5	0.000	26.6
(S) Toluene-d8					*64.9*	*63.2*		*80.0-120*	J2	J2		
(S) Dibromofluoromethane					*97.4*	*96.9*		*74.0-131*				
(S) 4-Bromofluorobenzene					*100*	*102*		*64.0-132*				

Method Blank (MB)

(MB) R3335028-2 08/19/18 12:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
1,2-Dichloropropane	U		0.00127	0.00500
Hexachloro-1,3-butadiene	U		0.0127	0.0250
2-Butanone (MEK)	U		0.0125	0.0250
Vinyl chloride	U		0.000683	0.00250
(S) Toluene-d8	*108*			*80.0-120*
(S) Dibromofluoromethane	*95.0*			*74.0-131*
(S) 4-Bromofluorobenzene	*97.9*			*64.0-132*

Laboratory Control Sample (LCS)

(LCS) R3335028-1 08/19/18 11:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,2-Dichloropropane	0.125	0.129	103	76.9-123	
Hexachloro-1,3-butadiene	0.125	0.124	99.0	69.2-136	
2-Butanone (MEK)	0.625	0.805	129	44.5-154	
Vinyl chloride	0.125	0.105	83.9	58.4-134	
(S) Toluene-d8			*109*	*80.0-120*	
(S) Dibromofluoromethane			*91.5*	*74.0-131*	
(S) 4-Bromofluorobenzene			*98.7*	*64.0-132*	

Method Blank (MB)

(MB) R3335260-1 08/21/18 08:54

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	*77.9*			*18.0-148*

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

(LCS) R3335260-2 08/21/18 09:07 • (LCSD) R3335260-3 08/21/18 09:21

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 %
Diesel Range Organics (DRO)	25.0	19.1	20.2	76.4	80.8	50.0-150			5.60	20
Residual Range Organics (RRO)	25.0	21.8	21.9	87.2	87.6	50.0-150			0.458	20
(S) o-Terphenyl				*74.5*	*78.7*	*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.

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
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.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1 6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1 4]	2006
Texas	T 104704245-17-14
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

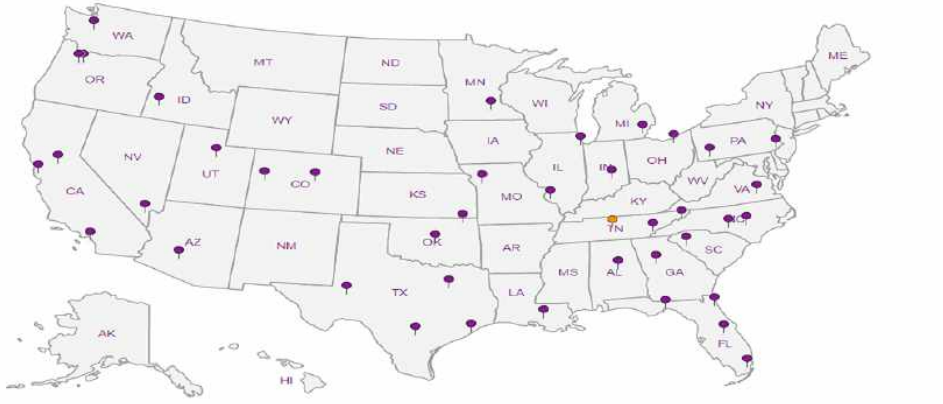
Third Party Federal Accreditations

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

[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 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# L1018176

E018

Acctnum: **TGERESHTX**
Template: **T139025**
Prelogin: **P665046**
TSR: **134 - Mark W. Beasley**
PB: TD 8-2-18
Shipped Via: **FedEX Ground**

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com,**

Project Description: **Future Federal Way Hospital**

City/State Collected:

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.06

Lab Project #
TGERESHTX-R13411

Collected by (print): TIM CRUMP

Site/Facility ID #

P.O. #
8162

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

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 4ozClr-NoPres	NWTPHDXNOSGT,TS 4ozClr-NoPres	SV8082,SV8270PAHSIMD 4ozClr-NoPres	V8260C, Gx 40ml/NaHSO4/Syr/MeOH	Remarks	Sample # (lab only)
B-9(4)	Grab	SS	4	8/15/18	0840	5	X	X		X		-01
B-9(10)	Grab	SS	10	8/15/18	0850	5	X	X		X		02
B-9(15)	Grab	SS	15	8/15/18	0855	5						
B-9(20)	Grab	SS	20	8/15/18	0910	5						
B-10(3)	Grab	SS	3	8/15/18	1030	5	X	X		X		03
B-10(10)	Grab	SS	10	8/15/18	1035	5	X	X		X		04
B-10(15)	Grab	SS	15	8/15/18	1045	5						
B-10(20)	Grab	SS	20	8/15/18	1055	5						

* 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 # 4492 6220 9362

```
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
```

<.5mR/HR

Relinquished by : (Signature)	Date: 08/15/18	Time: 1310	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 1 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 0.3 °C Bottles Received: 40
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) 801	Date: 8/16/18 Time: 8:45

If preservation required by Login: Date/Time

8-113

Condition: [✓ NCF] / OK

Pace Analytical®
National Center for Testing & Innovation

Login #: L1018176	**Client: TGERESHTX**	**Date: 8/16/18**	**Evaluated by: Jeremy**

Non-Conformance (check applicable items)

	Sample Integrity		**Chain of Custody Clarification**		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		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	x	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: Analysis not marked for B-9(15), B-9(20), B-10(15) or B-10(20). Currently placed on Hold.

Client informed by:		Call		Email		Voice Mail	Date: 8/16/18	Time: 1530
TSR Initials: MB	Client Contact:							

Login Instructions:

Correct, place on hold

ANALYTICAL REPORT

September 17, 2018

TGE Resources

Sample Delivery Group:	L1025391
Samples Received:	08/15/2018
Project Number:	R13411.06
Description:	Future Federal Way Hospital

Report To:

Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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 National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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B-3 (4) L1025391-01 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 09:55	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1154707	1	08/20/18 14:08	08/20/18 14:20	JAV
Metals (ICP) by Method 6010C	WG1167056	1	09/16/18 09:03	09/16/18 21:11	ST

B-4 (6) L1025391-02 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 10:35	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1153500	1	08/18/18 09:18	09/14/18 13:14	MLW
Total Solids by Method 2540 G-2011	WG1154707	1	08/20/18 14:08	08/20/18 14:20	JAV
Wet Chemistry by Method 3060A/7196A	WG1165460	1	09/13/18 12:13	09/14/18 13:14	MLW
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:15	TRB

B-6 (6) L1025391-03 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	08/14/18 11:55	08/15/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1153500	1	08/18/18 09:18	09/14/18 13:15	MLW
Total Solids by Method 2540 G-2011	WG1154708	1	08/20/18 11:06	08/20/18 11:13	JAV
Wet Chemistry by Method 3060A/7196A	WG1165460	1	09/13/18 12:13	09/14/18 13:15	MLW
Metals (ICP) by Method 6010C	WG1153500	1	08/18/18 09:18	08/19/18 12:22	TRB

CASE NARRATIVE

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: ESC Lab Sciences	LRC Date: 09/17/2018 16:11
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1025391-01, 02 and 03
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1153500, WG1154708, WG1154707, WG1165460 and WG1167056

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?		X			1
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: ESC Lab Sciences	LRC Date: 09/17/2018 16:11
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1025391-01, 02 and 03
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1153500, WG1154708, WG1154707, WG1165460 and WG1167056

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			2
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: ESC Lab Sciences	LRC Date: 09/17/2018 16:11
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1025391-01, 02 and 03
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1153500, WG1154708, WG1154707, WG1165460 and WG1167056

ER #[1]	**Description**
1	3060A/7196A WG1165460 Chromium,Hexavalent: Relative Percent Difference is outside of established control limits.
2	6010C WG1153500 Chromium: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

SAMPLE RESULTS - 01

L1025391

B-3 (4)

Collected date/time: 08/14/18 09:55

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.8		1	08/20/2018 14:20	WG1154707

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.58	B	0.700	2.00	2.15	1	09/16/2018 21:11	WG1167056

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

Calculated Results

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	43.9		0.146	1.00	1.04	1	09/14/2018 13:14	WG1153500

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.1		1	08/20/2018 14:20	WG1154707

Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	0.916	J	0.666	2.00	2.08	1	09/14/2018 13:14	WG1165460

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium	44.8		0.146	1.00	1.04	1	08/19/2018 12:15	WG1153500

Calculated Results

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	41.7		0.147	1.00	1.05	1	09/14/2018 13:15	WG1153500

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.6		1	08/20/2018 11:13	WG1154708

Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	0.670	J P1	0.670	2.00	2.09	1	09/14/2018 13:15	WG1165460

Metals (ICP) by Method 6010C

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium	42.4		0.147	1.00	1.05	1	08/19/2018 12:22	WG1153500

Method Blank (MB)

(MB) R3335233-1 08/20/18 14:20

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1017897-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1017897-03 08/20/18 14:20 • (DUP) R3335233-3 08/20/18 14:20

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.5	94.1	1	0.376		10

Laboratory Control Sample (LCS)

(LCS) R3335233-2 08/20/18 14:20

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) R3335227-1 08/20/18 11:13

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1017897-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1017897-11 08/20/18 11:13 • (DUP) R3335227-3 08/20/18 11:13

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	95.6	95.5	1	0.0205		10

Laboratory Control Sample (LCS)

(LCS) R3335227-2 08/20/18 11:13

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) R3342019-1 09/14/18 12:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chromium,Hexavalent	U		0.640	2.00

L1024302-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1024302-02 09/14/18 12:58 • (DUP) R3342019-4 09/14/18 12:58

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chromium,Hexavalent	ND	0.000	1	0.000		20

L1025391-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1025391-03 09/14/18 13:15 • (DUP) R3342019-9 09/14/18 13:16

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chromium,Hexavalent	0.670	0.000	1	200	P1	20

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

(LCS) R3342019-2 09/14/18 12:55 • (LCSD) R3342019-3 09/14/18 12:55

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 %
Chromium,Hexavalent	24.0	23.3	23.4	97.2	97.7	80.0-120			0.513	20

L1024302-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1024302-06 09/14/18 13:01 • (MS) R3342019-5 09/14/18 13:02 • (MSD) R3342019-6 09/14/18 13:02

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chromium,Hexavalent	20.0	ND	15.6	15.5	77.8	77.6	1	75.0-125			0.257	20

L1024302-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1024302-06 09/14/18 13:01 • (MS) R3342019-7 09/14/18 13:03

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chromium,Hexavalent	695	ND	738	106	50	75.0-125	

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

Method Blank (MB)

(MB) R3334886-1 08/19/18 11:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chromium	U		0.140	1.00

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

(LCS) R3334886-2 08/19/18 11:35 • (LCSD) R3334886-3 08/19/18 11:37

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 %
Chromium	100	95.1	104	95.1	104	80.0-120			8.57	20

L1017897-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1017897-10 08/19/18 11:40 • (MS) R3334886-6 08/19/18 11:47 • (MSD) R3334886-7 08/19/18 11:50

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 %
Chromium	123	21.5	132	138	89.5	94.5	1	75.0-125			4.55	20

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

Method Blank (MB)

(MB) R3342361-1 09/16/18 20:32

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	0.782	J	0.650	2.00

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

(LCS) R3342361-2 09/16/18 20:34 • (LCSD) R3342361-3 09/16/18 20:37

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 %
Arsenic	100	98.7	100	98.7	100	80.0-120			1.58	20

L1026042-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1026042-01 09/16/18 20:40 • (MS) R3342361-6 09/16/18 20:48 • (MSD) R3342361-7 09/16/18 20:51

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	ND	98.6	101	97.3	99.3	1	75.0-125			2.02	20

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

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.

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
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.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia[1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky[1,6]	90010
Kentucky[2]	16
Louisiana	AI30792
Louisiana[1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico[1]	n/a
New York	11742
North Carolina	Env375
North Carolina[1]	DW21704
North Carolina[3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee[1,4]	2006
Texas	T 104704245-17-14
Texas[5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

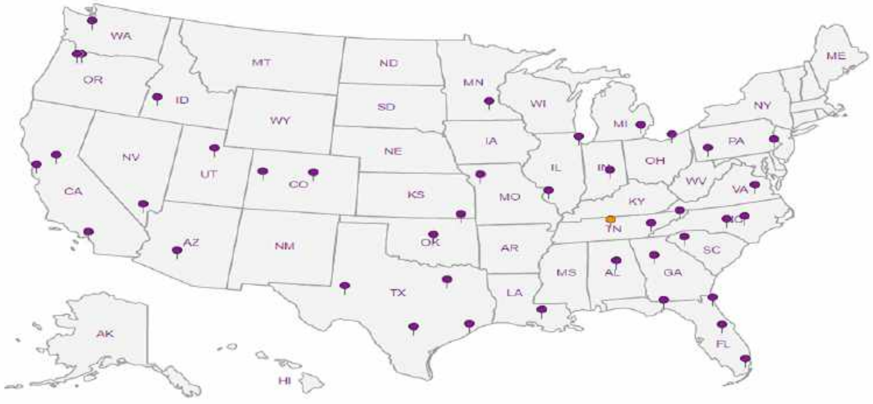
Third Party Federal Accreditations

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

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com,
tecrump@tgeresources.com,

Project Description: Future Federal Way Hospital

City/State Collected:

Phone: 713-744-5800
Fax: 713-744-5888

Client Project #
R13411.06

Lab Project #
TGERESHTX-R13411

Collected by (print):
TIM CRUMP

Site/Facility ID #

P.O. #
8162

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

Quote #

Date Results Needed

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

L# ~~L1017897~~
E240
L1025391

Acctnum: TGERESHTX
Template: T139025
Prelogin: P665046
TSR: 134 - Mark W. Beasley
PB: T082-08
Shipped Via: FedEX Ground

RV 8/16/18 -

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 4ozClr-NoPres	NWTPHDXNOSGT,TS 4ozClr-NoPres	SV8082,SV8270PAHSIMD 4ozClr-NoPres	V8260C, Gx 40ml/NaHSO4/Syr/MeOH	Remarks	Sample # (lab only)
B-1 (4)	Grab	SS	4	8/14/18	0850	5	X	X		X		~~-01~~
B-1 (9)	Grab	SS	9	8/14/18	0900	5	X	X		X		02
B-2 (4)	Grab	SS	4	8/14/18	0930	5	X	X		X		03
B-2 (8)	Grab	SS	8	8/14/18	0940	5	X	X		X		~~04~~
B-3 (4)	Grab	SS	4	8/14/18	0955	5	X	X		X		~~05~~ -01
B-3 (10)	Grab	SS	10	8/14/18	1010	5	X	X		X		06
B-4 (3)	Grab	SS	3	8/14/18	1030	5	X	X		X		~~07~~
B-4 (6)	Grab	SS	6	8/14/18	1035	5	X	X		X		~~08~~ -02
B-5 (4)	Grab	SS	4	8/14/18	1105	5	X	X		X		~~09~~
B-5 (9)	Grab	SS	9	8/14/18	1130	5	X	X		X		~~10~~

* 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 # 4492 6220 9340/9351

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
<0.5 MR/HR

Relinquished by : (Signature)	Date: 08/14/18	Time: 1440	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 2 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 6.5=3 °C Bottles Received: 80	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) 861	Date: 8/15/18 Time: 8:45	Hold: Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

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

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com,

Project Description: **Future Federal Way Hospital**

City/State Collected:

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.06

Lab Project #
TGERESHTX-R13411

L# ~~L1017897~~ N 9/15/18

Table # L1025311

Acctnum: **TGERESHTX**

Template: **T139025**

Prelogin: **P665046**

TSR: 134 - Mark W. Beasley

PB: TD 2-2-18

Shipped Via: **FedEX Ground**

Collected by (print):
TIM CRUMP

Site/Facility ID #

P.O. #
8162

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

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 4ozClr-NoPres	NWTPHDXNOSGT,TS 4ozClr-NoPres	SV8082,SV8270PAHSIMD 4ozClr-NoPres	V8260C, Gx 40ml/NaHSO4/Syr/MeOH								Remarks	Sample # (lab only)
B-6 (3)	Grab	SS	3	8/14/18	1145	5	X	X		X									-11
B-6 (6)	Grab	SS	6	8/14/18	1155	5	X	X		X									-12 -03
B-7 (4)	Grab	SS	4	8/14/18	1230	5	X	X		X									13
B-7 (9)	Grab	SS	9	8/14/18	1240	5	X	X		X									14
B-8 (4)	Grab	SS	4	8/14/18	1220	5	X	X		X									15
B-8 (7)	Grab	SS	7	8/14/18	1300	5	X	X		X									16
		SS																	
		SS																	
		SS																	
		SS																	

* 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
L025 MRIAR

Relinquished by : (Signature)	Date: 08/14/18	Time: 1440	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 2 [✓ HCl] / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 0.5 3 °C	Bottles Received: 80
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) 861	Date: 8/15/18	Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

From: Mark Beasley
Sent: Thursday, September 13, 2018 2:12 PM
To: Login; Sample Storage; Due Metals; Due WetLab
Subject: L1017897 *TGERESHTX* rush relog

Relog the following as R3 due 9/17:

L1017897-05	ASICP, transfer TS
L1017897-08	CR6, CR3, CRICP (place in WG1153500), transfer TS
L1017897-12	CR6, CR3, CRICP (place in WG1153500), transfer TS

Thanks
Mark

From: Tim Crump [mailto:tecrump@tgeresources.com]
Sent: Thursday, September 13, 2018 1:44 PM
To: Mark Beasley
Cc: Kristi Barnette
Subject: RE: Pace National Report & EDD for R13411.06 Future Federal Way Hospital L1017897

Mark,
I need the following additional soil sample analyses (expedited – 2 day? I'm not aware of timing needed for Chromium speciation):

- Soil sample B-3(4) "L1017897-05" re-analyzed for Arsenic;
- Soil sample B-4(6) "L1017897-08" analyzed for Chromium speciation; and
- Soil sample B-6(6) "L1017897-12" analyzed for Chromium speciation.

I will need pricing so I can pull a PO for this. Thanks.

Timothy E. Crump, P.G., C.P.G., RSO
Senior Project Manager

TGERESOURCES,INC.

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5817 Fax: (713) 744-5888
tecrump@tgeresources.com| www.tgeresources.com
WBENC & SBA Certified Woman Owned Small Business
DUNS# 929574051 / CAGE Code 08PQ6

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ANALYTICAL REPORT

November 27, 2019

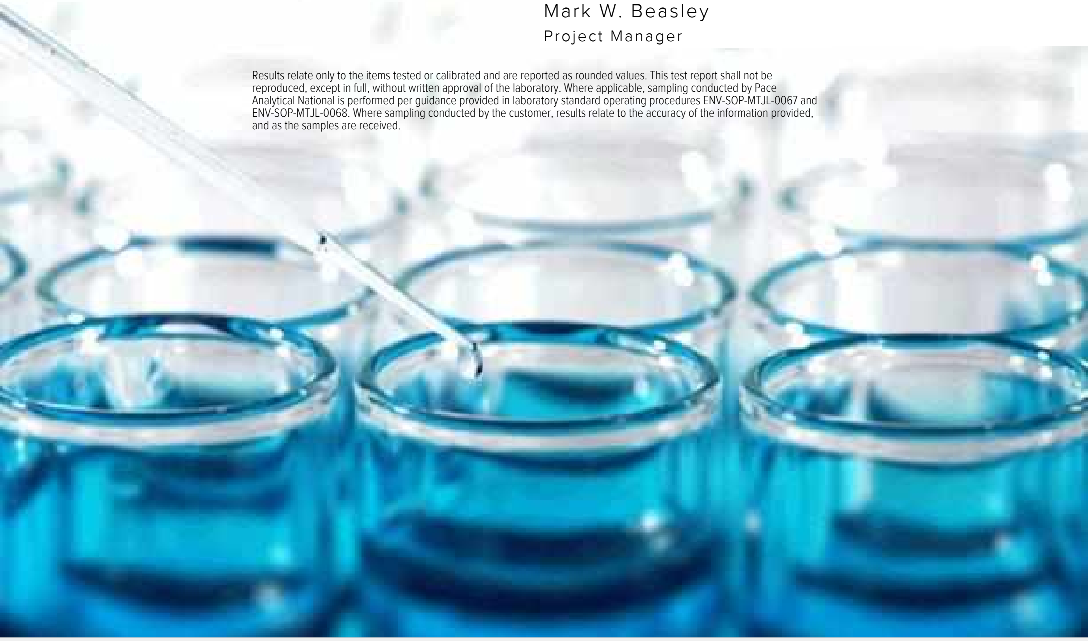
TGE Resources

Sample Delivery Group:	L1161400
Samples Received:	11/15/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SB-13 (0-1) L1161400-01 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 08:11	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384251	1	11/21/19 09:28	11/21/19 09:43	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:16	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382853	1	11/19/19 06:33	11/20/19 02:19	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 08:11	11/21/19 01:24	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1385940	1	11/13/19 08:11	11/24/19 04:33	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386320	1	11/13/19 08:11	11/25/19 04:10	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	10	11/19/19 19:32	11/21/19 23:09	FM	Mt. Juliet, TN

SB-13 (2-3) L1161400-02 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 08:13	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384251	1	11/21/19 09:28	11/21/19 09:43	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:18	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382853	1	11/19/19 06:33	11/20/19 02:28	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 08:13	11/21/19 01:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1385940	1	11/13/19 08:13	11/24/19 04:51	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386320	1	11/13/19 08:13	11/25/19 04:31	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	10	11/19/19 19:32	11/21/19 20:39	FM	Mt. Juliet, TN

SB-13 (4-6) L1161400-03 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 08:15	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384251	1	11/21/19 09:28	11/21/19 09:43	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:20	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382853	1	11/19/19 06:33	11/20/19 02:30	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 08:15	11/21/19 02:05	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1385940	1	11/13/19 08:15	11/24/19 05:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386320	1	11/13/19 08:15	11/25/19 04:51	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	10	11/19/19 19:32	11/21/19 21:18	FM	Mt. Juliet, TN

SB-13 (8-9) L1161400-04 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 08:17	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:27	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382853	1	11/19/19 06:33	11/20/19 02:33	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 08:17	11/21/19 02:26	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1385940	1	11/13/19 08:17	11/24/19 05:29	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386320	1	11/13/19 08:17	11/25/19 05:12	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	10	11/19/19 19:32	11/21/19 20:26	FM	Mt. Juliet, TN

SB-14 (0-1) L1161400-05 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 09:46	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:29	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382853	1	11/19/19 06:33	11/20/19 02:36	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 09:46	11/21/19 02:46	BMB	Mt. Juliet, TN

SB-14 (0-1) L1161400-05 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 09:46	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1385940	1	11/13/19 09:46	11/24/19 05:48	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386320	1	11/13/19 09:46	11/25/19 05:33	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	10	11/19/19 19:32	11/21/19 23:23	FM	Mt. Juliet, TN

SB-14 (2-3) L1161400-06 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 09:48	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:31	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382853	1	11/19/19 06:33	11/20/19 02:39	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 09:48	11/21/19 03:07	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 09:48	11/24/19 16:34	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386737	1	11/13/19 09:48	11/25/19 14:38	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	20	11/19/19 19:32	11/21/19 20:52	FM	Mt. Juliet, TN

SB-14 (10-12) L1161400-07 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 09:51	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:33	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382853	1	11/19/19 06:33	11/20/19 02:41	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 09:51	11/21/19 03:28	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 09:51	11/24/19 16:56	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386737	1	11/13/19 09:51	11/25/19 14:58	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	1	11/19/19 19:32	11/21/19 22:56	FM	Mt. Juliet, TN

SB-16 (0-1) L1161400-08 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 12:30	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:07	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383087	1	11/19/19 15:24	11/20/19 13:19	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 12:30	11/21/19 03:48	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 12:30	11/24/19 17:27	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386737	1	11/13/19 12:30	11/25/19 15:19	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	50	11/19/19 19:32	11/21/19 21:06	FM	Mt. Juliet, TN

SB-16 (2-3) L1161400-09 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 12:32	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:35	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383087	1	11/19/19 15:24	11/20/19 13:21	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 12:32	11/21/19 04:09	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 12:32	11/24/19 17:48	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386737	1	11/13/19 12:32	11/25/19 15:40	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	10	11/19/19 19:32	11/21/19 20:13	FM	Mt. Juliet, TN

SB-16 (10-12) L1161400-10 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 12:35	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:38	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383087	1	11/19/19 15:24	11/20/19 12:56	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 12:35	11/21/19 04:29	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 12:35	11/24/19 18:10	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386737	1	11/13/19 12:35	11/25/19 16:00	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	10	11/19/19 19:32	11/21/19 21:51	FM	Mt. Juliet, TN

SB-17 (0-1) L1161400-11 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 15:20	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:40	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383087	1	11/19/19 15:24	11/20/19 13:24	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 15:20	11/21/19 04:50	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 15:20	11/24/19 18:32	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386737	1	11/13/19 15:20	11/25/19 16:20	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	50	11/19/19 19:32	11/21/19 22:17	FM	Mt. Juliet, TN

SB-17 (6-8) L1161400-12 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 15:24	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:42	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383087	1	11/19/19 15:24	11/20/19 13:26	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 15:24	11/21/19 05:10	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 15:24	11/24/19 18:53	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	1	11/19/19 19:32	11/21/19 19:06	FM	Mt. Juliet, TN

SB-17 (14-15) L1161400-13 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 15:25	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:44	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383087	1	11/19/19 15:24	11/20/19 13:29	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 15:25	11/21/19 05:31	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 15:25	11/24/19 19:15	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	1	11/19/19 19:32	11/21/19 19:47	FM	Mt. Juliet, TN

SB-17A (7-8) L1161400-14 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 15:01	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384253	1	11/21/19 10:23	11/21/19 10:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:46	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383087	1	11/19/19 15:24	11/20/19 13:31	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383546	25	11/13/19 15:01	11/21/19 05:51	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 15:01	11/24/19 19:37	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	10	11/19/19 19:32	11/21/19 21:38	FM	Mt. Juliet, TN

SB-17A (12-13) L1161400-15 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 15:02	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384253	1	11/21/19 10:23	11/21/19 10:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:53	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383087	1	11/19/19 15:24	11/20/19 13:34	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383865	25	11/13/19 15:02	11/21/19 01:46	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 15:02	11/24/19 19:58	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	1	11/19/19 19:32	11/21/19 20:00	FM	Mt. Juliet, TN

SB-17C (2-3) L1161400-16 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 14:02	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384253	1	11/21/19 10:23	11/21/19 10:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:55	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383087	1	11/19/19 15:24	11/20/19 13:37	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1383865	25	11/13/19 14:02	11/21/19 02:07	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 14:02	11/24/19 20:19	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	1	11/19/19 19:32	11/21/19 19:20	FM	Mt. Juliet, TN

SB-17C (9-10) L1161400-17 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 14:04	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384253	1	11/21/19 10:23	11/21/19 10:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 09:57	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383087	1	11/19/19 15:24	11/20/19 13:39	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385348	200	11/13/19 14:04	11/22/19 15:28	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	20	11/13/19 14:04	11/24/19 22:08	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386737	20	11/13/19 14:04	11/25/19 16:41	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	10	11/19/19 19:32	11/21/19 22:04	FM	Mt. Juliet, TN

SB-17C (14-15) L1161400-18 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 14:05	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384253	1	11/21/19 10:23	11/21/19 10:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382816	1	11/19/19 19:16	11/20/19 10:00	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383087	1	11/19/19 15:24	11/20/19 13:42	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385348	200	11/13/19 14:05	11/22/19 15:52	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	20	11/13/19 14:05	11/24/19 22:29	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386737	20	11/13/19 14:05	11/25/19 17:02	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	1	11/19/19 19:32	11/21/19 19:33	FM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383230	5	11/19/19 19:32	11/22/19 03:54	FM	Mt. Juliet, TN

SB-16D (6-8) L1161400-19 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 13:27	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384253	1	11/21/19 10:23	11/21/19 10:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1383308	1	11/20/19 12:10	11/20/19 18:25	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383964	1	11/20/19 15:34	11/21/19 14:16	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385348	25	11/13/19 13:27	11/22/19 16:16	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 13:27	11/24/19 20:41	JHH	Mt. Juliet, TN

SAMPLE SUMMARY

SB-16D (6-8) L1161400-19 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 13:27	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383996	1	11/20/19 17:43	11/22/19 03:15	FM	Mt. Juliet, TN

SB-16D (14-15) L1161400-20 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 13:28	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384253	1	11/21/19 10:23	11/21/19 10:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1383308	1	11/20/19 12:10	11/20/19 18:27	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383964	1	11/20/19 15:34	11/21/19 14:03	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385348	25	11/13/19 13:28	11/22/19 16:40	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386339	1	11/13/19 13:28	11/24/19 21:03	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1383996	1	11/20/19 17:43	11/22/19 12:46	JDG	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

ONE LAB. NATIONWIDE.

Laboratory Name: Pace Analytical National	LRC Date: 11/27/2019 12:25
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1161400-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1382853, WG1382816, WG1383308, WG1383087, WG1383230, WG1383996, WG1383964, WG1384252, WG1384251, WG1384253, WG1383865, WG1385348, WG1383546, WG1385940, WG1386320, WG1386339 and WG1386737

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?		X			2
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			3
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 11/27/2019 12:25
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1161400-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1382853, WG1382816, WG1383308, WG1383087, WG1383230, WG1383996, WG1383964, WG1384252, WG1384251, WG1384253, WG1383865, WG1385348, WG1383546, WG1385940, WG1386320, WG1386339 and WG1386737

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 11/27/2019 12:25
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1161400-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1382853, WG1382816, WG1383308, WG1383087, WG1383230, WG1383996, WG1383964, WG1384252, WG1384251, WG1384253, WG1383865, WG1385348, WG1383546, WG1385940, WG1386320, WG1386339 and WG1386737

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			4
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 11/27/2019 12:25
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1161400-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1382853, WG1382816, WG1383308, WG1383087, WG1383230, WG1383996, WG1383964, WG1384252, WG1384251, WG1384253, WG1383865, WG1385348, WG1383546, WG1385940, WG1386320, WG1386339 and WG1386737

ER #[1]	**Description**
1	NWTPHDX-NO SGT WG1383230 o-Terphenyl L1161400-06, 08, 11 and 18: Percent Recovery is outside of established control limits.
2	8260D WG1386339 2-Butanone (MEK) L1161400-09, 12, 14, 15 and 16: Concentration in the Blank >MQL.
3	8260D WG1385940 Methylene Chloride, Styrene: Percent Recovery is outside of established control limits.
4	6010D WG1382853 Barium, Chromium: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits. 6010D WG1383087 Barium, Chromium, Lead: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5		1	11/21/2019 09:43	WG1384251

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0180	J	0.00299	0.0300	0.0321	1	11/20/2019 09:16	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.57	J	0.492	2.00	2.14	1	11/20/2019 02:19	WG1382853
Barium	56.0		0.182	0.500	0.535	1	11/20/2019 02:19	WG1382853
Cadmium	0.254	J	0.0748	0.500	0.535	1	11/20/2019 02:19	WG1382853
Chromium	28.1		0.150	1.00	1.07	1	11/20/2019 02:19	WG1382853
Lead	7.17		0.203	0.500	0.535	1	11/20/2019 02:19	WG1382853
Selenium	U		0.663	2.00	2.14	1	11/20/2019 02:19	WG1382853
Silver	0.289	B J	0.128	1.00	1.07	1	11/20/2019 02:19	WG1382853

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.906	0.100	2.67	25	11/21/2019 01:24	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*96.2*				*77.0-120*		*11/21/2019 01:24*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0146	0.0250	0.0267	1	11/24/2019 04:33	WG1385940
Acrylonitrile	U		0.00203	0.0125	0.0134	1	11/24/2019 04:33	WG1385940
Benzene	0.000742	J	0.000428	0.00100	0.00107	1	11/24/2019 04:33	WG1385940
Bromobenzene	U		0.00112	0.0125	0.0134	1	11/24/2019 04:33	WG1385940
Bromodichloromethane	U		0.000842	0.00250	0.00267	1	11/25/2019 04:10	WG1386320
Bromoform	U		0.00639	0.0250	0.0267	1	11/24/2019 04:33	WG1385940
Bromomethane	U		0.00396	0.0125	0.0134	1	11/24/2019 04:33	WG1385940
n-Butylbenzene	U		0.00411	0.0125	0.0134	1	11/24/2019 04:33	WG1385940
sec-Butylbenzene	U		0.00270	0.0125	0.0134	1	11/24/2019 04:33	WG1385940
tert-Butylbenzene	U		0.00166	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
Carbon tetrachloride	U		0.00115	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
Chlorobenzene	U		0.000613	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
Chlorodibromomethane	U		0.000481	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
Chloroethane	U		0.00115	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
Chloroform	U		0.000444	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
Chloromethane	U		0.00149	0.0125	0.0134	1	11/24/2019 04:33	WG1385940
2-Chlorotoluene	U		0.000984	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
4-Chlorotoluene	U		0.00121	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
1,2-Dibromo-3-Chloropropane	U		0.00545	0.0250	0.0267	1	11/24/2019 04:33	WG1385940
1,2-Dibromoethane	U		0.000561	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
Dibromomethane	U		0.00107	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
1,2-Dichlorobenzene	U		0.00155	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
1,3-Dichlorobenzene	U		0.00182	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
1,4-Dichlorobenzene	U		0.00211	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
Dichlorodifluoromethane	U		0.000874	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
1,1-Dichloroethane	U		0.000615	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
1,2-Dichloroethane	U		0.000508	0.00250	0.00267	1	11/24/2019 04:33	WG1385940

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000535	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
cis-1,2-Dichloroethene	U		0.000738	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
trans-1,2-Dichloroethene	U		0.00153	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
1,2-Dichloropropane	U		0.00136	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
1,1-Dichloropropene	U		0.000748	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
1,3-Dichloropropane	U		0.00187	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
cis-1,3-Dichloropropene	U		0.000725	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
trans-1,3-Dichloropropene	U		0.00164	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
2,2-Dichloropropane	U		0.000848	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
Di-isopropyl ether	U		0.000374	0.00100	0.00107	1	11/24/2019 04:33	WG1385940
Ethylbenzene	U		0.000567	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
Hexachloro-1,3-butadiene	U		0.0136	0.0250	0.0267	1	11/24/2019 04:33	WG1385940
Isopropylbenzene	U		0.000923	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
p-Isopropyltoluene	U		0.00249	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
2-Butanone (MEK)	U		0.0134	0.0250	0.0267	1	11/24/2019 04:33	WG1385940
Methylene Chloride	U	J4	0.00710	0.0250	0.0267	1	11/24/2019 04:33	WG1385940
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0250	0.0267	1	11/24/2019 04:33	WG1385940
Methyl tert-butyl ether	U		0.000315	0.00100	0.00107	1	11/24/2019 04:33	WG1385940
Naphthalene	U		0.00334	0.0125	0.0134	1	11/24/2019 04:33	WG1385940
n-Propylbenzene	U		0.00126	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
Styrene	U	J4	0.00292	0.0125	0.0134	1	11/24/2019 04:33	WG1385940
1,1,1,2-Tetrachloroethane	U		0.000535	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
1,1,2,2-Tetrachloroethane	U		0.000417	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
1,1,2-Trichlorotrifluoroethane	U		0.000722	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
Tetrachloroethene	U		0.000748	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
Toluene	0.00547		0.00134	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
1,2,3-Trichlorobenzene	U		0.000668	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
1,2,4-Trichlorobenzene	U		0.00515	0.0125	0.0134	1	11/24/2019 04:33	WG1385940
1,1,1-Trichloroethane	U		0.000294	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
1,1,2-Trichloroethane	U		0.000944	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
Trichloroethene	U		0.000428	0.00100	0.00107	1	11/24/2019 04:33	WG1385940
Trichlorofluoromethane	U		0.000535	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
1,2,3-Trichloropropane	U		0.00545	0.0125	0.0134	1	11/24/2019 04:33	WG1385940
1,2,4-Trimethylbenzene	0.00188	J	0.00124	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
1,2,3-Trimethylbenzene	U		0.00123	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
Vinyl chloride	U		0.000730	0.00250	0.00267	1	11/24/2019 04:33	WG1385940
1,3,5-Trimethylbenzene	U		0.00115	0.00500	0.00535	1	11/24/2019 04:33	WG1385940
Xylenes, Total	0.00531	J	0.00511	0.00650	0.00695	1	11/24/2019 04:33	WG1385940
(S) Toluene-d8	*103*				*75.0-131*		*11/24/2019 04:33*	WG1385940
(S) Toluene-d8	*103*				*75.0-131*		*11/25/2019 04:10*	WG1386320
(S) 4-Bromofluorobenzene	*88.1*				*67.0-138*		*11/24/2019 04:33*	WG1385940
(S) 4-Bromofluorobenzene	*102*				*67.0-138*		*11/25/2019 04:10*	WG1386320
(S) 1,2-Dichloroethane-d4	*94.1*				*70.0-130*		*11/24/2019 04:33*	WG1385940
(S) 1,2-Dichloroethane-d4	*99.9*				*70.0-130*		*11/25/2019 04:10*	WG1386320

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	126		14.2	4.00	42.8	10	11/21/2019 23:09	WG1383230
Residual Range Organics (RRO)	743		35.6	10.0	107	10	11/21/2019 23:09	WG1383230
(S) o-Terphenyl	*106*				*18.0-148*		*11/21/2019 23:09*	WG1383230

SB-13 (2-3)

Collected date/time: 11/13/19 08:13

SAMPLE RESULTS - 02

L1161400

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.7		1	11/21/2019 09:43	WG1384251

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0159	J	0.00312	0.0300	0.0335	1	11/20/2019 09:18	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.53	J	0.513	2.00	2.23	1	11/20/2019 02:28	WG1382853
Barium	53.1		0.190	0.500	0.558	1	11/20/2019 02:28	WG1382853
Cadmium	0.269	J	0.0781	0.500	0.558	1	11/20/2019 02:28	WG1382853
Chromium	26.8		0.156	1.00	1.12	1	11/20/2019 02:28	WG1382853
Lead	8.18		0.212	0.500	0.558	1	11/20/2019 02:28	WG1382853
Selenium	U		0.692	2.00	2.23	1	11/20/2019 02:28	WG1382853
Silver	0.245	B J	0.134	1.00	1.12	1	11/20/2019 02:28	WG1382853

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.09	B J	0.945	0.100	2.79	25	11/21/2019 01:45	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*95.1*				*77.0-120*		*11/21/2019 01:45*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0153	0.0250	0.0279	1	11/24/2019 04:51	WG1385940
Acrylonitrile	U		0.00212	0.0125	0.0139	1	11/24/2019 04:51	WG1385940
Benzene	0.000617	J	0.000446	0.00100	0.00112	1	11/24/2019 04:51	WG1385940
Bromobenzene	U		0.00117	0.0125	0.0139	1	11/24/2019 04:51	WG1385940
Bromodichloromethane	U		0.000879	0.00250	0.00279	1	11/25/2019 04:31	WG1386320
Bromoform	U		0.00667	0.0250	0.0279	1	11/24/2019 04:51	WG1385940
Bromomethane	U		0.00413	0.0125	0.0139	1	11/24/2019 04:51	WG1385940
n-Butylbenzene	U		0.00428	0.0125	0.0139	1	11/24/2019 04:51	WG1385940
sec-Butylbenzene	U		0.00282	0.0125	0.0139	1	11/24/2019 04:51	WG1385940
tert-Butylbenzene	U		0.00173	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
Carbon tetrachloride	U		0.00120	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
Chlorobenzene	U		0.000639	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
Chlorodibromomethane	U		0.000502	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
Chloroethane	U		0.00120	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
Chloroform	U		0.000463	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
Chloromethane	U		0.00155	0.0125	0.0139	1	11/24/2019 04:51	WG1385940
2-Chlorotoluene	U		0.00103	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
4-Chlorotoluene	U		0.00126	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
1,2-Dibromo-3-Chloropropane	U		0.00569	0.0250	0.0279	1	11/24/2019 04:51	WG1385940
1,2-Dibromoethane	U		0.000586	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
Dibromomethane	U		0.00112	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
1,2-Dichlorobenzene	U		0.00162	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
1,3-Dichlorobenzene	U		0.00190	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
1,4-Dichlorobenzene	U		0.00220	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
Dichlorodifluoromethane	U		0.000912	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
1,1-Dichloroethane	U		0.000641	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
1,2-Dichloroethane	U		0.000530	0.00250	0.00279	1	11/24/2019 04:51	WG1385940

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000558	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
cis-1,2-Dichloroethene	U		0.000770	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
trans-1,2-Dichloroethene	U		0.00160	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
1,2-Dichloropropane	U		0.00142	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
1,1-Dichloropropene	U		0.000781	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
1,3-Dichloropropane	U		0.00195	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
cis-1,3-Dichloropropene	U		0.000756	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
trans-1,3-Dichloropropene	U		0.00171	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
2,2-Dichloropropane	U		0.000885	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
Di-isopropyl ether	U		0.000390	0.00100	0.00112	1	11/24/2019 04:51	WG1385940
Ethylbenzene	U		0.000591	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
Hexachloro-1,3-butadiene	U		0.0142	0.0250	0.0279	1	11/24/2019 04:51	WG1385940
Isopropylbenzene	U		0.000963	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
p-Isopropyltoluene	U		0.00260	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
2-Butanone (MEK)	U		0.0139	0.0250	0.0279	1	11/24/2019 04:51	WG1385940
Methylene Chloride	U	J4	0.00741	0.0250	0.0279	1	11/24/2019 04:51	WG1385940
4-Methyl-2-pentanone (MIBK)	U		0.0112	0.0250	0.0279	1	11/24/2019 04:51	WG1385940
Methyl tert-butyl ether	U		0.000329	0.00100	0.00112	1	11/24/2019 04:51	WG1385940
Naphthalene	U		0.00348	0.0125	0.0139	1	11/24/2019 04:51	WG1385940
n-Propylbenzene	U		0.00132	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
Styrene	U	J4	0.00305	0.0125	0.0139	1	11/24/2019 04:51	WG1385940
1,1,1,2-Tetrachloroethane	U		0.000558	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
1,1,2,2-Tetrachloroethane	U		0.000435	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
1,1,2-Trichlorotrifluoroethane	U		0.000753	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
Tetrachloroethene	U		0.000781	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
Toluene	0.00360	J	0.00139	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
1,2,3-Trichlorobenzene	U		0.000697	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
1,2,4-Trichlorobenzene	U		0.00538	0.0125	0.0139	1	11/24/2019 04:51	WG1385940
1,1,1-Trichloroethane	U		0.000307	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
1,1,2-Trichloroethane	U		0.000985	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
Trichloroethene	U		0.000446	0.00100	0.00112	1	11/24/2019 04:51	WG1385940
Trichlorofluoromethane	U		0.000558	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
1,2,3-Trichloropropane	U		0.00569	0.0125	0.0139	1	11/24/2019 04:51	WG1385940
1,2,4-Trimethylbenzene	0.00151	J	0.00129	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
1,2,3-Trimethylbenzene	U		0.00128	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
Vinyl chloride	U		0.000762	0.00250	0.00279	1	11/24/2019 04:51	WG1385940
1,3,5-Trimethylbenzene	U		0.00120	0.00500	0.00558	1	11/24/2019 04:51	WG1385940
Xylenes, Total	U		0.00533	0.00650	0.00725	1	11/24/2019 04:51	WG1385940
(S) Toluene-d8	*103*				*75.0-131*		*11/24/2019 04:51*	WG1385940
(S) Toluene-d8	*103*				*75.0-131*		*11/25/2019 04:31*	WG1386320
(S) 4-Bromofluorobenzene	*85.7*				*67.0-138*		*11/24/2019 04:51*	WG1385940
(S) 4-Bromofluorobenzene	*104*				*67.0-138*		*11/25/2019 04:31*	WG1386320
(S) 1,2-Dichloroethane-d4	*96.4*				*70.0-130*		*11/24/2019 04:51*	WG1385940
(S) 1,2-Dichloroethane-d4	*105*				*70.0-130*		*11/25/2019 04:31*	WG1386320

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	43.1	J	14.8	4.00	44.6	10	11/21/2019 20:39	WG1383230
Residual Range Organics (RRO)	271		37.1	10.0	112	10	11/21/2019 20:39	WG1383230
(S) o-Terphenyl	*84.3*				*18.0-148*		*11/21/2019 20:39*	WG1383230

Sample Narrative:

L1161400-02 WG1383230: Dilution due to matrix impact during extract concentration procedure

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.3		1	11/21/2019 09:43	WG1384251

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0174	J	0.00310	0.0300	0.0332	1	11/20/2019 09:20	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.97	J	0.509	2.00	2.22	1	11/20/2019 02:30	WG1382853
Barium	50.0		0.188	0.500	0.554	1	11/20/2019 02:30	WG1382853
Cadmium	0.156	J	0.0775	0.500	0.554	1	11/20/2019 02:30	WG1382853
Chromium	24.1		0.155	1.00	1.11	1	11/20/2019 02:30	WG1382853
Lead	8.14		0.210	0.500	0.554	1	11/20/2019 02:30	WG1382853
Selenium	U		0.687	2.00	2.22	1	11/20/2019 02:30	WG1382853
Silver	0.299	B J	0.133	1.00	1.11	1	11/20/2019 02:30	WG1382853

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.939	0.100	2.77	25	11/21/2019 02:05	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*95.3*				*77.0-120*		*11/21/2019 02:05*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0152	0.0250	0.0277	1	11/24/2019 05:10	WG1385940
Acrylonitrile	U		0.00210	0.0125	0.0138	1	11/24/2019 05:10	WG1385940
Benzene	U		0.000443	0.00100	0.00111	1	11/24/2019 05:10	WG1385940
Bromobenzene	U		0.00116	0.0125	0.0138	1	11/24/2019 05:10	WG1385940
Bromodichloromethane	U		0.000873	0.00250	0.00277	1	11/25/2019 04:51	WG1386320
Bromoform	U		0.00662	0.0250	0.0277	1	11/24/2019 05:10	WG1385940
Bromomethane	U		0.00410	0.0125	0.0138	1	11/24/2019 05:10	WG1385940
n-Butylbenzene	U		0.00425	0.0125	0.0138	1	11/24/2019 05:10	WG1385940
sec-Butylbenzene	U		0.00280	0.0125	0.0138	1	11/24/2019 05:10	WG1385940
tert-Butylbenzene	U		0.00172	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
Carbon tetrachloride	U		0.00120	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
Chlorobenzene	U		0.000635	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
Chlorodibromomethane	U		0.000498	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
Chloroethane	U		0.00120	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
Chloroform	U		0.000460	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
Chloromethane	U		0.00154	0.0125	0.0138	1	11/24/2019 05:10	WG1385940
2-Chlorotoluene	U		0.00102	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
4-Chlorotoluene	U		0.00125	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
1,2-Dibromo-3-Chloropropane	U		0.00565	0.0250	0.0277	1	11/24/2019 05:10	WG1385940
1,2-Dibromoethane	U		0.000581	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
Dibromomethane	U		0.00111	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
1,2-Dichlorobenzene	U		0.00161	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
1,3-Dichlorobenzene	U		0.00188	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
1,4-Dichlorobenzene	U		0.00218	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
Dichlorodifluoromethane	U		0.000906	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
1,1-Dichloroethane	U		0.000637	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
1,2-Dichloroethane	U		0.000526	0.00250	0.00277	1	11/24/2019 05:10	WG1385940

SB-13 (4-6)

Collected date/time: 11/13/19 08:15

SAMPLE RESULTS - 03

L1161400

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000554	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
cis-1,2-Dichloroethene	U		0.000764	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
trans-1,2-Dichloroethene	U		0.00158	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
1,2-Dichloropropane	U		0.00141	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
1,1-Dichloropropene	U		0.000775	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
1,3-Dichloropropane	U		0.00194	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
cis-1,3-Dichloropropene	U		0.000751	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
trans-1,3-Dichloropropene	U		0.00169	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
2,2-Dichloropropane	U		0.000878	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
Di-isopropyl ether	U		0.000388	0.00100	0.00111	1	11/24/2019 05:10	WG1385940
Ethylbenzene	U		0.000587	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
Hexachloro-1,3-butadiene	U		0.0141	0.0250	0.0277	1	11/24/2019 05:10	WG1385940
Isopropylbenzene	U		0.000956	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
p-Isopropyltoluene	U		0.00258	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
2-Butanone (MEK)	U		0.0138	0.0250	0.0277	1	11/24/2019 05:10	WG1385940
Methylene Chloride	U	J4	0.00735	0.0250	0.0277	1	11/24/2019 05:10	WG1385940
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0250	0.0277	1	11/24/2019 05:10	WG1385940
Methyl tert-butyl ether	U		0.000327	0.00100	0.00111	1	11/24/2019 05:10	WG1385940
Naphthalene	U		0.00346	0.0125	0.0138	1	11/24/2019 05:10	WG1385940
n-Propylbenzene	U		0.00131	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
Styrene	U	J4	0.00302	0.0125	0.0138	1	11/24/2019 05:10	WG1385940
1,1,1,2-Tetrachloroethane	U		0.000554	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
1,1,2,2-Tetrachloroethane	U		0.000432	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
1,1,2-Trichlorotrifluoroethane	U		0.000748	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
Tetrachloroethene	U		0.000775	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
Toluene	0.00306	J	0.00138	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
1,2,3-Trichlorobenzene	U		0.000692	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
1,2,4-Trichlorobenzene	U		0.00534	0.0125	0.0138	1	11/24/2019 05:10	WG1385940
1,1,1-Trichloroethane	U		0.000305	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
1,1,2-Trichloroethane	U		0.000978	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
Trichloroethene	U		0.000443	0.00100	0.00111	1	11/24/2019 05:10	WG1385940
Trichlorofluoromethane	U		0.000554	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
1,2,3-Trichloropropane	U		0.00565	0.0125	0.0138	1	11/24/2019 05:10	WG1385940
1,2,4-Trimethylbenzene	U		0.00128	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
1,2,3-Trimethylbenzene	U		0.00127	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
Vinyl chloride	U		0.000756	0.00250	0.00277	1	11/24/2019 05:10	WG1385940
1,3,5-Trimethylbenzene	U		0.00120	0.00500	0.00554	1	11/24/2019 05:10	WG1385940
Xylenes, Total	U		0.00529	0.00650	0.00720	1	11/24/2019 05:10	WG1385940
(S) Toluene-d8	*104*				*75.0-131*		*11/24/2019 05:10*	WG1385940
(S) Toluene-d8	*103*				*75.0-131*		*11/25/2019 04:51*	WG1386320
(S) 4-Bromofluorobenzene	*89.8*				*67.0-138*		*11/24/2019 05:10*	WG1385940
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*11/25/2019 04:51*	WG1386320
(S) 1,2-Dichloroethane-d4	*102*				*70.0-130*		*11/24/2019 05:10*	WG1385940
(S) 1,2-Dichloroethane-d4	*99.9*				*70.0-130*		*11/25/2019 04:51*	WG1386320

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		14.7	4.00	44.3	10	11/21/2019 21:18	WG1383230
Residual Range Organics (RRO)	95.0	J	36.9	10.0	111	10	11/21/2019 21:18	WG1383230
(S) o-Terphenyl	*70.9*				*18.0-148*		*11/21/2019 21:18*	WG1383230

Sample Narrative:

L1161400-03 WG1383230: Cannot run at lower dilution due to viscosity of extract

SB-13 (8-9)

Collected date/time: 11/13/19 08:17

SAMPLE RESULTS - 04

L1161400

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.0		1	11/21/2019 09:26	WG1384252

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0171	J	0.00301	0.0300	0.0322	1	11/20/2019 09:27	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.50	J	0.494	2.00	2.15	1	11/20/2019 02:33	WG1382853
Barium	48.0		0.183	0.500	0.537	1	11/20/2019 02:33	WG1382853
Cadmium	0.200	J	0.0752	0.500	0.537	1	11/20/2019 02:33	WG1382853
Chromium	28.7		0.150	1.00	1.07	1	11/20/2019 02:33	WG1382853
Lead	6.24		0.204	0.500	0.537	1	11/20/2019 02:33	WG1382853
Selenium	U		0.666	2.00	2.15	1	11/20/2019 02:33	WG1382853
Silver	0.313	B J	0.129	1.00	1.07	1	11/20/2019 02:33	WG1382853

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	0.962	B J	0.911	0.100	2.69	25	11/21/2019 02:26	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*95.3*				*77.0-120*		*11/21/2019 02:26*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0147	0.0250	0.0269	1	11/24/2019 05:29	WG1385940
Acrylonitrile	U		0.00204	0.0125	0.0134	1	11/24/2019 05:29	WG1385940
Benzene	U		0.000430	0.00100	0.00107	1	11/24/2019 05:29	WG1385940
Bromobenzene	U		0.00113	0.0125	0.0134	1	11/24/2019 05:29	WG1385940
Bromodichloromethane	U		0.000847	0.00250	0.00269	1	11/25/2019 05:12	WG1386320
Bromoform	U		0.00643	0.0250	0.0269	1	11/24/2019 05:29	WG1385940
Bromomethane	U		0.00398	0.0125	0.0134	1	11/24/2019 05:29	WG1385940
n-Butylbenzene	U		0.00413	0.0125	0.0134	1	11/24/2019 05:29	WG1385940
sec-Butylbenzene	U		0.00272	0.0125	0.0134	1	11/24/2019 05:29	WG1385940
tert-Butylbenzene	U		0.00167	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
Carbon tetrachloride	U		0.00116	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
Chlorobenzene	U		0.000616	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
Chlorodibromomethane	U		0.000484	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
Chloroethane	U		0.00116	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
Chloroform	U		0.000446	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
Chloromethane	U		0.00149	0.0125	0.0134	1	11/24/2019 05:29	WG1385940
2-Chlorotoluene	U		0.000989	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
4-Chlorotoluene	U		0.00121	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
1,2-Dibromo-3-Chloropropane	U		0.00548	0.0250	0.0269	1	11/24/2019 05:29	WG1385940
1,2-Dibromoethane	U		0.000564	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
Dibromomethane	U		0.00107	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
1,2-Dichlorobenzene	U		0.00156	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
1,3-Dichlorobenzene	U		0.00183	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
1,4-Dichlorobenzene	U		0.00212	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
Dichlorodifluoromethane	U		0.000879	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
1,1-Dichloroethane	U		0.000618	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
1,2-Dichloroethane	U		0.000511	0.00250	0.00269	1	11/24/2019 05:29	WG1385940

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000537	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
cis-1,2-Dichloroethene	U		0.000742	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
trans-1,2-Dichloroethene	U		0.00154	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
1,2-Dichloropropane	U		0.00137	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
1,1-Dichloropropene	U		0.000752	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
1,3-Dichloropropane	U		0.00188	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
cis-1,3-Dichloropropene	U		0.000729	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
trans-1,3-Dichloropropene	U		0.00164	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
2,2-Dichloropropane	U		0.000852	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
Di-isopropyl ether	U		0.000376	0.00100	0.00107	1	11/24/2019 05:29	WG1385940
Ethylbenzene	U		0.000570	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
Hexachloro-1,3-butadiene	U		0.0137	0.0250	0.0269	1	11/24/2019 05:29	WG1385940
Isopropylbenzene	U		0.000928	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
p-Isopropyltoluene	U		0.00250	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
2-Butanone (MEK)	U		0.0134	0.0250	0.0269	1	11/24/2019 05:29	WG1385940
Methylene Chloride	U	J4	0.00714	0.0250	0.0269	1	11/24/2019 05:29	WG1385940
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0250	0.0269	1	11/24/2019 05:29	WG1385940
Methyl tert-butyl ether	U		0.000317	0.00100	0.00107	1	11/24/2019 05:29	WG1385940
Naphthalene	U		0.00335	0.0125	0.0134	1	11/24/2019 05:29	WG1385940
n-Propylbenzene	U		0.00127	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
Styrene	U	J4	0.00293	0.0125	0.0134	1	11/24/2019 05:29	WG1385940
1,1,1,2-Tetrachloroethane	U		0.000537	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
1,1,2,2-Tetrachloroethane	U		0.000419	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
1,1,2-Trichlorotrifluoroethane	U		0.000725	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
Tetrachloroethene	U		0.000752	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
Toluene	0.00161	J	0.00134	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
1,2,3-Trichlorobenzene	U		0.000672	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
1,2,4-Trichlorobenzene	U		0.00518	0.0125	0.0134	1	11/24/2019 05:29	WG1385940
1,1,1-Trichloroethane	U		0.000296	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
1,1,2-Trichloroethane	U		0.000949	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
Trichloroethene	U		0.000430	0.00100	0.00107	1	11/24/2019 05:29	WG1385940
Trichlorofluoromethane	U		0.000537	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
1,2,3-Trichloropropane	U		0.00548	0.0125	0.0134	1	11/24/2019 05:29	WG1385940
1,2,4-Trimethylbenzene	U		0.00125	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
1,2,3-Trimethylbenzene	U		0.00124	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
Vinyl chloride	U		0.000734	0.00250	0.00269	1	11/24/2019 05:29	WG1385940
1,3,5-Trimethylbenzene	U		0.00116	0.00500	0.00537	1	11/24/2019 05:29	WG1385940
Xylenes, Total	U		0.00514	0.00650	0.00699	1	11/24/2019 05:29	WG1385940
(S) Toluene-d8	*104*				*75.0-131*		*11/24/2019 05:29*	WG1385940
(S) Toluene-d8	*104*				*75.0-131*		*11/25/2019 05:12*	WG1386320
(S) 4-Bromofluorobenzene	*86.8*				*67.0-138*		*11/24/2019 05:29*	WG1385940
(S) 4-Bromofluorobenzene	*99.6*				*67.0-138*		*11/25/2019 05:12*	WG1386320
(S) 1,2-Dichloroethane-d4	*95.1*				*70.0-130*		*11/24/2019 05:29*	WG1385940
(S) 1,2-Dichloroethane-d4	*98.8*				*70.0-130*		*11/25/2019 05:12*	WG1386320

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	18.1	J	14.3	4.00	43.0	10	11/21/2019 20:26	WG1383230
Residual Range Organics (RRO)	142		35.8	10.0	107	10	11/21/2019 20:26	WG1383230
(S) o-Terphenyl	*77.2*				*18.0-148*		*11/21/2019 20:26*	WG1383230

Sample Narrative:

L1161400-04 WG1383230: Dilution due to matrix impact during extract concentration procedure

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5		1	11/21/2019 09:26	WG1384252

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0231	J	0.00300	0.0300	0.0321	1	11/20/2019 09:29	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.67		0.492	2.00	2.14	1	11/20/2019 02:36	WG1382853
Barium	75.7		0.182	0.500	0.535	1	11/20/2019 02:36	WG1382853
Cadmium	0.235	J	0.0749	0.500	0.535	1	11/20/2019 02:36	WG1382853
Chromium	26.0		0.150	1.00	1.07	1	11/20/2019 02:36	WG1382853
Lead	23.9		0.203	0.500	0.535	1	11/20/2019 02:36	WG1382853
Selenium	U		0.663	2.00	2.14	1	11/20/2019 02:36	WG1382853
Silver	0.273	B J	0.128	1.00	1.07	1	11/20/2019 02:36	WG1382853

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.907	0.100	2.68	25	11/21/2019 02:46	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*96.1*				*77.0-120*		*11/21/2019 02:46*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0147	0.0250	0.0268	1	11/24/2019 05:48	WG1385940
Acrylonitrile	U		0.00203	0.0125	0.0134	1	11/24/2019 05:48	WG1385940
Benzene	0.000508	J	0.000428	0.00100	0.00107	1	11/24/2019 05:48	WG1385940
Bromobenzene	U		0.00112	0.0125	0.0134	1	11/24/2019 05:48	WG1385940
Bromodichloromethane	U		0.000843	0.00250	0.00268	1	11/25/2019 05:33	WG1386320
Bromoform	U		0.00640	0.0250	0.0268	1	11/24/2019 05:48	WG1385940
Bromomethane	U		0.00396	0.0125	0.0134	1	11/24/2019 05:48	WG1385940
n-Butylbenzene	U		0.00411	0.0125	0.0134	1	11/24/2019 05:48	WG1385940
sec-Butylbenzene	U		0.00271	0.0125	0.0134	1	11/24/2019 05:48	WG1385940
tert-Butylbenzene	U		0.00166	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
Carbon tetrachloride	U		0.00116	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
Chlorobenzene	U		0.000613	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
Chlorodibromomethane	U		0.000482	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
Chloroethane	U		0.00116	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
Chloroform	U		0.000444	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
Chloromethane	U		0.00149	0.0125	0.0134	1	11/24/2019 05:48	WG1385940
2-Chlorotoluene	U		0.000984	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
4-Chlorotoluene	U		0.00121	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
1,2-Dibromo-3-Chloropropane	U		0.00546	0.0250	0.0268	1	11/24/2019 05:48	WG1385940
1,2-Dibromoethane	U		0.000562	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
Dibromomethane	U		0.00107	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
1,2-Dichlorobenzene	U		0.00155	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
1,3-Dichlorobenzene	U		0.00182	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
1,4-Dichlorobenzene	U		0.00211	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
Dichlorodifluoromethane	U		0.000875	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
1,1-Dichloroethane	U		0.000615	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
1,2-Dichloroethane	U		0.000508	0.00250	0.00268	1	11/24/2019 05:48	WG1385940

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000535	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
cis-1,2-Dichloroethene	U		0.000738	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
trans-1,2-Dichloroethene	U		0.00153	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
1,2-Dichloropropane	U		0.00136	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
1,1-Dichloropropene	U		0.000749	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
1,3-Dichloropropane	U		0.00187	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
cis-1,3-Dichloropropene	U		0.000725	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
trans-1,3-Dichloropropene	U		0.00164	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
2,2-Dichloropropane	U		0.000849	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
Di-isopropyl ether	U		0.000375	0.00100	0.00107	1	11/24/2019 05:48	WG1385940
Ethylbenzene	U		0.000567	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
Hexachloro-1,3-butadiene	U		0.0136	0.0250	0.0268	1	11/24/2019 05:48	WG1385940
Isopropylbenzene	U		0.000923	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
p-Isopropyltoluene	U		0.00249	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
2-Butanone (MEK)	U		0.0134	0.0250	0.0268	1	11/24/2019 05:48	WG1385940
Methylene Chloride	U	J4	0.00710	0.0250	0.0268	1	11/24/2019 05:48	WG1385940
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0250	0.0268	1	11/24/2019 05:48	WG1385940
Methyl tert-butyl ether	U		0.000316	0.00100	0.00107	1	11/24/2019 05:48	WG1385940
Naphthalene	U		0.00334	0.0125	0.0134	1	11/24/2019 05:48	WG1385940
n-Propylbenzene	U		0.00126	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
Styrene	U	J4	0.00292	0.0125	0.0134	1	11/24/2019 05:48	WG1385940
1,1,1,2-Tetrachloroethane	U		0.000535	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
1,1,2,2-Tetrachloroethane	U		0.000417	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
1,1,2-Trichlorotrifluoroethane	U		0.000722	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
Tetrachloroethene	U		0.000749	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
Toluene	0.00492	J	0.00134	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
1,2,3-Trichlorobenzene	U		0.000669	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
1,2,4-Trichlorobenzene	U		0.00516	0.0125	0.0134	1	11/24/2019 05:48	WG1385940
1,1,1-Trichloroethane	U		0.000294	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
1,1,2-Trichloroethane	U		0.000945	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
Trichloroethene	U		0.000428	0.00100	0.00107	1	11/24/2019 05:48	WG1385940
Trichlorofluoromethane	U		0.000535	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
1,2,3-Trichloropropane	U		0.00546	0.0125	0.0134	1	11/24/2019 05:48	WG1385940
1,2,4-Trimethylbenzene	U		0.00124	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
1,2,3-Trimethylbenzene	U		0.00123	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
Vinyl chloride	U		0.000731	0.00250	0.00268	1	11/24/2019 05:48	WG1385940
1,3,5-Trimethylbenzene	U		0.00116	0.00500	0.00535	1	11/24/2019 05:48	WG1385940
Xylenes, Total	U		0.00511	0.00650	0.00696	1	11/24/2019 05:48	WG1385940
(S) Toluene-d8	*101*				*75.0-131*		*11/24/2019 05:48*	WG1385940
(S) Toluene-d8	*103*				*75.0-131*		*11/25/2019 05:33*	WG1386320
(S) 4-Bromofluorobenzene	*88.6*				*67.0-138*		*11/24/2019 05:48*	WG1385940
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*11/25/2019 05:33*	WG1386320
(S) 1,2-Dichloroethane-d4	*82.6*				*70.0-130*		*11/24/2019 05:48*	WG1385940
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*11/25/2019 05:33*	WG1386320

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	118		14.2	4.00	42.8	10	11/21/2019 23:23	WG1383230
Residual Range Organics (RRO)	860		35.6	10.0	107	10	11/21/2019 23:23	WG1383230
(S) o-Terphenyl	*101*				*18.0-148*		*11/21/2019 23:23*	WG1383230

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.6		1	11/21/2019 09:26	WG1384252

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0167	J	0.00302	0.0300	0.0324	1	11/20/2019 09:31	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	0.713	J	0.497	2.00	2.16	1	11/20/2019 02:39	WG1382853
Barium	41.4		0.184	0.500	0.540	1	11/20/2019 02:39	WG1382853
Cadmium	0.119	J	0.0756	0.500	0.540	1	11/20/2019 02:39	WG1382853
Chromium	21.1		0.151	1.00	1.08	1	11/20/2019 02:39	WG1382853
Lead	2.03		0.205	0.500	0.540	1	11/20/2019 02:39	WG1382853
Selenium	U		0.670	2.00	2.16	1	11/20/2019 02:39	WG1382853
Silver	0.200	B J	0.130	1.00	1.08	1	11/20/2019 02:39	WG1382853

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.915	0.100	2.70	25	11/21/2019 03:07	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*94.9*				*77.0-120*		*11/21/2019 03:07*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0148	0.0250	0.0270	1	11/24/2019 16:34	WG1386339
Acrylonitrile	U		0.00205	0.0125	0.0135	1	11/24/2019 16:34	WG1386339
Benzene	U		0.000432	0.00100	0.00108	1	11/24/2019 16:34	WG1386339
Bromobenzene	U		0.00113	0.0125	0.0135	1	11/24/2019 16:34	WG1386339
Bromodichloromethane	U		0.000851	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
Bromoform	U		0.00646	0.0250	0.0270	1	11/24/2019 16:34	WG1386339
Bromomethane	U		0.00400	0.0125	0.0135	1	11/24/2019 16:34	WG1386339
n-Butylbenzene	0.00498	J	0.00415	0.0125	0.0135	1	11/24/2019 16:34	WG1386339
sec-Butylbenzene	U		0.00273	0.0125	0.0135	1	11/24/2019 16:34	WG1386339
tert-Butylbenzene	U		0.00167	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
Carbon tetrachloride	U		0.00117	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
Chlorobenzene	U		0.000619	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
Chlorodibromomethane	U		0.000486	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
Chloroethane	U		0.00117	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
Chloroform	0.000765	J	0.000448	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
Chloromethane	U		0.00150	0.0125	0.0135	1	11/24/2019 16:34	WG1386339
2-Chlorotoluene	U		0.000994	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
4-Chlorotoluene	U		0.00122	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00551	0.0250	0.0270	1	11/24/2019 16:34	WG1386339
1,2-Dibromoethane	U		0.000567	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
Dibromomethane	U		0.00108	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
1,2-Dichlorobenzene	U		0.00157	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
1,3-Dichlorobenzene	U		0.00184	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
1,4-Dichlorobenzene	U		0.00213	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
Dichlorodifluoromethane	U		0.000883	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
1,1-Dichloroethane	U		0.000621	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
1,2-Dichloroethane	U		0.000513	0.00250	0.00270	1	11/24/2019 16:34	WG1386339

SB-14 (2-3) SAMPLE RESULTS - 06

Collected date/time: 11/13/19 09:48

L1161400

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000540	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
cis-1,2-Dichloroethene	U		0.000745	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
trans-1,2-Dichloroethene	U		0.00154	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
1,2-Dichloropropane	U		0.00137	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
1,1-Dichloropropene	U		0.000756	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
1,3-Dichloropropane	U		0.00189	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
cis-1,3-Dichloropropene	U		0.000732	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
trans-1,3-Dichloropropene	U		0.00165	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
2,2-Dichloropropane	U		0.000856	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
Di-isopropyl ether	U		0.000378	0.00100	0.00108	1	11/24/2019 16:34	WG1386339
Ethylbenzene	0.00220	J	0.000572	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
Hexachloro-1,3-butadiene	U		0.0137	0.0250	0.0270	1	11/24/2019 16:34	WG1386339
Isopropylbenzene	U		0.000932	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
p-Isopropyltoluene	U		0.00252	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
2-Butanone (MEK)	U		0.0135	0.0250	0.0270	1	11/24/2019 16:34	WG1386339
Methylene Chloride	U		0.00717	0.0250	0.0270	1	11/24/2019 16:34	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0108	0.0250	0.0270	1	11/24/2019 16:34	WG1386339
Methyl tert-butyl ether	U		0.000319	0.00100	0.00108	1	11/24/2019 16:34	WG1386339
Naphthalene	0.0327		0.00337	0.0125	0.0135	1	11/25/2019 14:38	WG1386737
n-Propylbenzene	0.00431	J	0.00127	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
Styrene	U		0.00295	0.0125	0.0135	1	11/24/2019 16:34	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000540	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000421	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000729	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
Tetrachloroethene	U		0.000756	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
Toluene	0.00150	J	0.00135	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
1,2,3-Trichlorobenzene	U		0.000675	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
1,2,4-Trichlorobenzene	U		0.00521	0.0125	0.0135	1	11/24/2019 16:34	WG1386339
1,1,1-Trichloroethane	U		0.000297	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
1,1,2-Trichloroethane	U		0.000954	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
Trichloroethene	U		0.000432	0.00100	0.00108	1	11/24/2019 16:34	WG1386339
Trichlorofluoromethane	U		0.000540	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
1,2,3-Trichloropropane	U		0.00551	0.0125	0.0135	1	11/24/2019 16:34	WG1386339
1,2,4-Trimethylbenzene	0.0243		0.00125	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
1,2,3-Trimethylbenzene	0.0105		0.00124	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
Vinyl chloride	U		0.000738	0.00250	0.00270	1	11/24/2019 16:34	WG1386339
1,3,5-Trimethylbenzene	0.00787		0.00117	0.00500	0.00540	1	11/24/2019 16:34	WG1386339
Xylenes, Total	0.00593	J	0.00516	0.00650	0.00702	1	11/24/2019 16:34	WG1386339
(S) Toluene-d8	*103*				*75.0-131*		*11/24/2019 16:34*	WG1386339
(S) Toluene-d8	*101*				*75.0-131*		*11/25/2019 14:38*	WG1386737
(S) 4-Bromofluorobenzene	*99.4*				*67.0-138*		*11/24/2019 16:34*	WG1386339
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*11/25/2019 14:38*	WG1386737
(S) 1,2-Dichloroethane-d4	*81.9*				*70.0-130*		*11/24/2019 16:34*	WG1386339
(S) 1,2-Dichloroethane-d4	*102*				*70.0-130*		*11/25/2019 14:38*	WG1386737

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	57.3	J	28.7	4.00	86.4	20	11/21/2019 20:52	WG1383230
Residual Range Organics (RRO)	524		71.9	10.0	216	20	11/21/2019 20:52	WG1383230
(S) o-Terphenyl	*82.2*	J7			*18.0-148*		*11/21/2019 20:52*	WG1383230

Sample Narrative:

L1161400-06 WG1383230: Cannot run at lower dilution due to viscosity of extract

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

SB-14 (10-12)

Collected date/time: 11/13/19 09:51

SAMPLE RESULTS - 07

L1161400

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.6		1	11/21/2019 09:26	WG1384252

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0230	J	0.00302	0.0300	0.0324	1	11/20/2019 09:33	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.37	J	0.497	2.00	2.16	1	11/20/2019 02:41	WG1382853
Barium	47.9		0.184	0.500	0.540	1	11/20/2019 02:41	WG1382853
Cadmium	0.117	J	0.0756	0.500	0.540	1	11/20/2019 02:41	WG1382853
Chromium	27.1		0.151	1.00	1.08	1	11/20/2019 02:41	WG1382853
Lead	1.34		0.205	0.500	0.540	1	11/20/2019 02:41	WG1382853
Selenium	U		0.670	2.00	2.16	1	11/20/2019 02:41	WG1382853
Silver	0.275	B J	0.130	1.00	1.08	1	11/20/2019 02:41	WG1382853

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.915	0.100	2.70	25	11/21/2019 03:28	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*95.4*				*77.0-120*		*11/21/2019 03:28*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0148	0.0250	0.0270	1	11/24/2019 16:56	WG1386339
Acrylonitrile	U		0.00205	0.0125	0.0135	1	11/24/2019 16:56	WG1386339
Benzene	U		0.000432	0.00100	0.00108	1	11/24/2019 16:56	WG1386339
Bromobenzene	U		0.00113	0.0125	0.0135	1	11/24/2019 16:56	WG1386339
Bromodichloromethane	U		0.000851	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
Bromoform	U		0.00646	0.0250	0.0270	1	11/24/2019 16:56	WG1386339
Bromomethane	U		0.00400	0.0125	0.0135	1	11/24/2019 16:56	WG1386339
n-Butylbenzene	U		0.00415	0.0125	0.0135	1	11/24/2019 16:56	WG1386339
sec-Butylbenzene	U		0.00273	0.0125	0.0135	1	11/24/2019 16:56	WG1386339
tert-Butylbenzene	U		0.00167	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
Carbon tetrachloride	U		0.00117	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
Chlorobenzene	U		0.000619	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
Chlorodibromomethane	U		0.000486	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
Chloroethane	U		0.00117	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
Chloroform	U		0.000448	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
Chloromethane	U		0.00150	0.0125	0.0135	1	11/24/2019 16:56	WG1386339
2-Chlorotoluene	U		0.000994	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
4-Chlorotoluene	U		0.00122	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00551	0.0250	0.0270	1	11/24/2019 16:56	WG1386339
1,2-Dibromoethane	U		0.000567	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
Dibromomethane	U		0.00108	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
1,2-Dichlorobenzene	U		0.00157	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
1,3-Dichlorobenzene	U		0.00184	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
1,4-Dichlorobenzene	U		0.00213	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
Dichlorodifluoromethane	U		0.000884	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
1,1-Dichloroethane	U		0.000621	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
1,2-Dichloroethane	U		0.000513	0.00250	0.00270	1	11/24/2019 16:56	WG1386339

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000540	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
cis-1,2-Dichloroethene	U		0.000745	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
trans-1,2-Dichloroethene	U		0.00154	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
1,2-Dichloropropane	U		0.00137	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
1,1-Dichloropropene	U		0.000756	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
1,3-Dichloropropane	U		0.00189	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
cis-1,3-Dichloropropene	U		0.000732	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
trans-1,3-Dichloropropene	U		0.00165	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
2,2-Dichloropropane	U		0.000857	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
Di-isopropyl ether	U		0.000378	0.00100	0.00108	1	11/24/2019 16:56	WG1386339
Ethylbenzene	U		0.000573	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
Hexachloro-1,3-butadiene	U		0.0137	0.0250	0.0270	1	11/24/2019 16:56	WG1386339
Isopropylbenzene	U		0.000932	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
p-Isopropyltoluene	U		0.00252	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
2-Butanone (MEK)	U		0.0135	0.0250	0.0270	1	11/24/2019 16:56	WG1386339
Methylene Chloride	U		0.00717	0.0250	0.0270	1	11/24/2019 16:56	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0108	0.0250	0.0270	1	11/24/2019 16:56	WG1386339
Methyl tert-butyl ether	U		0.000319	0.00100	0.00108	1	11/24/2019 16:56	WG1386339
Naphthalene	0.0133	J	0.00337	0.0125	0.0135	1	11/25/2019 14:58	WG1386737
n-Propylbenzene	U		0.00127	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
Styrene	U		0.00295	0.0125	0.0135	1	11/24/2019 16:56	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000540	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000421	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000729	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
Tetrachloroethene	U		0.000756	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
Toluene	0.00421	J	0.00135	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
1,2,3-Trichlorobenzene	U		0.000675	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
1,2,4-Trichlorobenzene	U		0.00521	0.0125	0.0135	1	11/24/2019 16:56	WG1386339
1,1,1-Trichloroethane	U		0.000297	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
1,1,2-Trichloroethane	U		0.000954	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
Trichloroethene	U		0.000432	0.00100	0.00108	1	11/24/2019 16:56	WG1386339
Trichlorofluoromethane	U		0.000540	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
1,2,3-Trichloropropane	U		0.00551	0.0125	0.0135	1	11/24/2019 16:56	WG1386339
1,2,4-Trimethylbenzene	0.00377	B J	0.00125	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
1,2,3-Trimethylbenzene	U		0.00124	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
Vinyl chloride	U		0.000738	0.00250	0.00270	1	11/24/2019 16:56	WG1386339
1,3,5-Trimethylbenzene	U		0.00117	0.00500	0.00540	1	11/24/2019 16:56	WG1386339
Xylenes, Total	U		0.00516	0.00650	0.00702	1	11/24/2019 16:56	WG1386339
(S) Toluene-d8	*100*				*75.0-131*		*11/24/2019 16:56*	WG1386339
(S) Toluene-d8	*99.6*				*75.0-131*		*11/25/2019 14:58*	WG1386737
(S) 4-Bromofluorobenzene	*98.6*				*67.0-138*		*11/24/2019 16:56*	WG1386339
(S) 4-Bromofluorobenzene	*97.5*				*67.0-138*		*11/25/2019 14:58*	WG1386737
(S) 1,2-Dichloroethane-d4	*87.6*				*70.0-130*		*11/24/2019 16:56*	WG1386339
(S) 1,2-Dichloroethane-d4	*98.6*				*70.0-130*		*11/25/2019 14:58*	WG1386737

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.44	4.00	4.32	1	11/21/2019 22:56	WG1383230
Residual Range Organics (RRO)	5.76	J	3.60	10.0	10.8	1	11/21/2019 22:56	WG1383230
(S) o-Terphenyl	*70.8*				*18.0-148*		*11/21/2019 22:56*	WG1383230

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.3		1	11/21/2019 09:26	WG1384252

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0190	J	0.00307	0.0300	0.0329	1	11/20/2019 09:07	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.93		0.504	2.00	2.19	1	11/20/2019 13:19	WG1383087
Barium	51.1		0.186	0.500	0.548	1	11/20/2019 13:19	WG1383087
Cadmium	0.160	J	0.0767	0.500	0.548	1	11/20/2019 13:19	WG1383087
Chromium	20.4		0.153	1.00	1.10	1	11/20/2019 13:19	WG1383087
Lead	8.54		0.208	0.500	0.548	1	11/20/2019 13:19	WG1383087
Selenium	U		0.679	2.00	2.19	1	11/20/2019 13:19	WG1383087
Silver	U		0.131	1.00	1.10	1	11/20/2019 13:19	WG1383087

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.928	0.100	2.74	25	11/21/2019 03:48	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*96.1*				*77.0-120*		*11/21/2019 03:48*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0150	0.0250	0.0274	1	11/24/2019 17:27	WG1386339
Acrylonitrile	U		0.00208	0.0125	0.0137	1	11/24/2019 17:27	WG1386339
Benzene	U		0.000438	0.00100	0.00110	1	11/24/2019 17:27	WG1386339
Bromobenzene	U		0.00115	0.0125	0.0137	1	11/24/2019 17:27	WG1386339
Bromodichloromethane	U		0.000863	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
Bromoform	U		0.00655	0.0250	0.0274	1	11/24/2019 17:27	WG1386339
Bromomethane	U		0.00405	0.0125	0.0137	1	11/24/2019 17:27	WG1386339
n-Butylbenzene	U		0.00421	0.0125	0.0137	1	11/24/2019 17:27	WG1386339
sec-Butylbenzene	U		0.00277	0.0125	0.0137	1	11/24/2019 17:27	WG1386339
tert-Butylbenzene	U		0.00170	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
Carbon tetrachloride	U		0.00118	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
Chlorobenzene	U		0.000628	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
Chlorodibromomethane	U		0.000493	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
Chloroethane	U		0.00118	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
Chloroform	U		0.000454	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
Chloromethane	U		0.00152	0.0125	0.0137	1	11/24/2019 17:27	WG1386339
2-Chlorotoluene	U		0.00101	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
4-Chlorotoluene	U		0.00124	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00559	0.0250	0.0274	1	11/24/2019 17:27	WG1386339
1,2-Dibromoethane	U		0.000575	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
Dibromomethane	U		0.00110	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
1,2-Dichlorobenzene	U		0.00159	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
1,3-Dichlorobenzene	U		0.00186	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
1,4-Dichlorobenzene	U		0.00216	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
Dichlorodifluoromethane	U		0.000896	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
1,1-Dichloroethane	U		0.000630	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
1,2-Dichloroethane	U		0.000520	0.00250	0.00274	1	11/24/2019 17:27	WG1386339

SB-16 (0-1)

SAMPLE RESULTS - 08

Collected date/time: 11/13/19 12:30

L1161400

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000548	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
cis-1,2-Dichloroethene	U		0.000756	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
trans-1,2-Dichloroethene	U		0.00157	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
1,2-Dichloropropane	U		0.00139	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
1,1-Dichloropropene	U		0.000767	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
1,3-Dichloropropane	U		0.00192	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
cis-1,3-Dichloropropene	U		0.000743	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
trans-1,3-Dichloropropene	U		0.00168	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
2,2-Dichloropropane	U		0.000868	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
Di-isopropyl ether	U		0.000383	0.00100	0.00110	1	11/24/2019 17:27	WG1386339
Ethylbenzene	0.00139	J	0.000580	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0274	1	11/24/2019 17:27	WG1386339
Isopropylbenzene	U		0.000945	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
p-Isopropyltoluene	U		0.00255	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
2-Butanone (MEK)	U		0.0137	0.0250	0.0274	1	11/24/2019 17:27	WG1386339
Methylene Chloride	U		0.00727	0.0250	0.0274	1	11/24/2019 17:27	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0250	0.0274	1	11/24/2019 17:27	WG1386339
Methyl tert-butyl ether	U		0.000323	0.00100	0.00110	1	11/24/2019 17:27	WG1386339
Naphthalene	0.00657	J	0.00342	0.0125	0.0137	1	11/25/2019 15:19	WG1386737
n-Propylbenzene	U		0.00129	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
Styrene	U		0.00299	0.0125	0.0137	1	11/24/2019 17:27	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000548	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000427	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000739	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
Tetrachloroethene	U		0.000767	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
Toluene	0.00410	J	0.00137	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
1,2,3-Trichlorobenzene	U		0.000684	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
1,2,4-Trichlorobenzene	U		0.00528	0.0125	0.0137	1	11/24/2019 17:27	WG1386339
1,1,1-Trichloroethane	U		0.000301	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
1,1,2-Trichloroethane	U		0.000967	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
Trichloroethene	U		0.000438	0.00100	0.00110	1	11/24/2019 17:27	WG1386339
Trichlorofluoromethane	U		0.000548	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
1,2,3-Trichloropropane	U		0.00559	0.0125	0.0137	1	11/24/2019 17:27	WG1386339
1,2,4-Trimethylbenzene	0.00287	B J	0.00127	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
1,2,3-Trimethylbenzene	U		0.00126	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
Vinyl chloride	U		0.000748	0.00250	0.00274	1	11/24/2019 17:27	WG1386339
1,3,5-Trimethylbenzene	U		0.00118	0.00500	0.00548	1	11/24/2019 17:27	WG1386339
Xylenes, Total	0.00723		0.00523	0.00650	0.00712	1	11/24/2019 17:27	WG1386339
(S) Toluene-d8	*101*				*75.0-131*		*11/24/2019 17:27*	WG1386339
(S) Toluene-d8	*101*				*75.0-131*		*11/25/2019 15:19*	WG1386737
(S) 4-Bromofluorobenzene	*96.8*				*67.0-138*		*11/24/2019 17:27*	WG1386339
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*11/25/2019 15:19*	WG1386737
(S) 1,2-Dichloroethane-d4	*88.7*				*70.0-130*		*11/24/2019 17:27*	WG1386339
(S) 1,2-Dichloroethane-d4	*99.7*				*70.0-130*		*11/25/2019 15:19*	WG1386737

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	151	J	72.8	4.00	219	50	11/21/2019 21:06	WG1383230
Residual Range Organics (RRO)	1390		182	10.0	548	50	11/21/2019 21:06	WG1383230
(S) o-Terphenyl	*86.6*	J7			*18.0-148*		*11/21/2019 21:06*	WG1383230

Sample Narrative:

L1161400-08 WG1383230: Cannot run at lower dilution due to viscosity of extract

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.1		1	11/21/2019 09:26	WG1384252

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0368		0.00311	0.0300	0.0333	1	11/20/2019 09:35	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.37		0.511	2.00	2.22	1	11/20/2019 13:21	WG1383087
Barium	88.8		0.189	0.500	0.555	1	11/20/2019 13:21	WG1383087
Cadmium	0.214	J	0.0777	0.500	0.555	1	11/20/2019 13:21	WG1383087
Chromium	34.3		0.155	1.00	1.11	1	11/20/2019 13:21	WG1383087
Lead	11.5		0.211	0.500	0.555	1	11/20/2019 13:21	WG1383087
Selenium	U		0.688	2.00	2.22	1	11/20/2019 13:21	WG1383087
Silver	U		0.133	1.00	1.11	1	11/20/2019 13:21	WG1383087

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.941	0.100	2.77	25	11/21/2019 04:09	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*95.9*				*77.0-120*		*11/21/2019 04:09*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0160	J	0.0152	0.0250	0.0277	1	11/24/2019 17:48	WG1386339
Acrylonitrile	U		0.00211	0.0125	0.0139	1	11/24/2019 17:48	WG1386339
Benzene	U		0.000444	0.00100	0.00111	1	11/24/2019 17:48	WG1386339
Bromobenzene	U		0.00117	0.0125	0.0139	1	11/24/2019 17:48	WG1386339
Bromodichloromethane	U		0.000875	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
Bromoform	U		0.00664	0.0250	0.0277	1	11/24/2019 17:48	WG1386339
Bromomethane	U		0.00411	0.0125	0.0139	1	11/24/2019 17:48	WG1386339
n-Butylbenzene	U		0.00426	0.0125	0.0139	1	11/24/2019 17:48	WG1386339
sec-Butylbenzene	U		0.00281	0.0125	0.0139	1	11/24/2019 17:48	WG1386339
tert-Butylbenzene	U		0.00172	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
Carbon tetrachloride	U		0.00120	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
Chlorobenzene	U		0.000636	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
Chlorodibromomethane	U		0.000499	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
Chloroethane	U		0.00120	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
Chloroform	0.000927	J	0.000461	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
Chloromethane	U		0.00154	0.0125	0.0139	1	11/24/2019 17:48	WG1386339
2-Chlorotoluene	U		0.00102	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
4-Chlorotoluene	U		0.00125	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00566	0.0250	0.0277	1	11/24/2019 17:48	WG1386339
1,2-Dibromoethane	U		0.000583	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
Dibromomethane	U		0.00111	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
1,2-Dichlorobenzene	U		0.00161	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
1,3-Dichlorobenzene	U		0.00189	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
1,4-Dichlorobenzene	U		0.00219	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
Dichlorodifluoromethane	U		0.000908	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
1,1-Dichloroethane	U		0.000638	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
1,2-Dichloroethane	U		0.000527	0.00250	0.00277	1	11/24/2019 17:48	WG1386339

SAMPLE RESULTS - 09

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000555	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
cis-1,2-Dichloroethene	U		0.000766	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
trans-1,2-Dichloroethene	U		0.00159	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
1,2-Dichloropropane	U		0.00141	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
1,1-Dichloropropene	U		0.000777	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
1,3-Dichloropropane	U		0.00194	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
cis-1,3-Dichloropropene	U		0.000753	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
trans-1,3-Dichloropropene	U		0.00170	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
2,2-Dichloropropane	U		0.000880	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
Di-isopropyl ether	U		0.000388	0.00100	0.00111	1	11/24/2019 17:48	WG1386339
Ethylbenzene	0.000714	J	0.000588	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
Hexachloro-1,3-butadiene	U		0.0141	0.0250	0.0277	1	11/24/2019 17:48	WG1386339
Isopropylbenzene	U		0.000958	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
p-Isopropyltoluene	0.00271	J	0.00259	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
2-Butanone (MEK)	0.0148	B J	0.0139	0.0250	0.0277	1	11/24/2019 17:48	WG1386339
Methylene Chloride	U		0.00737	0.0250	0.0277	1	11/24/2019 17:48	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0250	0.0277	1	11/24/2019 17:48	WG1386339
Methyl tert-butyl ether	U		0.000327	0.00100	0.00111	1	11/24/2019 17:48	WG1386339
Naphthalene	0.00393	J	0.00346	0.0125	0.0139	1	11/25/2019 15:40	WG1386737
n-Propylbenzene	U		0.00131	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
Styrene	U		0.00303	0.0125	0.0139	1	11/24/2019 17:48	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000555	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000433	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000749	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
Tetrachloroethene	U		0.000777	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
Toluene	0.00562		0.00139	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
1,2,3-Trichlorobenzene	U		0.000694	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
1,2,4-Trichlorobenzene	U		0.00535	0.0125	0.0139	1	11/24/2019 17:48	WG1386339
1,1,1-Trichloroethane	U		0.000305	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
1,1,2-Trichloroethane	U		0.000980	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
Trichloroethene	U		0.000444	0.00100	0.00111	1	11/24/2019 17:48	WG1386339
Trichlorofluoromethane	U		0.000555	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
1,2,3-Trichloropropane	U		0.00566	0.0125	0.0139	1	11/24/2019 17:48	WG1386339
1,2,4-Trimethylbenzene	0.00275	B J	0.00129	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
1,2,3-Trimethylbenzene	U		0.00128	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
Vinyl chloride	U		0.000758	0.00250	0.00277	1	11/24/2019 17:48	WG1386339
1,3,5-Trimethylbenzene	U		0.00120	0.00500	0.00555	1	11/24/2019 17:48	WG1386339
Xylenes, Total	U		0.00531	0.00650	0.00721	1	11/24/2019 17:48	WG1386339
(S) Toluene-d8	*106*				*75.0-131*		*11/24/2019 17:48*	WG1386339
(S) Toluene-d8	*103*				*75.0-131*		*11/25/2019 15:40*	WG1386737
(S) 4-Bromofluorobenzene	*94.4*				*67.0-138*		*11/24/2019 17:48*	WG1386339
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*11/25/2019 15:40*	WG1386737
(S) 1,2-Dichloroethane-d4	*88.3*				*70.0-130*		*11/24/2019 17:48*	WG1386339
(S) 1,2-Dichloroethane-d4	*105*				*70.0-130*		*11/25/2019 15:40*	WG1386737

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	28.9	J	14.8	4.00	44.4	10	11/21/2019 20:13	WG1383230
Residual Range Organics (RRO)	253		37.0	10.0	111	10	11/21/2019 20:13	WG1383230
(S) o-Terphenyl	*75.8*				*18.0-148*		*11/21/2019 20:13*	WG1383230

Sample Narrative:

L1161400-09 WG1383230: Dilution due to matrix impact during extract concentration procedure

SB-16 (10-12)

Collected date/time: 11/13/19 12:35

SAMPLE RESULTS - 10

L1161400

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.5		1	11/21/2019 09:26	WG1384252

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0396		0.00324	0.0300	0.0347	1	11/20/2019 09:38	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.73		0.532	2.00	2.31	1	11/20/2019 12:56	WG1383087
Barium	85.3	O1	0.197	0.500	0.578	1	11/20/2019 12:56	WG1383087
Cadmium	0.218	J	0.0809	0.500	0.578	1	11/20/2019 12:56	WG1383087
Chromium	30.5	O1	0.162	1.00	1.16	1	11/20/2019 12:56	WG1383087
Lead	22.3	O1	0.220	0.500	0.578	1	11/20/2019 12:56	WG1383087
Selenium	U		0.717	2.00	2.31	1	11/20/2019 12:56	WG1383087
Silver	U		0.139	1.00	1.16	1	11/20/2019 12:56	WG1383087

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.980	0.100	2.89	25	11/21/2019 04:29	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*95.9*				*77.0-120*		*11/21/2019 04:29*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0158	0.0250	0.0289	1	11/24/2019 18:10	WG1386339
Acrylonitrile	U		0.00220	0.0125	0.0145	1	11/24/2019 18:10	WG1386339
Benzene	U		0.000463	0.00100	0.00116	1	11/24/2019 18:10	WG1386339
Bromobenzene	U		0.00121	0.0125	0.0145	1	11/24/2019 18:10	WG1386339
Bromodichloromethane	U		0.000911	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
Bromoform	U		0.00692	0.0250	0.0289	1	11/24/2019 18:10	WG1386339
Bromomethane	U		0.00428	0.0125	0.0145	1	11/24/2019 18:10	WG1386339
n-Butylbenzene	U		0.00444	0.0125	0.0145	1	11/24/2019 18:10	WG1386339
sec-Butylbenzene	U		0.00293	0.0125	0.0145	1	11/24/2019 18:10	WG1386339
tert-Butylbenzene	U		0.00179	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
Carbon tetrachloride	U		0.00125	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
Chlorobenzene	U		0.000663	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
Chlorodibromomethane	U		0.000520	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
Chloroethane	U		0.00125	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
Chloroform	U		0.000480	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
Chloromethane	U		0.00161	0.0125	0.0145	1	11/24/2019 18:10	WG1386339
2-Chlorotoluene	U		0.00106	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
4-Chlorotoluene	U		0.00131	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00590	0.0250	0.0289	1	11/24/2019 18:10	WG1386339
1,2-Dibromoethane	U		0.000607	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
Dibromomethane	U		0.00116	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
1,2-Dichlorobenzene	U		0.00168	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
1,3-Dichlorobenzene	U		0.00197	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
1,4-Dichlorobenzene	U		0.00228	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
Dichlorodifluoromethane	U		0.000946	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
1,1-Dichloroethane	U		0.000665	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
1,2-Dichloroethane	U		0.000549	0.00250	0.00289	1	11/24/2019 18:10	WG1386339

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000578	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
cis-1,2-Dichloroethene	U		0.000798	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
trans-1,2-Dichloroethene	U		0.00165	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
1,2-Dichloropropane	U		0.00147	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
1,1-Dichloropropene	U		0.000809	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
1,3-Dichloropropane	U		0.00202	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
cis-1,3-Dichloropropene	U		0.000784	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
trans-1,3-Dichloropropene	U		0.00177	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
2,2-Dichloropropane	U		0.000917	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
Di-isopropyl ether	U		0.000405	0.00100	0.00116	1	11/24/2019 18:10	WG1386339
Ethylbenzene	U		0.000613	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
Hexachloro-1,3-butadiene	U		0.0147	0.0250	0.0289	1	11/24/2019 18:10	WG1386339
Isopropylbenzene	U		0.000998	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
p-Isopropyltoluene	U		0.00269	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
2-Butanone (MEK)	U		0.0145	0.0250	0.0289	1	11/24/2019 18:10	WG1386339
Methylene Chloride	U		0.00768	0.0250	0.0289	1	11/24/2019 18:10	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0116	0.0250	0.0289	1	11/24/2019 18:10	WG1386339
Methyl tert-butyl ether	U		0.000341	0.00100	0.00116	1	11/24/2019 18:10	WG1386339
Naphthalene	U		0.00361	0.0125	0.0145	1	11/25/2019 16:00	WG1386737
n-Propylbenzene	U		0.00136	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
Styrene	U		0.00316	0.0125	0.0145	1	11/24/2019 18:10	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000578	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000451	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000781	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
Tetrachloroethene	U		0.000809	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
Toluene	0.00596		0.00145	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
1,2,3-Trichlorobenzene	U		0.000723	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
1,2,4-Trichlorobenzene	U		0.00557	0.0125	0.0145	1	11/24/2019 18:10	WG1386339
1,1,1-Trichloroethane	U		0.000318	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
1,1,2-Trichloroethane	U		0.00102	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
Trichloroethene	U		0.000463	0.00100	0.00116	1	11/24/2019 18:10	WG1386339
Trichlorofluoromethane	U		0.000578	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
1,2,3-Trichloropropane	U		0.00590	0.0125	0.0145	1	11/24/2019 18:10	WG1386339
1,2,4-Trimethylbenzene	0.00368	B J	0.00134	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
1,2,3-Trimethylbenzene	0.00221	J	0.00133	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
Vinyl chloride	U		0.000790	0.00250	0.00289	1	11/24/2019 18:10	WG1386339
1,3,5-Trimethylbenzene	0.00125	J	0.00125	0.00500	0.00578	1	11/24/2019 18:10	WG1386339
Xylenes, Total	U		0.00553	0.00650	0.00752	1	11/24/2019 18:10	WG1386339
(S) Toluene-d8	*105*				*75.0-131*		*11/24/2019 18:10*	WG1386339
(S) Toluene-d8	*100*				*75.0-131*		*11/25/2019 16:00*	WG1386737
(S) 4-Bromofluorobenzene	*99.3*				*67.0-138*		*11/24/2019 18:10*	WG1386339
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*11/25/2019 16:00*	WG1386737
(S) 1,2-Dichloroethane-d4	*87.9*				*70.0-130*		*11/24/2019 18:10*	WG1386339
(S) 1,2-Dichloroethane-d4	*98.4*				*70.0-130*		*11/25/2019 16:00*	WG1386737

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		15.4	4.00	46.3	10	11/21/2019 21:51	WG1383230
Residual Range Organics (RRO)	82.8	J	38.5	10.0	116	10	11/21/2019 21:51	WG1383230
(S) o-Terphenyl	*67.6*				*18.0-148*		*11/21/2019 21:51*	WG1383230

Sample Narrative:

L1161400-10 WG1383230: Cannot run at lower dilution due to viscosity of extract

SB-17 (0-1)
Collected date/time: 11/13/19 15:20

SAMPLE RESULTS - 11

L1161400

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.4		1	11/21/2019 09:26	WG1384252

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0222	J	0.00300	0.0300	0.0321	1	11/20/2019 09:40	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.77		0.492	2.00	2.14	1	11/20/2019 13:24	WG1383087
Barium	65.0		0.182	0.500	0.535	1	11/20/2019 13:24	WG1383087
Cadmium	0.156	J	0.0749	0.500	0.535	1	11/20/2019 13:24	WG1383087
Chromium	25.8		0.150	1.00	1.07	1	11/20/2019 13:24	WG1383087
Lead	19.4		0.203	0.500	0.535	1	11/20/2019 13:24	WG1383087
Selenium	U		0.664	2.00	2.14	1	11/20/2019 13:24	WG1383087
Silver	U		0.128	1.00	1.07	1	11/20/2019 13:24	WG1383087

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.907	0.100	2.68	25	11/21/2019 04:50	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*95.0*				*77.0-120*		*11/21/2019 04:50*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0147	0.0250	0.0268	1	11/24/2019 18:32	WG1386339
Acrylonitrile	U		0.00203	0.0125	0.0134	1	11/24/2019 18:32	WG1386339
Benzene	U		0.000428	0.00100	0.00107	1	11/24/2019 18:32	WG1386339
Bromobenzene	U		0.00112	0.0125	0.0134	1	11/24/2019 18:32	WG1386339
Bromodichloromethane	U		0.000844	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
Bromoform	U		0.00640	0.0250	0.0268	1	11/24/2019 18:32	WG1386339
Bromomethane	U		0.00396	0.0125	0.0134	1	11/24/2019 18:32	WG1386339
n-Butylbenzene	U		0.00411	0.0125	0.0134	1	11/24/2019 18:32	WG1386339
sec-Butylbenzene	U		0.00271	0.0125	0.0134	1	11/24/2019 18:32	WG1386339
tert-Butylbenzene	U		0.00166	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
Carbon tetrachloride	U		0.00116	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
Chlorobenzene	U		0.000613	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
Chlorodibromomethane	U		0.000482	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
Chloroethane	U		0.00116	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
Chloroform	U		0.000444	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
Chloromethane	U		0.00149	0.0125	0.0134	1	11/24/2019 18:32	WG1386339
2-Chlorotoluene	U		0.000985	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
4-Chlorotoluene	U		0.00121	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00546	0.0250	0.0268	1	11/24/2019 18:32	WG1386339
1,2-Dibromoethane	U		0.000562	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
Dibromomethane	U		0.00107	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
1,2-Dichlorobenzene	U		0.00155	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
1,3-Dichlorobenzene	U		0.00182	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
1,4-Dichlorobenzene	U		0.00211	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
Dichlorodifluoromethane	U		0.000876	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
1,1-Dichloroethane	U		0.000616	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
1,2-Dichloroethane	U		0.000508	0.00250	0.00268	1	11/24/2019 18:32	WG1386339

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000535	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
cis-1,2-Dichloroethene	U		0.000739	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
trans-1,2-Dichloroethene	U		0.00153	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
1,2-Dichloropropane	U		0.00136	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
1,1-Dichloropropene	U		0.000749	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
1,3-Dichloropropane	U		0.00187	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
cis-1,3-Dichloropropene	U		0.000726	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
trans-1,3-Dichloropropene	U		0.00164	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
2,2-Dichloropropane	U		0.000849	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
Di-isopropyl ether	U		0.000375	0.00100	0.00107	1	11/24/2019 18:32	WG1386339
Ethylbenzene	0.000788	J	0.000567	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
Hexachloro-1,3-butadiene	U		0.0136	0.0250	0.0268	1	11/24/2019 18:32	WG1386339
Isopropylbenzene	U		0.000924	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
p-Isopropyltoluene	U		0.00249	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
2-Butanone (MEK)	U		0.0134	0.0250	0.0268	1	11/24/2019 18:32	WG1386339
Methylene Chloride	U		0.00711	0.0250	0.0268	1	11/24/2019 18:32	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0250	0.0268	1	11/24/2019 18:32	WG1386339
Methyl tert-butyl ether	U		0.000316	0.00100	0.00107	1	11/24/2019 18:32	WG1386339
Naphthalene	U		0.00334	0.0125	0.0134	1	11/25/2019 16:20	WG1386737
n-Propylbenzene	U		0.00126	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
Styrene	U		0.00292	0.0125	0.0134	1	11/24/2019 18:32	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000535	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000417	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000723	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
Tetrachloroethene	U		0.000749	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
Toluene	0.00416	J	0.00134	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
1,2,3-Trichlorobenzene	U		0.000669	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
1,2,4-Trichlorobenzene	U		0.00516	0.0125	0.0134	1	11/24/2019 18:32	WG1386339
1,1,1-Trichloroethane	U		0.000294	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
1,1,2-Trichloroethane	U		0.000945	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
Trichloroethene	U		0.000428	0.00100	0.00107	1	11/24/2019 18:32	WG1386339
Trichlorofluoromethane	U		0.000535	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
1,2,3-Trichloropropane	U		0.00546	0.0125	0.0134	1	11/24/2019 18:32	WG1386339
1,2,4-Trimethylbenzene	0.00197	B J	0.00124	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
1,2,3-Trimethylbenzene	U		0.00123	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
Vinyl chloride	U		0.000731	0.00250	0.00268	1	11/24/2019 18:32	WG1386339
1,3,5-Trimethylbenzene	U		0.00116	0.00500	0.00535	1	11/24/2019 18:32	WG1386339
Xylenes, Total	U		0.00512	0.00650	0.00696	1	11/24/2019 18:32	WG1386339
(S) Toluene-d8	*101*				*75.0-131*		*11/24/2019 18:32*	WG1386339
(S) Toluene-d8	*105*				*75.0-131*		*11/25/2019 16:20*	WG1386737
(S) 4-Bromofluorobenzene	*95.1*				*67.0-138*		*11/24/2019 18:32*	WG1386339
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*11/25/2019 16:20*	WG1386737
(S) 1,2-Dichloroethane-d4	*88.8*				*70.0-130*		*11/24/2019 18:32*	WG1386339
(S) 1,2-Dichloroethane-d4	*98.7*				*70.0-130*		*11/25/2019 16:20*	WG1386737

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	135	J	71.2	4.00	214	50	11/21/2019 22:17	WG1383230
Residual Range Organics (RRO)	2300		178	10.0	535	50	11/21/2019 22:17	WG1383230
(S) o-Terphenyl	*99.7*	J7			*18.0-148*		*11/21/2019 22:17*	WG1383230

Sample Narrative:

L1161400-11 WG1383230: Cannot run at lower dilution due to viscosity of extract

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.4		1	11/21/2019 09:26	WG1384252

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0497		0.00340	0.0300	0.0364	1	11/20/2019 09:42	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.96		0.558	2.00	2.43	1	11/20/2019 13:26	WG1383087
Barium	112		0.206	0.500	0.607	1	11/20/2019 13:26	WG1383087
Cadmium	0.371	J	0.0849	0.500	0.607	1	11/20/2019 13:26	WG1383087
Chromium	29.9		0.170	1.00	1.21	1	11/20/2019 13:26	WG1383087
Lead	30.3		0.231	0.500	0.607	1	11/20/2019 13:26	WG1383087
Selenium	U		0.752	2.00	2.43	1	11/20/2019 13:26	WG1383087
Silver	U		0.146	1.00	1.21	1	11/20/2019 13:26	WG1383087

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2.27	B J	1.03	0.100	3.03	25	11/21/2019 05:10	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*96.1*				*77.0-120*		*11/21/2019 05:10*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0656		0.0166	0.0250	0.0303	1	11/24/2019 18:53	WG1386339
Acrylonitrile	U		0.00231	0.0125	0.0152	1	11/24/2019 18:53	WG1386339
Benzene	0.00210		0.000485	0.00100	0.00121	1	11/24/2019 18:53	WG1386339
Bromobenzene	U		0.00127	0.0125	0.0152	1	11/24/2019 18:53	WG1386339
Bromodichloromethane	U		0.000956	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
Bromoform	U		0.00726	0.0250	0.0303	1	11/24/2019 18:53	WG1386339
Bromomethane	U		0.00449	0.0125	0.0152	1	11/24/2019 18:53	WG1386339
n-Butylbenzene	U		0.00466	0.0125	0.0152	1	11/24/2019 18:53	WG1386339
sec-Butylbenzene	U		0.00307	0.0125	0.0152	1	11/24/2019 18:53	WG1386339
tert-Butylbenzene	U		0.00188	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
Carbon tetrachloride	U		0.00131	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
Chlorobenzene	U		0.000695	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
Chlorodibromomethane	U		0.000546	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
Chloroethane	U		0.00131	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
Chloroform	U		0.000504	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
Chloromethane	U		0.00169	0.0125	0.0152	1	11/24/2019 18:53	WG1386339
2-Chlorotoluene	U		0.00112	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
4-Chlorotoluene	U		0.00137	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00619	0.0250	0.0303	1	11/24/2019 18:53	WG1386339
1,2-Dibromoethane	U		0.000637	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
Dibromomethane	U		0.00121	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
1,2-Dichlorobenzene	U		0.00176	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
1,3-Dichlorobenzene	U		0.00206	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
1,4-Dichlorobenzene	U		0.00239	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
Dichlorodifluoromethane	U		0.000993	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
1,1-Dichloroethane	U		0.000698	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
1,2-Dichloroethane	U		0.000576	0.00250	0.00303	1	11/24/2019 18:53	WG1386339

SB-17 (6-8)

Collected date/time: 11/13/19 15:24

SAMPLE RESULTS - 12

L1161400

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000607	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
cis-1,2-Dichloroethene	U		0.000837	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
trans-1,2-Dichloroethene	U		0.00174	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
1,2-Dichloropropane	U		0.00154	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
1,1-Dichloropropene	U		0.000849	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
1,3-Dichloropropane	U		0.00212	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
cis-1,3-Dichloropropene	U		0.000823	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
trans-1,3-Dichloropropene	U		0.00186	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
2,2-Dichloropropane	U		0.000962	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
Di-isopropyl ether	U		0.000425	0.00100	0.00121	1	11/24/2019 18:53	WG1386339
Ethylbenzene	0.00165	J	0.000643	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
Hexachloro-1,3-butadiene	U		0.0154	0.0250	0.0303	1	11/24/2019 18:53	WG1386339
Isopropylbenzene	U		0.00105	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
p-Isopropyltoluene	0.0199		0.00283	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
2-Butanone (MEK)	0.0376	B	0.0152	0.0250	0.0303	1	11/24/2019 18:53	WG1386339
Methylene Chloride	U		0.00806	0.0250	0.0303	1	11/24/2019 18:53	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0121	0.0250	0.0303	1	11/24/2019 18:53	WG1386339
Methyl tert-butyl ether	U		0.000358	0.00100	0.00121	1	11/24/2019 18:53	WG1386339
Naphthalene	0.00706	J	0.00379	0.0125	0.0152	1	11/24/2019 18:53	WG1386339
n-Propylbenzene	U		0.00143	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
Styrene	U		0.00331	0.0125	0.0152	1	11/24/2019 18:53	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000607	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000473	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000819	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
Tetrachloroethene	U		0.000849	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
Toluene	0.0125		0.00152	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
1,2,3-Trichlorobenzene	U		0.000758	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
1,2,4-Trichlorobenzene	U		0.00585	0.0125	0.0152	1	11/24/2019 18:53	WG1386339
1,1,1-Trichloroethane	U		0.000334	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
1,1,2-Trichloroethane	U		0.00107	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
Trichloroethene	U		0.000485	0.00100	0.00121	1	11/24/2019 18:53	WG1386339
Trichlorofluoromethane	U		0.000607	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
1,2,3-Trichloropropane	U		0.00619	0.0125	0.0152	1	11/24/2019 18:53	WG1386339
1,2,4-Trimethylbenzene	0.00309	B J	0.00141	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
1,2,3-Trimethylbenzene	0.00368	J	0.00140	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
Vinyl chloride	U		0.000829	0.00250	0.00303	1	11/24/2019 18:53	WG1386339
1,3,5-Trimethylbenzene	0.00157	J	0.00131	0.00500	0.00607	1	11/24/2019 18:53	WG1386339
Xylenes, Total	U		0.00580	0.00650	0.00789	1	11/24/2019 18:53	WG1386339
(S) Toluene-d8	*104*				*75.0-131*		*11/24/2019 18:53*	WG1386339
(S) 4-Bromofluorobenzene	*97.6*				*67.0-138*		*11/24/2019 18:53*	WG1386339
(S) 1,2-Dichloroethane-d4	*88.3*				*70.0-130*		*11/24/2019 18:53*	WG1386339

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	9.11		1.61	4.00	4.85	1	11/21/2019 19:06	WG1383230
Residual Range Organics (RRO)	29.1		4.04	10.0	12.1	1	11/21/2019 19:06	WG1383230
(S) o-Terphenyl	*55.3*				*18.0-148*		*11/21/2019 19:06*	WG1383230

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

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.6		1	11/21/2019 09:26	WG1384252

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0251	J	0.00316	0.0300	0.0339	1	11/20/2019 09:44	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.49		0.519	2.00	2.26	1	11/20/2019 13:29	WG1383087
Barium	68.3		0.192	0.500	0.564	1	11/20/2019 13:29	WG1383087
Cadmium	0.118	J	0.0790	0.500	0.564	1	11/20/2019 13:29	WG1383087
Chromium	32.3		0.158	1.00	1.13	1	11/20/2019 13:29	WG1383087
Lead	4.44		0.214	0.500	0.564	1	11/20/2019 13:29	WG1383087
Selenium	U		0.700	2.00	2.26	1	11/20/2019 13:29	WG1383087
Silver	U		0.135	1.00	1.13	1	11/20/2019 13:29	WG1383087

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.957	0.100	2.82	25	11/21/2019 05:31	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*96.4*				*77.0-120*		*11/21/2019 05:31*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0155	0.0250	0.0282	1	11/24/2019 19:15	WG1386339
Acrylonitrile	U		0.00214	0.0125	0.0141	1	11/24/2019 19:15	WG1386339
Benzene	U		0.000452	0.00100	0.00113	1	11/24/2019 19:15	WG1386339
Bromobenzene	U		0.00119	0.0125	0.0141	1	11/24/2019 19:15	WG1386339
Bromodichloromethane	U		0.000890	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
Bromoform	U		0.00675	0.0250	0.0282	1	11/24/2019 19:15	WG1386339
Bromomethane	U		0.00418	0.0125	0.0141	1	11/24/2019 19:15	WG1386339
n-Butylbenzene	U		0.00434	0.0125	0.0141	1	11/24/2019 19:15	WG1386339
sec-Butylbenzene	U		0.00286	0.0125	0.0141	1	11/24/2019 19:15	WG1386339
tert-Butylbenzene	U		0.00175	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
Carbon tetrachloride	U		0.00122	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
Chlorobenzene	U		0.000647	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
Chlorodibromomethane	U		0.000508	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
Chloroethane	U		0.00122	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
Chloroform	0.000668	J	0.000468	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
Chloromethane	U		0.00157	0.0125	0.0141	1	11/24/2019 19:15	WG1386339
2-Chlorotoluene	U		0.00104	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
4-Chlorotoluene	U		0.00128	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00576	0.0250	0.0282	1	11/24/2019 19:15	WG1386339
1,2-Dibromoethane	U		0.000593	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
Dibromomethane	U		0.00113	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
1,2-Dichlorobenzene	U		0.00164	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
1,3-Dichlorobenzene	U		0.00192	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
1,4-Dichlorobenzene	U		0.00222	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
Dichlorodifluoromethane	U		0.000923	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
1,1-Dichloroethane	U		0.000649	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
1,2-Dichloroethane	U		0.000536	0.00250	0.00282	1	11/24/2019 19:15	WG1386339

SB-17 (14-15)

Collected date/time: 11/13/19 15:25

SAMPLE RESULTS - 13

L1161400

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000564	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
cis-1,2-Dichloroethene	U		0.000779	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
trans-1,2-Dichloroethene	U		0.00161	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
1,2-Dichloropropane	U		0.00143	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
1,1-Dichloropropene	U		0.000790	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
1,3-Dichloropropane	U		0.00198	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
cis-1,3-Dichloropropene	U		0.000765	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
trans-1,3-Dichloropropene	U		0.00173	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
2,2-Dichloropropane	U		0.000895	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
Di-isopropyl ether	U		0.000395	0.00100	0.00113	1	11/24/2019 19:15	WG1386339
Ethylbenzene	U		0.000598	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
Hexachloro-1,3-butadiene	U		0.0143	0.0250	0.0282	1	11/24/2019 19:15	WG1386339
Isopropylbenzene	U		0.000974	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
p-Isopropyltoluene	U		0.00263	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
2-Butanone (MEK)	U		0.0141	0.0250	0.0282	1	11/24/2019 19:15	WG1386339
Methylene Chloride	U		0.00750	0.0250	0.0282	1	11/24/2019 19:15	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0113	0.0250	0.0282	1	11/24/2019 19:15	WG1386339
Methyl tert-butyl ether	U		0.000333	0.00100	0.00113	1	11/24/2019 19:15	WG1386339
Naphthalene	U		0.00352	0.0125	0.0141	1	11/24/2019 19:15	WG1386339
n-Propylbenzene	U		0.00133	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
Styrene	U		0.00308	0.0125	0.0141	1	11/24/2019 19:15	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000564	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000440	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000762	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
Tetrachloroethene	U		0.000790	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
Toluene	0.00369	J	0.00141	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
1,2,3-Trichlorobenzene	U		0.000706	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
1,2,4-Trichlorobenzene	U		0.00544	0.0125	0.0141	1	11/24/2019 19:15	WG1386339
1,1,1-Trichloroethane	U		0.000310	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
1,1,2-Trichloroethane	U		0.000997	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
Trichloroethene	U		0.000452	0.00100	0.00113	1	11/24/2019 19:15	WG1386339
Trichlorofluoromethane	U		0.000564	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
1,2,3-Trichloropropane	U		0.00576	0.0125	0.0141	1	11/24/2019 19:15	WG1386339
1,2,4-Trimethylbenzene	0.00173	B J	0.00131	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
1,2,3-Trimethylbenzene	U		0.00130	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
Vinyl chloride	U		0.000771	0.00250	0.00282	1	11/24/2019 19:15	WG1386339
1,3,5-Trimethylbenzene	U		0.00122	0.00500	0.00564	1	11/24/2019 19:15	WG1386339
Xylenes, Total	U		0.00540	0.00650	0.00734	1	11/24/2019 19:15	WG1386339
(S) Toluene-d8	*103*				*75.0-131*		*11/24/2019 19:15*	WG1386339
(S) 4-Bromofluorobenzene	*96.6*				*67.0-138*		*11/24/2019 19:15*	WG1386339
(S) 1,2-Dichloroethane-d4	*87.5*				*70.0-130*		*11/24/2019 19:15*	WG1386339

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	27.8		1.50	4.00	4.52	1	11/21/2019 19:47	WG1383230
Residual Range Organics (RRO)	11.7		3.76	10.0	11.3	1	11/21/2019 19:47	WG1383230
(S) o-Terphenyl	*67.6*				*18.0-148*		*11/21/2019 19:47*	WG1383230

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	81.5		1	11/21/2019 10:33	WG1384253

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0489		0.00344	0.0300	0.0368	1	11/20/2019 09:46	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	10.2		0.565	2.00	2.45	1	11/20/2019 13:31	WG1383087
Barium	133		0.209	0.500	0.614	1	11/20/2019 13:31	WG1383087
Cadmium	0.341	J	0.0859	0.500	0.614	1	11/20/2019 13:31	WG1383087
Chromium	32.4		0.172	1.00	1.23	1	11/20/2019 13:31	WG1383087
Lead	29.4		0.233	0.500	0.614	1	11/20/2019 13:31	WG1383087
Selenium	U		0.761	2.00	2.45	1	11/20/2019 13:31	WG1383087
Silver	U		0.147	1.00	1.23	1	11/20/2019 13:31	WG1383087

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	13.4	B	1.04	0.100	3.07	25	11/21/2019 05:51	WG1383546
(S) a,a,a-Trifluorotoluene(FID)	*95.8*				*77.0-120*		*11/21/2019 05:51*	WG1383546

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0345		0.0168	0.0250	0.0307	1	11/24/2019 19:37	WG1386339
Acrylonitrile	U		0.00233	0.0125	0.0153	1	11/24/2019 19:37	WG1386339
Benzene	0.00107	J	0.000491	0.00100	0.00123	1	11/24/2019 19:37	WG1386339
Bromobenzene	U		0.00129	0.0125	0.0153	1	11/24/2019 19:37	WG1386339
Bromodichloromethane	U		0.000967	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
Bromoform	U		0.00734	0.0250	0.0307	1	11/24/2019 19:37	WG1386339
Bromomethane	U		0.00454	0.0125	0.0153	1	11/24/2019 19:37	WG1386339
n-Butylbenzene	0.00587	J	0.00471	0.0125	0.0153	1	11/24/2019 19:37	WG1386339
sec-Butylbenzene	0.00617	J	0.00311	0.0125	0.0153	1	11/24/2019 19:37	WG1386339
tert-Butylbenzene	U		0.00190	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
Carbon tetrachloride	U		0.00133	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
Chlorobenzene	U		0.000703	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
Chlorodibromomethane	U		0.000552	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
Chloroethane	U		0.00133	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
Chloroform	U		0.000509	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
Chloromethane	U		0.00171	0.0125	0.0153	1	11/24/2019 19:37	WG1386339
2-Chlorotoluene	U		0.00113	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
4-Chlorotoluene	U		0.00139	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00626	0.0250	0.0307	1	11/24/2019 19:37	WG1386339
1,2-Dibromoethane	U		0.000644	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
Dibromomethane	U		0.00123	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
1,2-Dichlorobenzene	U		0.00178	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
1,3-Dichlorobenzene	U		0.00209	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
1,4-Dichlorobenzene	U		0.00242	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
Dichlorodifluoromethane	U		0.00100	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
1,1-Dichloroethane	U		0.000706	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
1,2-Dichloroethane	U		0.000583	0.00250	0.00307	1	11/24/2019 19:37	WG1386339

SB-17A (7-8)

Collected date/time: 11/13/19 15:01

SAMPLE RESULTS - 14

L1161400

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

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000614	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
cis-1,2-Dichloroethene	U		0.000847	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
trans-1,2-Dichloroethene	U		0.00176	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
1,2-Dichloropropane	U		0.00156	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
1,1-Dichloropropene	U		0.000859	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
1,3-Dichloropropane	U		0.00215	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
cis-1,3-Dichloropropene	U		0.000832	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
trans-1,3-Dichloropropene	U		0.00188	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
2,2-Dichloropropane	U		0.000973	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
Di-isopropyl ether	U		0.000430	0.00100	0.00123	1	11/24/2019 19:37	WG1386339
Ethylbenzene	0.00184	J	0.000651	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
Hexachloro-1,3-butadiene	U		0.0156	0.0250	0.0307	1	11/24/2019 19:37	WG1386339
Isopropylbenzene	0.00345		0.00106	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
p-Isopropyltoluene	0.0147		0.00286	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
2-Butanone (MEK)	0.0481	B	0.0153	0.0250	0.0307	1	11/24/2019 19:37	WG1386339
Methylene Chloride	U		0.00815	0.0250	0.0307	1	11/24/2019 19:37	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0123	0.0250	0.0307	1	11/24/2019 19:37	WG1386339
Methyl tert-butyl ether	U		0.000362	0.00100	0.00123	1	11/24/2019 19:37	WG1386339
Naphthalene	0.0190		0.00383	0.0125	0.0153	1	11/24/2019 19:37	WG1386339
n-Propylbenzene	0.00393	J	0.00145	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
Styrene	U		0.00335	0.0125	0.0153	1	11/24/2019 19:37	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000614	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000479	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000829	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
Tetrachloroethene	U		0.000859	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
Toluene	0.0105		0.00153	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
1,2,3-Trichlorobenzene	U		0.000767	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
1,2,4-Trichlorobenzene	U		0.00592	0.0125	0.0153	1	11/24/2019 19:37	WG1386339
1,1,1-Trichloroethane	U		0.000338	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
1,1,2-Trichloroethane	U		0.00108	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
Trichloroethene	U		0.000491	0.00100	0.00123	1	11/24/2019 19:37	WG1386339
Trichlorofluoromethane	U		0.000614	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
1,2,3-Trichloropropane	U		0.00626	0.0125	0.0153	1	11/24/2019 19:37	WG1386339
1,2,4-Trimethylbenzene	0.0327		0.00142	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
1,2,3-Trimethylbenzene	0.0517		0.00141	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
Vinyl chloride	U		0.000838	0.00250	0.00307	1	11/24/2019 19:37	WG1386339
1,3,5-Trimethylbenzene	0.00561	J	0.00133	0.00500	0.00614	1	11/24/2019 19:37	WG1386339
Xylenes, Total	0.00835		0.00587	0.00650	0.00798	1	11/24/2019 19:37	WG1386339
(S) Toluene-d8	*102*				*75.0-131*		*11/24/2019 19:37*	WG1386339
(S) 4-Bromofluorobenzene	*107*				*67.0-138*		*11/24/2019 19:37*	WG1386339
(S) 1,2-Dichloroethane-d4	*89.9*				*70.0-130*		*11/24/2019 19:37*	WG1386339

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	40.0	J	16.3	4.00	49.1	10	11/21/2019 21:38	WG1383230
Residual Range Organics (RRO)	130		40.9	10.0	123	10	11/21/2019 21:38	WG1383230
(S) o-Terphenyl	*71.4*				*18.0-148*		*11/21/2019 21:38*	WG1383230

Sample Narrative:

L1161400-14 WG1383230: Cannot run at lower dilution due to viscosity of extract

SB-17A (12-13)

Collected date/time: 11/13/19 15:02

SAMPLE RESULTS - 15

L1161400

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	90.1		1	11/21/2019 10:33	WG1384253

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0333	J	0.00311	0.0300	0.0333	1	11/20/2019 09:53	WG1382816

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	4.39		0.510	2.00	2.22	1	11/20/2019 13:34	WG1383087
Barium	93.9		0.189	0.500	0.555	1	11/20/2019 13:34	WG1383087
Cadmium	0.154	J	0.0777	0.500	0.555	1	11/20/2019 13:34	WG1383087
Chromium	50.4		0.155	1.00	1.11	1	11/20/2019 13:34	WG1383087
Lead	5.95		0.211	0.500	0.555	1	11/20/2019 13:34	WG1383087
Selenium	U		0.688	2.00	2.22	1	11/20/2019 13:34	WG1383087
Silver	U		0.133	1.00	1.11	1	11/20/2019 13:34	WG1383087

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	4.25		0.940	0.100	2.77	25	11/21/2019 01:46	WG1383865
(S) a,a,a-Trifluorotoluene(FID)	*113*				*77.0-120*		*11/21/2019 01:46*	WG1383865

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0152	0.0250	0.0277	1	11/24/2019 19:58	WG1386339
Acrylonitrile	U		0.00211	0.0125	0.0139	1	11/24/2019 19:58	WG1386339
Benzene	U		0.000444	0.00100	0.00111	1	11/24/2019 19:58	WG1386339
Bromobenzene	U		0.00117	0.0125	0.0139	1	11/24/2019 19:58	WG1386339
Bromodichloromethane	U		0.000874	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
Bromoform	U		0.00664	0.0250	0.0277	1	11/24/2019 19:58	WG1386339
Bromomethane	U		0.00411	0.0125	0.0139	1	11/24/2019 19:58	WG1386339
n-Butylbenzene	U		0.00426	0.0125	0.0139	1	11/24/2019 19:58	WG1386339
sec-Butylbenzene	U		0.00281	0.0125	0.0139	1	11/24/2019 19:58	WG1386339
tert-Butylbenzene	U		0.00172	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
Carbon tetrachloride	U		0.00120	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
Chlorobenzene	U		0.000636	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
Chlorodibromomethane	U		0.000499	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
Chloroethane	U		0.00120	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
Chloroform	U		0.000460	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
Chloromethane	U		0.00154	0.0125	0.0139	1	11/24/2019 19:58	WG1386339
2-Chlorotoluene	U		0.00102	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
4-Chlorotoluene	U		0.00125	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00566	0.0250	0.0277	1	11/24/2019 19:58	WG1386339
1,2-Dibromoethane	U		0.000583	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
Dibromomethane	U		0.00111	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
1,2-Dichlorobenzene	U		0.00161	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
1,3-Dichlorobenzene	U		0.00189	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
1,4-Dichlorobenzene	U		0.00219	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
Dichlorodifluoromethane	U		0.000908	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
1,1-Dichloroethane	U		0.000638	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
1,2-Dichloroethane	U		0.000527	0.00250	0.00277	1	11/24/2019 19:58	WG1386339

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000555	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
cis-1,2-Dichloroethene	U		0.000766	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
trans-1,2-Dichloroethene	U		0.00159	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
1,2-Dichloropropane	U		0.00141	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
1,1-Dichloropropene	U		0.000777	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
1,3-Dichloropropane	U		0.00194	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
cis-1,3-Dichloropropene	U		0.000752	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
trans-1,3-Dichloropropene	U		0.00170	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
2,2-Dichloropropane	U		0.000880	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
Di-isopropyl ether	U		0.000388	0.00100	0.00111	1	11/24/2019 19:58	WG1386339
Ethylbenzene	U		0.000588	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
Hexachloro-1,3-butadiene	U		0.0141	0.0250	0.0277	1	11/24/2019 19:58	WG1386339
Isopropylbenzene	U		0.000958	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
p-Isopropyltoluene	0.00313	J	0.00259	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
2-Butanone (MEK)	0.0284	B	0.0139	0.0250	0.0277	1	11/24/2019 19:58	WG1386339
Methylene Chloride	U		0.00737	0.0250	0.0277	1	11/24/2019 19:58	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0250	0.0277	1	11/24/2019 19:58	WG1386339
Methyl tert-butyl ether	U		0.000327	0.00100	0.00111	1	11/24/2019 19:58	WG1386339
Naphthalene	0.00627	J	0.00346	0.0125	0.0139	1	11/24/2019 19:58	WG1386339
n-Propylbenzene	U		0.00131	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
Styrene	U		0.00303	0.0125	0.0139	1	11/24/2019 19:58	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000555	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000433	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000749	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
Tetrachloroethene	U		0.000777	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
Toluene	0.00273	J	0.00139	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
1,2,3-Trichlorobenzene	U		0.000693	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
1,2,4-Trichlorobenzene	U		0.00535	0.0125	0.0139	1	11/24/2019 19:58	WG1386339
1,1,1-Trichloroethane	U		0.000305	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
1,1,2-Trichloroethane	U		0.000980	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
Trichloroethene	U		0.000444	0.00100	0.00111	1	11/24/2019 19:58	WG1386339
Trichlorofluoromethane	U		0.000555	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
1,2,3-Trichloropropane	U		0.00566	0.0125	0.0139	1	11/24/2019 19:58	WG1386339
1,2,4-Trimethylbenzene	0.00509	B J	0.00129	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
1,2,3-Trimethylbenzene	0.00662		0.00128	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
Vinyl chloride	U		0.000758	0.00250	0.00277	1	11/24/2019 19:58	WG1386339
1,3,5-Trimethylbenzene	0.00156	J	0.00120	0.00500	0.00555	1	11/24/2019 19:58	WG1386339
Xylenes, Total	U		0.00530	0.00650	0.00721	1	11/24/2019 19:58	WG1386339
(S) Toluene-d8	*102*				*75.0-131*		*11/24/2019 19:58*	WG1386339
(S) 4-Bromofluorobenzene	*98.6*				*67.0-138*		*11/24/2019 19:58*	WG1386339
(S) 1,2-Dichloroethane-d4	*88.8*				*70.0-130*		*11/24/2019 19:58*	WG1386339

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	6.40		1.48	4.00	4.44	1	11/21/2019 20:00	WG1383230
Residual Range Organics (RRO)	21.4		3.69	10.0	11.1	1	11/21/2019 20:00	WG1383230
(S) o-Terphenyl	*60.5*				*18.0-148*		*11/21/2019 20:00*	WG1383230

SB-17C (2-3)

Collected date/time: 11/13/19 14:02

SAMPLE RESULTS - 16

L1161400

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	91.6		1	11/21/2019 10:33	WG1384253

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0377		0.00306	0.0300	0.0328	1	11/20/2019 09:55	WG1382816

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	3.51		0.502	2.00	2.18	1	11/20/2019 13:37	WG1383087
Barium	83.8		0.186	0.500	0.546	1	11/20/2019 13:37	WG1383087
Cadmium	0.115	J	0.0764	0.500	0.546	1	11/20/2019 13:37	WG1383087
Chromium	27.2		0.153	1.00	1.09	1	11/20/2019 13:37	WG1383087
Lead	4.29		0.207	0.500	0.546	1	11/20/2019 13:37	WG1383087
Selenium	U		0.677	2.00	2.18	1	11/20/2019 13:37	WG1383087
Silver	U		0.131	1.00	1.09	1	11/20/2019 13:37	WG1383087

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	4.22		0.925	0.100	2.73	25	11/21/2019 02:07	WG1383865
(S) a,a,a-Trifluorotoluene(FID)	*112*				*77.0-120*		*11/21/2019 02:07*	WG1383865

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	0.0428		0.0150	0.0250	0.0273	1	11/24/2019 20:19	WG1386339
Acrylonitrile	U		0.00207	0.0125	0.0137	1	11/24/2019 20:19	WG1386339
Benzene	U		0.000437	0.00100	0.00109	1	11/24/2019 20:19	WG1386339
Bromobenzene	U		0.00115	0.0125	0.0137	1	11/24/2019 20:19	WG1386339
Bromodichloromethane	U		0.000861	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
Bromoform	U		0.00653	0.0250	0.0273	1	11/24/2019 20:19	WG1386339
Bromomethane	U		0.00404	0.0125	0.0137	1	11/24/2019 20:19	WG1386339
n-Butylbenzene	U		0.00419	0.0125	0.0137	1	11/24/2019 20:19	WG1386339
sec-Butylbenzene	0.00788	J	0.00276	0.0125	0.0137	1	11/24/2019 20:19	WG1386339
tert-Butylbenzene	U		0.00169	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
Carbon tetrachloride	U		0.00118	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
Chlorobenzene	U		0.000626	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
Chlorodibromomethane	U		0.000491	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
Chloroethane	U		0.00118	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
Chloroform	U		0.000453	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
Chloromethane	U		0.00152	0.0125	0.0137	1	11/24/2019 20:19	WG1386339
2-Chlorotoluene	U		0.00100	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
4-Chlorotoluene	U		0.00123	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00557	0.0250	0.0273	1	11/24/2019 20:19	WG1386339
1,2-Dibromoethane	U		0.000573	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
Dibromomethane	U		0.00109	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
1,2-Dichlorobenzene	U		0.00158	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
1,3-Dichlorobenzene	U		0.00186	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
1,4-Dichlorobenzene	U		0.00215	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
Dichlorodifluoromethane	U		0.000893	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
1,1-Dichloroethane	U		0.000628	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
1,2-Dichloroethane	U		0.000519	0.00250	0.00273	1	11/24/2019 20:19	WG1386339

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000546	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
cis-1,2-Dichloroethene	U		0.000753	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
trans-1,2-Dichloroethene	U		0.00156	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
1,2-Dichloropropane	U		0.00139	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
1,1-Dichloropropene	U		0.000764	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
1,3-Dichloropropane	U		0.00191	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
cis-1,3-Dichloropropene	U		0.000740	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
trans-1,3-Dichloropropene	U		0.00167	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
2,2-Dichloropropane	U		0.000866	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
Di-isopropyl ether	U		0.000382	0.00100	0.00109	1	11/24/2019 20:19	WG1386339
Ethylbenzene	U		0.000579	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0273	1	11/24/2019 20:19	WG1386339
Isopropylbenzene	U		0.000942	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
p-Isopropyltoluene	0.290		0.00254	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
2-Butanone (MEK)	0.0384	B	0.0137	0.0250	0.0273	1	11/24/2019 20:19	WG1386339
Methylene Chloride	U		0.00725	0.0250	0.0273	1	11/24/2019 20:19	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0273	1	11/24/2019 20:19	WG1386339
Methyl tert-butyl ether	U		0.000322	0.00100	0.00109	1	11/24/2019 20:19	WG1386339
Naphthalene	U		0.00341	0.0125	0.0137	1	11/24/2019 20:19	WG1386339
n-Propylbenzene	U		0.00129	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
Styrene	U		0.00298	0.0125	0.0137	1	11/24/2019 20:19	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000546	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000426	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000737	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
Tetrachloroethene	U		0.000764	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
Toluene	0.00218	J	0.00137	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
1,2,3-Trichlorobenzene	U		0.000683	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
1,2,4-Trichlorobenzene	U		0.00526	0.0125	0.0137	1	11/24/2019 20:19	WG1386339
1,1,1-Trichloroethane	U		0.000300	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
1,1,2-Trichloroethane	U		0.000964	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
Trichloroethene	U		0.000437	0.00100	0.00109	1	11/24/2019 20:19	WG1386339
Trichlorofluoromethane	U		0.000546	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
1,2,3-Trichloropropane	U		0.00557	0.0125	0.0137	1	11/24/2019 20:19	WG1386339
1,2,4-Trimethylbenzene	0.00654	B	0.00127	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
1,2,3-Trimethylbenzene	U		0.00126	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
Vinyl chloride	U		0.000746	0.00250	0.00273	1	11/24/2019 20:19	WG1386339
1,3,5-Trimethylbenzene	U		0.00118	0.00500	0.00546	1	11/24/2019 20:19	WG1386339
Xylenes, Total	U		0.00522	0.00650	0.00710	1	11/24/2019 20:19	WG1386339
(S) Toluene-d8	*103*				*75.0-131*		*11/24/2019 20:19*	WG1386339
(S) 4-Bromofluorobenzene	*102*				*67.0-138*		*11/24/2019 20:19*	WG1386339
(S) 1,2-Dichloroethane-d4	*86.4*				*70.0-130*		*11/24/2019 20:19*	WG1386339

Volatile Organic Compounds (GC/MS) by Method 8260D - TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch	CAS #
1,4-Cyclohexadiene, 1-Methyl-4-(1-	0.952	J N	0.000	0.000	0.000	1	11/24/2019 20:19	WG1386339	000099-85-4
Camphene	0.293	J N	0.000	0.000	0.000	1	11/24/2019 20:19	WG1386339	000079-92-5
Cyclohexene, 1-Methyl-4-(1-Methyle	0.163	J N	0.000	0.000	0.000	1	11/24/2019 20:19	WG1386339	000586-62-9
Bicyclo[2.2.1]Heptane, 7,7-Dimethy	0.0811	J N	0.000	0.000	0.000	1	11/24/2019 20:19	WG1386339	000471-84-1
Cyclohexanone, 2,3-Dimethyl-	0.0624	J N	0.000	0.000	0.000	1	11/24/2019 20:19	WG1386339	013395-76-1
Undecane, 2,6-Dimethyl-	0.0399	J N	0.000	0.000	0.000	1	11/24/2019 20:19	WG1386339	017301-23-4

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

SB-17C (2-3)

Collected date/time: 11/13/19 14:02

SAMPLE RESULTS - 16

L1161400

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	18.6		1.45	4.00	4.37	1	11/21/2019 19:20	WG1383230
Residual Range Organics (RRO)	19.2		3.64	10.0	10.9	1	11/21/2019 19:20	WG1383230
(S) o-Terphenyl	*65.2*				*18.0-148*		*11/21/2019 19:20*	WG1383230

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

SB-17C (9-10)

Collected date/time: 11/13/19 14:04

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.9		1	11/21/2019 10:33	WG1384253

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0309	J	0.00326	0.0300	0.0349	1	11/20/2019 09:57	WG1382816

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.73		0.536	2.00	2.33	1	11/20/2019 13:39	WG1383087
Barium	127		0.198	0.500	0.582	1	11/20/2019 13:39	WG1383087
Cadmium	0.172	J	0.0815	0.500	0.582	1	11/20/2019 13:39	WG1383087
Chromium	43.1		0.163	1.00	1.16	1	11/20/2019 13:39	WG1383087
Lead	10.2		0.221	0.500	0.582	1	11/20/2019 13:39	WG1383087
Selenium	U		0.722	2.00	2.33	1	11/20/2019 13:39	WG1383087
Silver	U		0.140	1.00	1.16	1	11/20/2019 13:39	WG1383087

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	377		7.89	0.100	23.3	200	11/22/2019 15:28	WG1385348
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*11/22/2019 15:28*	WG1385348

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.319	0.0250	0.582	20	11/24/2019 22:08	WG1386339
Acrylonitrile	U		0.0442	0.0125	0.291	20	11/24/2019 22:08	WG1386339
Benzene	0.0171	J	0.00931	0.00100	0.0233	20	11/24/2019 22:08	WG1386339
Bromobenzene	U		0.0245	0.0125	0.291	20	11/24/2019 22:08	WG1386339
Bromodichloromethane	U		0.0184	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
Bromoform	U		0.139	0.0250	0.582	20	11/24/2019 22:08	WG1386339
Bromomethane	U		0.0862	0.0125	0.291	20	11/24/2019 22:08	WG1386339
n-Butylbenzene	U		0.0894	0.0125	0.291	20	11/24/2019 22:08	WG1386339
sec-Butylbenzene	U		0.0589	0.0125	0.291	20	11/24/2019 22:08	WG1386339
tert-Butylbenzene	U		0.0361	0.00500	0.116	20	11/24/2019 22:08	WG1386339
Carbon tetrachloride	U		0.0251	0.00500	0.116	20	11/24/2019 22:08	WG1386339
Chlorobenzene	U		0.0133	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
Chlorodibromomethane	U		0.0105	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
Chloroethane	U		0.0251	0.00500	0.116	20	11/24/2019 22:08	WG1386339
Chloroform	0.0220	J	0.00966	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
Chloromethane	U		0.0324	0.0125	0.291	20	11/24/2019 22:08	WG1386339
2-Chlorotoluene	U		0.0214	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
4-Chlorotoluene	U		0.0263	0.00500	0.116	20	11/24/2019 22:08	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.119	0.0250	0.582	20	11/24/2019 22:08	WG1386339
1,2-Dibromoethane	U		0.0122	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
Dibromomethane	U		0.0233	0.00500	0.116	20	11/24/2019 22:08	WG1386339
1,2-Dichlorobenzene	U		0.0338	0.00500	0.116	20	11/24/2019 22:08	WG1386339
1,3-Dichlorobenzene	U		0.0396	0.00500	0.116	20	11/24/2019 22:08	WG1386339
1,4-Dichlorobenzene	U		0.0459	0.00500	0.116	20	11/24/2019 22:08	WG1386339
Dichlorodifluoromethane	U		0.0190	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
1,1-Dichloroethane	U		0.0134	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
1,2-Dichloroethane	U		0.0111	0.00250	0.0582	20	11/24/2019 22:08	WG1386339

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.0116	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
cis-1,2-Dichloroethene	U		0.0161	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
trans-1,2-Dichloroethene	U		0.0333	0.00500	0.116	20	11/24/2019 22:08	WG1386339
1,2-Dichloropropane	U		0.0296	0.00500	0.116	20	11/24/2019 22:08	WG1386339
1,1-Dichloropropene	U		0.0163	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
1,3-Dichloropropane	U		0.0408	0.00500	0.116	20	11/24/2019 22:08	WG1386339
cis-1,3-Dichloropropene	U		0.0158	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
trans-1,3-Dichloropropene	U		0.0356	0.00500	0.116	20	11/24/2019 22:08	WG1386339
2,2-Dichloropropane	U		0.0185	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
Di-isopropyl ether	U		0.00815	0.00100	0.0233	20	11/24/2019 22:08	WG1386339
Ethylbenzene	0.0342	J	0.0123	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
Hexachloro-1,3-butadiene	U		0.296	0.0250	0.582	20	11/24/2019 22:08	WG1386339
Isopropylbenzene	U		0.0201	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
p-Isopropyltoluene	11.8		0.0543	0.00500	0.116	20	11/24/2019 22:08	WG1386339
2-Butanone (MEK)	U		0.291	0.0250	0.582	20	11/24/2019 22:08	WG1386339
Methylene Chloride	U		0.155	0.0250	0.582	20	11/24/2019 22:08	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.233	0.0250	0.582	20	11/24/2019 22:08	WG1386339
Methyl tert-butyl ether	U		0.00687	0.00100	0.0233	20	11/24/2019 22:08	WG1386339
Naphthalene	U		0.0727	0.0125	0.291	20	11/25/2019 16:41	WG1386737
n-Propylbenzene	0.0444	J	0.0275	0.00500	0.116	20	11/24/2019 22:08	WG1386339
Styrene	U		0.0636	0.0125	0.291	20	11/24/2019 22:08	WG1386339
1,1,1,2-Tetrachloroethane	U		0.0116	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
1,1,2,2-Tetrachloroethane	U		0.00908	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.0157	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
Tetrachloroethene	U		0.0163	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
Toluene	0.0537	J	0.0291	0.00500	0.116	20	11/24/2019 22:08	WG1386339
1,2,3-Trichlorobenzene	U		0.0146	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
1,2,4-Trichlorobenzene	U		0.112	0.0125	0.291	20	11/24/2019 22:08	WG1386339
1,1,1-Trichloroethane	U		0.00640	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
1,1,2-Trichloroethane	U		0.0206	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
Trichloroethene	U		0.00931	0.00100	0.0233	20	11/24/2019 22:08	WG1386339
Trichlorofluoromethane	U		0.0116	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
1,2,3-Trichloropropane	U		0.119	0.0125	0.291	20	11/24/2019 22:08	WG1386339
1,2,4-Trimethylbenzene	0.548		0.0270	0.00500	0.116	20	11/24/2019 22:08	WG1386339
1,2,3-Trimethylbenzene	0.106	J	0.0268	0.00500	0.116	20	11/24/2019 22:08	WG1386339
Vinyl chloride	U		0.0159	0.00250	0.0582	20	11/24/2019 22:08	WG1386339
1,3,5-Trimethylbenzene	0.0710	J	0.0251	0.00500	0.116	20	11/24/2019 22:08	WG1386339
Xylenes, Total	0.128	J	0.111	0.00650	0.151	20	11/24/2019 22:08	WG1386339
(S) Toluene-d8	*103*				*75.0-131*		*11/24/2019 22:08*	WG1386339
(S) Toluene-d8	*101*				*75.0-131*		*11/25/2019 16:41*	WG1386737
(S) 4-Bromofluorobenzene	*104*				*67.0-138*		*11/24/2019 22:08*	WG1386339
(S) 4-Bromofluorobenzene	*96.3*				*67.0-138*		*11/25/2019 16:41*	WG1386737
(S) 1,2-Dichloroethane-d4	*89.7*				*70.0-130*		*11/24/2019 22:08*	WG1386339
(S) 1,2-Dichloroethane-d4	*107*				*70.0-130*		*11/25/2019 16:41*	WG1386737

Sample Narrative:

L1161400-17 WG1386339: Target compounds too high to run at a lower dilution.

Volatile Organic Compounds (GC/MS) by Method 8260D - TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch	CAS #
Tricyclo[2.2.1.02,6]Heptane, 1,3,3-Trimethyl-	32.4	J N	0.000	0.000	0.000	20	11/25/2019 16:41	WG1386737	488-97-1
Camphene	7.41	J N	0.000	0.000	0.000	20	11/25/2019 16:41	WG1386737	79-92-5
Benzene, 1-Bromo-3-Fluoro-	4.77	J N	0.000	0.000	0.000	20	11/25/2019 16:41	WG1386737	1073-06-9
Limonene	7.70	J N	0.000	0.000	0.000	20	11/25/2019 16:41	WG1386737	138-86-3

SB-17C (9-10)

Collected date/time: 11/13/19 14:04

SAMPLE RESULTS - 17

L1161400

Volatile Organic Compounds (GC/MS) by Method 8260D - TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch	CAS #
Benzene, 1-Methyl-3-(1-Methylethyl)-	12.3	J N	0.000	0.000	0.000	20	11/25/2019 16:41	WG1386737	535-77-3
Cyclohexene, 1-Methyl-4-(1-Methylethylidene)-	3.39	J N	0.000	0.000	0.000	20	11/25/2019 16:41	WG1386737	586-62-9
L-1,2,3-Trimethylbicyclo[2.2.1]-2-Heptanol	5.05	J N	0.000	0.000	0.000	20	11/25/2019 16:41	WG1386737	0-00-0
Bicyclo[2.2.1]Heptan-2-Ol, 1,3,3-Trimethyl-, (1R-Endo)-	1.68	J N	0.000	0.000	0.000	20	11/25/2019 16:41	WG1386737	2217-02-9
Cyclohexanemethanol, .Alpha.,.Alpha.,4-Trimethyl-	1.80	J N	0.000	0.000	0.000	20	11/25/2019 16:41	WG1386737	498-81-7
Bicyclo[2.2.1]Heptan-2-One, 1,7,7-Trimethyl-, (.+/-.)-	0.869	J N	0.000	0.000	0.000	20	11/25/2019 16:41	WG1386737	21368-68-3

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	385		15.5	4.00	46.6	10	11/21/2019 22:04	WG1383230
Residual Range Organics (RRO)	830		38.8	10.0	116	10	11/21/2019 22:04	WG1383230
(S) o-Terphenyl	*38.6*				*18.0-148*		*11/21/2019 22:04*	WG1383230

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

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	89.3		1	11/21/2019 10:33	WG1384253

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0249	J	0.00313	0.0300	0.0336	1	11/20/2019 10:00	WG1382816

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	5.16		0.515	2.00	2.24	1	11/20/2019 13:42	WG1383087
Barium	89.8		0.190	0.500	0.560	1	11/20/2019 13:42	WG1383087
Cadmium	0.120	J	0.0784	0.500	0.560	1	11/20/2019 13:42	WG1383087
Chromium	34.7		0.157	1.00	1.12	1	11/20/2019 13:42	WG1383087
Lead	3.59		0.213	0.500	0.560	1	11/20/2019 13:42	WG1383087
Selenium	U		0.694	2.00	2.24	1	11/20/2019 13:42	WG1383087
Silver	U		0.134	1.00	1.12	1	11/20/2019 13:42	WG1383087

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	580		7.59	0.100	22.4	200	11/22/2019 15:52	WG1385348
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*11/22/2019 15:52*	WG1385348

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.307	0.0250	0.560	20	11/24/2019 22:29	WG1386339
Acrylonitrile	U		0.0425	0.0125	0.280	20	11/24/2019 22:29	WG1386339
Benzene	U		0.00896	0.00100	0.0224	20	11/24/2019 22:29	WG1386339
Bromobenzene	U		0.0235	0.0125	0.280	20	11/24/2019 22:29	WG1386339
Bromodichloromethane	U		0.0176	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
Bromoform	U		0.134	0.0250	0.560	20	11/24/2019 22:29	WG1386339
Bromomethane	U		0.0828	0.0125	0.280	20	11/24/2019 22:29	WG1386339
n-Butylbenzene	U		0.0860	0.0125	0.280	20	11/24/2019 22:29	WG1386339
sec-Butylbenzene	U		0.0566	0.0125	0.280	20	11/24/2019 22:29	WG1386339
tert-Butylbenzene	U		0.0347	0.00500	0.112	20	11/24/2019 22:29	WG1386339
Carbon tetrachloride	U		0.0242	0.00500	0.112	20	11/24/2019 22:29	WG1386339
Chlorobenzene	U		0.0128	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
Chlorodibromomethane	U		0.0101	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
Chloroethane	U		0.0242	0.00500	0.112	20	11/24/2019 22:29	WG1386339
Chloroform	U		0.00929	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
Chloromethane	U		0.0311	0.0125	0.280	20	11/24/2019 22:29	WG1386339
2-Chlorotoluene	U		0.0206	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
4-Chlorotoluene	U		0.0253	0.00500	0.112	20	11/24/2019 22:29	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.114	0.0250	0.560	20	11/24/2019 22:29	WG1386339
1,2-Dibromoethane	U		0.0118	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
Dibromomethane	U		0.0224	0.00500	0.112	20	11/24/2019 22:29	WG1386339
1,2-Dichlorobenzene	U		0.0325	0.00500	0.112	20	11/24/2019 22:29	WG1386339
1,3-Dichlorobenzene	U		0.0381	0.00500	0.112	20	11/24/2019 22:29	WG1386339
1,4-Dichlorobenzene	U		0.0441	0.00500	0.112	20	11/24/2019 22:29	WG1386339
Dichlorodifluoromethane	U		0.0183	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
1,1-Dichloroethane	U		0.0129	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
1,2-Dichloroethane	U		0.0106	0.00250	0.0560	20	11/24/2019 22:29	WG1386339

SB-17C (14-15)

Collected date/time: 11/13/19 14:05

SAMPLE RESULTS - 18

L1161400

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.0112	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
cis-1,2-Dichloroethene	U		0.0154	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
trans-1,2-Dichloroethene	U		0.0320	0.00500	0.112	20	11/24/2019 22:29	WG1386339
1,2-Dichloropropane	U		0.0284	0.00500	0.112	20	11/24/2019 22:29	WG1386339
1,1-Dichloropropene	U		0.0157	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
1,3-Dichloropropane	U		0.0392	0.00500	0.112	20	11/24/2019 22:29	WG1386339
cis-1,3-Dichloropropene	U		0.0152	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
trans-1,3-Dichloropropene	U		0.0343	0.00500	0.112	20	11/24/2019 22:29	WG1386339
2,2-Dichloropropane	U		0.0178	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
Di-isopropyl ether	U		0.00784	0.00100	0.0224	20	11/24/2019 22:29	WG1386339
Ethylbenzene	U		0.0119	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
Hexachloro-1,3-butadiene	U		0.284	0.0250	0.560	20	11/24/2019 22:29	WG1386339
Isopropylbenzene	U		0.0193	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
p-Isopropyltoluene	10.9		0.0522	0.00500	0.112	20	11/24/2019 22:29	WG1386339
2-Butanone (MEK)	U		0.280	0.0250	0.560	20	11/24/2019 22:29	WG1386339
Methylene Chloride	U		0.149	0.0250	0.560	20	11/24/2019 22:29	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.224	0.0250	0.560	20	11/24/2019 22:29	WG1386339
Methyl tert-butyl ether	U		0.00660	0.00100	0.0224	20	11/24/2019 22:29	WG1386339
Naphthalene	U		0.0699	0.0125	0.280	20	11/25/2019 17:02	WG1386737
n-Propylbenzene	U		0.0264	0.00500	0.112	20	11/24/2019 22:29	WG1386339
Styrene	U		0.0611	0.0125	0.280	20	11/24/2019 22:29	WG1386339
1,1,1,2-Tetrachloroethane	U		0.0112	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
1,1,2,2-Tetrachloroethane	U		0.00873	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.0151	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
Tetrachloroethene	U		0.0157	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
Toluene	0.0366	J	0.0280	0.00500	0.112	20	11/24/2019 22:29	WG1386339
1,2,3-Trichlorobenzene	U		0.0140	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
1,2,4-Trichlorobenzene	U		0.108	0.0125	0.280	20	11/24/2019 22:29	WG1386339
1,1,1-Trichloroethane	U		0.00616	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
1,1,2-Trichloroethane	U		0.0198	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
Trichloroethene	U		0.00896	0.00100	0.0224	20	11/24/2019 22:29	WG1386339
Trichlorofluoromethane	U		0.0112	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
1,2,3-Trichloropropane	U		0.114	0.0125	0.280	20	11/24/2019 22:29	WG1386339
1,2,4-Trimethylbenzene	0.349	B	0.0260	0.00500	0.112	20	11/24/2019 22:29	WG1386339
1,2,3-Trimethylbenzene	0.0279	J	0.0257	0.00500	0.112	20	11/24/2019 22:29	WG1386339
Vinyl chloride	U		0.0153	0.00250	0.0560	20	11/24/2019 22:29	WG1386339
1,3,5-Trimethylbenzene	U		0.0242	0.00500	0.112	20	11/24/2019 22:29	WG1386339
Xylenes, Total	U		0.107	0.00650	0.146	20	11/24/2019 22:29	WG1386339
(S) Toluene-d8	*101*				*75.0-131*		*11/24/2019 22:29*	WG1386339
(S) Toluene-d8	*102*				*75.0-131*		*11/25/2019 17:02*	WG1386737
(S) 4-Bromofluorobenzene	*102*				*67.0-138*		*11/24/2019 22:29*	WG1386339
(S) 4-Bromofluorobenzene	*79.5*				*67.0-138*		*11/25/2019 17:02*	WG1386737
(S) 1,2-Dichloroethane-d4	*90.3*				*70.0-130*		*11/24/2019 22:29*	WG1386339
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*11/25/2019 17:02*	WG1386737

Sample Narrative:

L1161400-18 WG1386339: Target compounds too high to run at a lower dilution.

Volatile Organic Compounds (GC/MS) by Method 8260D - TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch	CAS #
Tricyclo[2.2.1.02,6]Heptane, 1,3,3-Trimethyl-	22.9	J N	0.000	0.000	0.000	20	11/25/2019 17:02	WG1386737	488-97-1
Camphene	10.3	J N	0.000	0.000	0.000	20	11/25/2019 17:02	WG1386737	79-92-5
Cyclohexane, 1-Methyl-4-(1-Methylethyl)-, Cis-	23.1	J N	0.000	0.000	0.000	20	11/25/2019 17:02	WG1386737	6069-98-3

SB-17C (14-15)

Collected date/time: 11/13/19 14:05

SAMPLE RESULTS - 18

L1161400

Volatile Organic Compounds (GC/MS) by Method 8260D - TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch	CAS #
Bicyclo[4.1.0]Heptane, 3,7,7-Trimethyl-, (1.Alpha.,3.Alpha.,	1.33	J N	0.000	0.000	0.000	20	11/25/2019 17:02	WG1386737	18968-23-5
Bicyclo[4.1.0]Heptane, 3,7,7-Trimethyl-, [1S-(1.Alpha.,3.Bet	14.4	J N	0.000	0.000	0.000	20	11/25/2019 17:02	WG1386737	2778-68-9
Limonene	6.90	J N	0.000	0.000	0.000	20	11/25/2019 17:02	WG1386737	138-86-3
Benzene, 1-Methyl-3-(1-Methylethyl)-	47.4	J N	0.000	0.000	0.000	20	11/25/2019 17:02	WG1386737	535-77-3
Cyclohexene, 1-Methyl-4-(1-Methylethylidene)-	2.52	J N	0.000	0.000	0.000	20	11/25/2019 17:02	WG1386737	586-62-9
L-1,2,3-Trimethylbicyclo[2.2.1]-2-Heptanol	8.09	J N	0.000	0.000	0.000	20	11/25/2019 17:02	WG1386737	0-00-0
Bicyclo[2.2.1]Heptan-2-Ol, 1,3,3-Trimethyl-	1.71	J N	0.000	0.000	0.000	20	11/25/2019 17:02	WG1386737	1632-73-1

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	294		1.49	4.00	4.48	1	11/21/2019 19:33	WG1383230
Residual Range Organics (RRO)	580		18.6	10.0	56.0	5	11/22/2019 03:54	WG1383230
(S) o-Terphenyl	*0.000*	J2			*18.0-148*		*11/21/2019 19:33*	WG1383230
(S) o-Terphenyl	*35.3*				*18.0-148*		*11/22/2019 03:54*	WG1383230

Sample Narrative:

L1161400-18 WG1383230: Surrogate failure due to matrix interference

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	82.4		1	11/21/2019 10:33	WG1384253

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0662		0.00340	0.0300	0.0364	1	11/20/2019 18:25	WG1383308

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	7.94		0.559	2.00	2.43	1	11/21/2019 14:16	WG1383964
Barium	114		0.206	0.500	0.607	1	11/21/2019 14:16	WG1383964
Cadmium	0.900		0.0850	0.500	0.607	1	11/21/2019 14:16	WG1383964
Chromium	32.6		0.170	1.00	1.21	1	11/21/2019 14:16	WG1383964
Lead	73.5		0.231	0.500	0.607	1	11/21/2019 14:16	WG1383964
Selenium	U		0.753	2.00	2.43	1	11/21/2019 14:16	WG1383964
Silver	U		0.146	1.00	1.21	1	11/21/2019 14:16	WG1383964

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.03	0.100	3.04	25	11/22/2019 16:16	WG1385348
(S) a,a,a-Trifluorotoluene(FID)	*99.4*				*77.0-120*		*11/22/2019 16:16*	WG1385348

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0166	0.0250	0.0304	1	11/24/2019 20:41	WG1386339
Acrylonitrile	U		0.00231	0.0125	0.0152	1	11/24/2019 20:41	WG1386339
Benzene	U		0.000486	0.00100	0.00121	1	11/24/2019 20:41	WG1386339
Bromobenzene	U		0.00128	0.0125	0.0152	1	11/24/2019 20:41	WG1386339
Bromodichloromethane	U		0.000957	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
Bromoform	U		0.00726	0.0250	0.0304	1	11/24/2019 20:41	WG1386339
Bromomethane	U		0.00449	0.0125	0.0152	1	11/24/2019 20:41	WG1386339
n-Butylbenzene	U		0.00466	0.0125	0.0152	1	11/24/2019 20:41	WG1386339
sec-Butylbenzene	U		0.00307	0.0125	0.0152	1	11/24/2019 20:41	WG1386339
tert-Butylbenzene	U		0.00188	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
Carbon tetrachloride	U		0.00131	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
Chlorobenzene	U		0.000696	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
Chlorodibromomethane	U		0.000546	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
Chloroethane	U		0.00131	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
Chloroform	U		0.000504	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
Chloromethane	U		0.00169	0.0125	0.0152	1	11/24/2019 20:41	WG1386339
2-Chlorotoluene	U		0.00112	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
4-Chlorotoluene	U		0.00137	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00619	0.0250	0.0304	1	11/24/2019 20:41	WG1386339
1,2-Dibromoethane	U		0.000638	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
Dibromomethane	U		0.00121	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
1,2-Dichlorobenzene	U		0.00176	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
1,3-Dichlorobenzene	U		0.00206	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
1,4-Dichlorobenzene	U		0.00239	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
Dichlorodifluoromethane	U		0.000993	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
1,1-Dichloroethane	U		0.000698	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
1,2-Dichloroethane	U		0.000577	0.00250	0.00304	1	11/24/2019 20:41	WG1386339

SB-16D (6-8)

Collected date/time: 11/13/19 13:27

SAMPLE RESULTS - 19

L1161400

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000607	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
cis-1,2-Dichloroethene	U		0.000838	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
trans-1,2-Dichloroethene	U		0.00174	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
1,2-Dichloropropane	U		0.00154	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
1,1-Dichloropropene	U		0.000850	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
1,3-Dichloropropane	U		0.00213	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
cis-1,3-Dichloropropene	U		0.000823	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
trans-1,3-Dichloropropene	U		0.00186	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
2,2-Dichloropropane	U		0.000963	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
Di-isopropyl ether	U		0.000425	0.00100	0.00121	1	11/24/2019 20:41	WG1386339
Ethylbenzene	U		0.000644	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
Hexachloro-1,3-butadiene	U		0.0154	0.0250	0.0304	1	11/24/2019 20:41	WG1386339
Isopropylbenzene	U		0.00105	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
p-Isopropyltoluene	0.0203		0.00283	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
2-Butanone (MEK)	U		0.0152	0.0250	0.0304	1	11/24/2019 20:41	WG1386339
Methylene Chloride	U		0.00806	0.0250	0.0304	1	11/24/2019 20:41	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0121	0.0250	0.0304	1	11/24/2019 20:41	WG1386339
Methyl tert-butyl ether	U		0.000358	0.00100	0.00121	1	11/24/2019 20:41	WG1386339
Naphthalene	0.00379	J	0.00379	0.0125	0.0152	1	11/24/2019 20:41	WG1386339
n-Propylbenzene	U		0.00143	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
Styrene	U		0.00332	0.0125	0.0152	1	11/24/2019 20:41	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000607	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000474	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000820	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
Tetrachloroethene	U		0.000850	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
Toluene	0.00618		0.00152	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
1,2,3-Trichlorobenzene	U		0.000759	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
1,2,4-Trichlorobenzene	U		0.00585	0.0125	0.0152	1	11/24/2019 20:41	WG1386339
1,1,1-Trichloroethane	U		0.000334	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
1,1,2-Trichloroethane	U		0.00107	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
Trichloroethene	U		0.000486	0.00100	0.00121	1	11/24/2019 20:41	WG1386339
Trichlorofluoromethane	U		0.000607	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
1,2,3-Trichloropropane	U		0.00619	0.0125	0.0152	1	11/24/2019 20:41	WG1386339
1,2,4-Trimethylbenzene	0.00206	B J	0.00141	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
1,2,3-Trimethylbenzene	U		0.00140	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
Vinyl chloride	U		0.000829	0.00250	0.00304	1	11/24/2019 20:41	WG1386339
1,3,5-Trimethylbenzene	U		0.00131	0.00500	0.00607	1	11/24/2019 20:41	WG1386339
Xylenes, Total	U		0.00580	0.00650	0.00789	1	11/24/2019 20:41	WG1386339
(S) Toluene-d8	*103*				*75.0-131*		*11/24/2019 20:41*	WG1386339
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*11/24/2019 20:41*	WG1386339
(S) 1,2-Dichloroethane-d4	*86.9*				*70.0-130*		*11/24/2019 20:41*	WG1386339

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	12.1		1.62	4.00	4.86	1	11/22/2019 03:15	WG1383996
Residual Range Organics (RRO)	63.4		4.04	10.0	12.1	1	11/22/2019 03:15	WG1383996
(S) o-Terphenyl	*72.9*				*18.0-148*		*11/22/2019 03:15*	WG1383996

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.5		1	11/21/2019 10:33	WG1384253

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0345	J	0.00335	0.0300	0.0359	1	11/20/2019 18:27	WG1383308

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.52		0.551	2.00	2.40	1	11/21/2019 14:03	WG1383964
Barium	82.9		0.204	0.500	0.599	1	11/21/2019 14:03	WG1383964
Cadmium	0.227	J	0.0838	0.500	0.599	1	11/21/2019 14:03	WG1383964
Chromium	31.0		0.168	1.00	1.20	1	11/21/2019 14:03	WG1383964
Lead	15.8		0.228	0.500	0.599	1	11/21/2019 14:03	WG1383964
Selenium	U		0.743	2.00	2.40	1	11/21/2019 14:03	WG1383964
Silver	U		0.144	1.00	1.20	1	11/21/2019 14:03	WG1383964

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.02	0.100	2.99	25	11/22/2019 16:40	WG1385348
(S) a,a,a-Trifluorotoluene(FID)	*99.4*				*77.0-120*		*11/22/2019 16:40*	WG1385348

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0164	0.0250	0.0299	1	11/24/2019 21:03	WG1386339
Acrylonitrile	U		0.00228	0.0125	0.0150	1	11/24/2019 21:03	WG1386339
Benzene	U		0.000479	0.00100	0.00120	1	11/24/2019 21:03	WG1386339
Bromobenzene	U		0.00126	0.0125	0.0150	1	11/24/2019 21:03	WG1386339
Bromodichloromethane	U		0.000944	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
Bromoform	U		0.00716	0.0250	0.0299	1	11/24/2019 21:03	WG1386339
Bromomethane	U		0.00443	0.0125	0.0150	1	11/24/2019 21:03	WG1386339
n-Butylbenzene	U		0.00460	0.0125	0.0150	1	11/24/2019 21:03	WG1386339
sec-Butylbenzene	U		0.00303	0.0125	0.0150	1	11/24/2019 21:03	WG1386339
tert-Butylbenzene	U		0.00186	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
Carbon tetrachloride	U		0.00129	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
Chlorobenzene	U		0.000686	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
Chlorodibromomethane	U		0.000539	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
Chloroethane	U		0.00129	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
Chloroform	U		0.000497	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
Chloromethane	U		0.00166	0.0125	0.0150	1	11/24/2019 21:03	WG1386339
2-Chlorotoluene	U		0.00110	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
4-Chlorotoluene	U		0.00135	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
1,2-Dibromo-3-Chloropropane	U		0.00611	0.0250	0.0299	1	11/24/2019 21:03	WG1386339
1,2-Dibromoethane	U		0.000629	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
Dibromomethane	U		0.00120	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
1,2-Dichlorobenzene	U		0.00174	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
1,3-Dichlorobenzene	U		0.00204	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
1,4-Dichlorobenzene	U		0.00236	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
Dichlorodifluoromethane	U		0.000980	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
1,1-Dichloroethane	U		0.000689	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
1,2-Dichloroethane	U		0.000569	0.00250	0.00299	1	11/24/2019 21:03	WG1386339

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000599	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
cis-1,2-Dichloroethene	U		0.000826	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
trans-1,2-Dichloroethene	U		0.00171	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
1,2-Dichloropropane	U		0.00152	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
1,1-Dichloropropene	U		0.000838	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
1,3-Dichloropropane	U		0.00210	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
cis-1,3-Dichloropropene	U		0.000812	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
trans-1,3-Dichloropropene	U		0.00183	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
2,2-Dichloropropane	U		0.000950	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
Di-isopropyl ether	U		0.000419	0.00100	0.00120	1	11/24/2019 21:03	WG1386339
Ethylbenzene	U		0.000635	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
Hexachloro-1,3-butadiene	U		0.0152	0.0250	0.0299	1	11/24/2019 21:03	WG1386339
Isopropylbenzene	U		0.00103	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
p-Isopropyltoluene	0.00674		0.00279	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
2-Butanone (MEK)	U		0.0150	0.0250	0.0299	1	11/24/2019 21:03	WG1386339
Methylene Chloride	U		0.00795	0.0250	0.0299	1	11/24/2019 21:03	WG1386339
4-Methyl-2-pentanone (MIBK)	U		0.0120	0.0250	0.0299	1	11/24/2019 21:03	WG1386339
Methyl tert-butyl ether	U		0.000353	0.00100	0.00120	1	11/24/2019 21:03	WG1386339
Naphthalene	U		0.00374	0.0125	0.0150	1	11/24/2019 21:03	WG1386339
n-Propylbenzene	U		0.00141	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
Styrene	U		0.00327	0.0125	0.0150	1	11/24/2019 21:03	WG1386339
1,1,1,2-Tetrachloroethane	U		0.000599	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
1,1,2,2-Tetrachloroethane	U		0.000467	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
1,1,2-Trichlorotrifluoroethane	U		0.000808	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
Tetrachloroethene	U		0.000838	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
Toluene	0.00389	J	0.00150	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
1,2,3-Trichlorobenzene	U		0.000749	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
1,2,4-Trichlorobenzene	U		0.00577	0.0125	0.0150	1	11/24/2019 21:03	WG1386339
1,1,1-Trichloroethane	U		0.000329	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
1,1,2-Trichloroethane	U		0.00106	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
Trichloroethene	U		0.000479	0.00100	0.00120	1	11/24/2019 21:03	WG1386339
Trichlorofluoromethane	U		0.000599	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
1,2,3-Trichloropropane	U		0.00611	0.0125	0.0150	1	11/24/2019 21:03	WG1386339
1,2,4-Trimethylbenzene	0.00181	B J	0.00139	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
1,2,3-Trimethylbenzene	U		0.00138	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
Vinyl chloride	U		0.000818	0.00250	0.00299	1	11/24/2019 21:03	WG1386339
1,3,5-Trimethylbenzene	U		0.00129	0.00500	0.00599	1	11/24/2019 21:03	WG1386339
Xylenes, Total	U		0.00572	0.00650	0.00778	1	11/24/2019 21:03	WG1386339
(S) Toluene-d8	*104*				*75.0-131*		*11/24/2019 21:03*	WG1386339
(S) 4-Bromofluorobenzene	*102*				*67.0-138*		*11/24/2019 21:03*	WG1386339
(S) 1,2-Dichloroethane-d4	*87.4*				*70.0-130*		*11/24/2019 21:03*	WG1386339

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.59	4.00	4.79	1	11/22/2019 12:46	WG1383996
Residual Range Organics (RRO)	8.87	J	3.99	10.0	12.0	1	11/22/2019 12:46	WG1383996
(S) o-Terphenyl	*65.0*				*18.0-148*		*11/22/2019 12:46*	WG1383996

WG1384251

Total Solids by Method 2540 G-2011

Method Blank (MB)

(MB) R3474871-1 11/21/19 09:43

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00300			

L1161283-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1161283-12 11/21/19 09:43 • (DUP) R3474871-3 11/21/19 09:43

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	86.9	85.8	1	1.24		10

Laboratory Control Sample (LCS)

(LCS) R3474871-2 11/21/19 09:43

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) R3474870-1 11/21/19 09:26

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1161400-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1161400-11 11/21/19 09:26 • (DUP) R3474870-3 11/21/19 09:26

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	93.4	93.0	1	0.407		10

Laboratory Control Sample (LCS)

(LCS) R3474870-2 11/21/19 09:26

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) R3474969-1 11/21/19 10:33

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1161400-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1161400-20 11/21/19 10:33 • (DUP) R3474969-3 11/21/19 10:33

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	83.5	83.7	1	0.251		10

Laboratory Control Sample (LCS)

(LCS) R3474969-2 11/21/19 10:33

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

WG1382816

Mercury by Method 7471A

QUALITY CONTROL SUMMARY

L1161400-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18

Method Blank (MB)

(MB) R3474051-1 11/20/19 09:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.00280	0.0300

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

(LCS) R3474051-2 11/20/19 09:02 • (LCSD) R3474051-3 11/20/19 09:05

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 %
Mercury	0.500	0.533	0.508	107	102	80.0-120			4.80	20

L1161400-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161400-08 11/20/19 09:07 • (MS) R3474051-4 11/20/19 09:09 • (MSD) R3474051-5 11/20/19 09:11

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 %
Mercury	0.548	0.0190	0.523	0.473	92.1	83.0	1	75.0-125			10.0	20

Method Blank (MB)

(MB) R3474355-1 11/20/19 18:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.00280	0.0300

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

(LCS) R3474355-2 11/20/19 18:15 • (LCSD) R3474355-3 11/20/19 18:17

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 %
Mercury	0.500	0.410	0.429	82.0	85.9	80.0-120			4.58	20

L1161500-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161500-01 11/20/19 18:19 • (MS) R3474355-4 11/20/19 18:21 • (MSD) R3474355-5 11/20/19 18:23

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 %
Mercury	0.633	0.0190	0.588	0.593	89.8	90.6	1	75.0-125			0.883	20

Method Blank (MB)

(MB) R3473955-1 11/20/19 01:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	0.188	J	0.120	1.00

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

(LCS) R3473955-2 11/20/19 01:15 • (LCSD) R3473955-3 11/20/19 01:18

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 %
Arsenic	100	92.0	92.5	92.0	92.5	80.0-120			0.543	20
Barium	100	94.6	95.4	94.6	95.4	80.0-120			0.796	20
Cadmium	100	93.4	94.3	93.4	94.3	80.0-120			0.920	20
Chromium	100	104	105	104	105	80.0-120			1.77	20
Lead	100	100	101	100	101	80.0-120			0.674	20
Selenium	100	92.2	92.4	92.2	92.4	80.0-120			0.177	20
Silver	20.0	18.9	19.2	94.5	95.9	80.0-120			1.52	20

L1161030-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161030-12 11/20/19 01:21 • (MS) R3473955-6 11/20/19 01:29 • (MSD) R3473955-7 11/20/19 01:31

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 %
Arsenic	133	1.56	127	131	94.1	96.8	1	75.0-125			2.86	20
Barium	133	225	365	360	105	101	1	75.0-125			1.40	20
Cadmium	133	0.928	133	136	98.8	101	1	75.0-125			2.63	20
Chromium	133	32.4	174	179	106	110	1	75.0-125			2.84	20
Lead	133	9.39	157	159	110	112	1	75.0-125			1.83	20
Selenium	133	U	125	131	94.0	97.8	1	75.0-125			4.05	20
Silver	26.7	0.784	28.1	28.8	102	105	1	75.0-125			2.67	20

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

Method Blank (MB)

(MB) R3474363-1 11/20/19 12:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	U		0.120	1.00

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

(LCS) R3474363-2 11/20/19 12:51 • (LCSD) R3474363-3 11/20/19 12:53

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Arsenic	100	97.4	97.5	97.4	97.5	80.0-120			0.194	20
Barium	100	106	106	106	106	80.0-120			0.00941	20
Cadmium	100	101	101	101	101	80.0-120			0.0608	20
Chromium	100	105	106	105	106	80.0-120			0.227	20
Lead	100	101	101	101	101	80.0-120			0.174	20
Selenium	100	101	100	101	100	80.0-120			0.515	20
Silver	20.0	19.2	19.2	95.8	96.0	80.0-120			0.218	20

L1161400-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161400-10 11/20/19 12:56 • (MS) R3474363-6 11/20/19 13:03 • (MSD) R3474363-7 11/20/19 13:06

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	116	4.73	114	109	94.5	90.4	1	75.0-125			4.22	20
Barium	116	85.3	213	224	110	120	1	75.0-125			5.36	20
Cadmium	116	0.218	114	110	98.7	94.6	1	75.0-125			4.24	20
Chromium	116	30.5	151	147	104	101	1	75.0-125			2.99	20
Lead	116	22.3	141	129	102	92.2	1	75.0-125			8.65	20
Selenium	116	U	112	108	96.8	93.5	1	75.0-125			3.55	20
Silver	23.1	U	22.2	21.2	96.0	91.8	1	75.0-125			4.52	20

Method Blank (MB)

(MB) R3474845-1 11/21/19 13:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	U		0.120	1.00

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

(LCS) R3474845-2 11/21/19 13:58 • (LCSD) R3474845-3 11/21/19 14:00

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Arsenic	100	98.9	95.5	98.9	95.5	80.0-120			3.51	20
Barium	100	102	100	102	100	80.0-120			1.41	20
Cadmium	100	96.1	94.7	96.1	94.7	80.0-120			1.49	20
Chromium	100	99.6	98.2	99.6	98.2	80.0-120			1.42	20
Lead	100	101	99.0	101	99.0	80.0-120			2.37	20
Selenium	100	99.2	96.2	99.2	96.2	80.0-120			3.05	20
Silver	20.0	18.7	18.4	93.7	91.9	80.0-120			1.91	20

L1161400-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161400-20 11/21/19 14:03 • (MS) R3474845-6 11/21/19 14:11 • (MSD) R3474845-7 11/21/19 14:14

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	120	3.52	125	123	101	100	1	75.0-125			1.09	20
Barium	120	82.9	184	205	84.2	102	1	75.0-125			11.0	20
Cadmium	120	0.227	122	121	102	100	1	75.0-125			1.19	20
Chromium	120	31.0	148	155	97.7	104	1	75.0-125			4.73	20
Lead	120	15.8	133	134	98.2	98.6	1	75.0-125			0.363	20
Selenium	120	U	123	121	102	101	1	75.0-125			1.00	20
Silver	24.0	U	23.5	23.1	98.2	96.6	1	75.0-125			1.64	20

Method Blank (MB)

(MB) R3475463-2 11/20/19 22:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	0.0457	J	0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*95.1*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3475463-1 11/20/19 21:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.29	96.2	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*105*	*77.0-120*	

Method Blank (MB)

(MB) R3475000-1 11/21/19 00:23

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)	*108*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3475000-2 11/21/19 01:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	4.87	88.5	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*113*	*77.0-120*	

L1161451-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161451-05 11/21/19 05:12 • (MS) R3475000-3 11/21/19 08:37 • (MSD) R3475000-4 11/21/19 08:58

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	129	ND	97.1	95.3	73.9	72.5	25	10.0-149			1.87	27
(S) a,a,a-Trifluorotoluene(FID)					*114*	*114*		*77.0-120*				

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

Method Blank (MB)

(MB) R3475225-3 11/22/19 13:45

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)	*99.3*			*77.0-120*

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

(LCS) R3475225-1 11/22/19 12:09 • (LCSD) R3475225-2 11/22/19 12:33

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 %
Gasoline Range Organics-NWTPH	5.50	6.16	5.70	112	104	71.0-124			7.76	20
(S) a,a,a-Trifluorotoluene(FID)				*109*	*108*	*77.0-120*				

Method Blank (MB)

(MB) R3475499-2 11/23/19 21:48

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250
p-Isopropyltoluene	U		0.00233	0.00500

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

Method Blank (MB)

(MB) R3475499-2 11/23/19 21:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
2-Butanone (MEK)	0.0297		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	0.00250
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 chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*102*			*75.0-131*
(S) 4-Bromofluorobenzene	*89.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*91.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3475499-1 11/23/19 20:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.480	76.8	10.0-160	
Acrylonitrile	0.625	0.497	79.5	45.0-153	
Benzene	0.125	0.124	99.2	70.0-123	
Bromobenzene	0.125	0.114	91.2	73.0-121	
Bromoform	0.125	0.0857	68.6	64.0-132	
Bromomethane	0.125	0.131	105	56.0-147	

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

Laboratory Control Sample (LCS)

(LCS) R3475499-1 11/23/19 20:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
n-Butylbenzene	0.125	0.154	123	68.0-135	
sec-Butylbenzene	0.125	0.134	107	74.0-130	
tert-Butylbenzene	0.125	0.116	92.8	75.0-127	
Carbon tetrachloride	0.125	0.104	83.2	66.0-128	
Chlorobenzene	0.125	0.0966	77.3	76.0-128	
Chlorodibromomethane	0.125	0.0973	77.8	74.0-127	
Chloroethane	0.125	0.137	110	61.0-134	
Chloroform	0.125	0.106	84.8	72.0-123	
Chloromethane	0.125	0.154	123	51.0-138	
2-Chlorotoluene	0.125	0.129	103	75.0-124	
4-Chlorotoluene	0.125	0.126	101	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.105	84.0	59.0-130	
1,2-Dibromoethane	0.125	0.0930	74.4	74.0-128	
Dibromomethane	0.125	0.101	80.8	75.0-122	
1,2-Dichlorobenzene	0.125	0.105	84.0	76.0-124	
1,3-Dichlorobenzene	0.125	0.121	96.8	76.0-125	
1,4-Dichlorobenzene	0.125	0.107	85.6	77.0-121	
Dichlorodifluoromethane	0.125	0.148	118	43.0-156	
1,1-Dichloroethane	0.125	0.0960	76.8	70.0-127	
1,2-Dichloroethane	0.125	0.105	84.0	65.0-131	
1,1-Dichloroethene	0.125	0.116	92.8	65.0-131	
cis-1,2-Dichloroethene	0.125	0.113	90.4	73.0-125	
trans-1,2-Dichloroethene	0.125	0.122	97.6	71.0-125	
1,2-Dichloropropane	0.125	0.106	84.8	74.0-125	
1,1-Dichloropropene	0.125	0.104	83.2	73.0-125	
1,3-Dichloropropane	0.125	0.105	84.0	80.0-125	
cis-1,3-Dichloropropene	0.125	0.109	87.2	76.0-127	
trans-1,3-Dichloropropene	0.125	0.107	85.6	73.0-127	
2,2-Dichloropropane	0.125	0.128	102	59.0-135	
Di-isopropyl ether	0.125	0.114	91.2	60.0-136	
Ethylbenzene	0.125	0.0964	77.1	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.129	103	57.0-150	
Isopropylbenzene	0.125	0.101	80.8	72.0-127	
p-Isopropyltoluene	0.125	0.127	102	72.0-133	
2-Butanone (MEK)	0.625	0.523	83.7	30.0-160	
Methylene Chloride	0.125	0.0766	61.3	68.0-123	J4
4-Methyl-2-pentanone (MIBK)	0.625	0.576	92.2	56.0-143	
Methyl tert-butyl ether	0.125	0.111	88.8	66.0-132	
Naphthalene	0.125	0.115	92.0	59.0-130	
n-Propylbenzene	0.125	0.137	110	74.0-126	

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

Laboratory Control Sample (LCS)

(LCS) R3475499-1 11/23/19 20:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Styrene	0.125	0.0861	68.9	72.0-127	J4
1,1,1,2-Tetrachloroethane	0.125	0.103	82.4	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.136	109	68.0-128	
Tetrachloroethene	0.125	0.100	80.0	70.0-136	
Toluene	0.125	0.105	84.0	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.111	88.8	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.145	116	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.141	113	62.0-137	
1,1,1-Trichloroethane	0.125	0.124	99.2	69.0-126	
1,1,2-Trichloroethane	0.125	0.107	85.6	78.0-123	
Trichloroethene	0.125	0.108	86.4	76.0-126	
Trichlorofluoromethane	0.125	0.112	89.6	61.0-142	
1,2,3-Trichloropropane	0.125	0.121	96.8	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.112	89.6	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.118	94.4	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.119	95.2	73.0-127	
Vinyl chloride	0.125	0.139	111	63.0-134	
Xylenes, Total	0.375	0.292	77.9	72.0-127	
(S) Toluene-d8			*99.9*	*75.0-131*	
(S) 4-Bromofluorobenzene			*90.3*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*96.5*	*70.0-130*	

L1161032-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161032-01 11/24/19 03:36 • (MS) R3475499-3 11/24/19 06:07 • (MSD) R3475499-4 11/24/19 06:25

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	0.714	ND	0.353	0.320	49.4	44.8	1	10.0-160			9.85	40
Acrylonitrile	0.714	ND	0.621	0.566	87.0	79.2	1	10.0-160			9.43	40
Benzene	0.143	ND	0.142	0.136	99.2	95.2	1	10.0-149			4.12	37
Bromobenzene	0.143	ND	0.128	0.115	89.6	80.8	1	10.0-156			10.3	38
Bromoform	0.143	ND	0.0859	0.0747	60.2	52.3	1	10.0-146			13.9	36
Bromomethane	0.143	ND	0.117	0.118	81.6	82.4	1	10.0-149			0.976	38
n-Butylbenzene	0.143	ND	0.181	0.174	126	122	1	10.0-160			3.87	40
sec-Butylbenzene	0.143	ND	0.159	0.150	111	105	1	10.0-159			5.93	39
tert-Butylbenzene	0.143	ND	0.133	0.125	92.8	87.2	1	10.0-156			6.22	39
Carbon tetrachloride	0.143	ND	0.127	0.117	88.8	81.6	1	10.0-145			8.45	37
Chlorobenzene	0.143	ND	0.109	0.104	76.2	73.0	1	10.0-152			4.29	39
Chlorodibromomethane	0.143	ND	0.0938	0.0922	65.7	64.6	1	10.0-146			1.72	37

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

L1161032-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161032-01 11/24/19 03:36 • (MS) R3475499-3 11/24/19 06:07 • (MSD) R3475499-4 11/24/19 06:25

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloroethane	0.143	ND	0.128	0.115	89.6	80.8	1	10.0-146			10.3	40
Chloroform	0.143	ND	0.120	0.110	84.0	77.0	1	10.0-146			8.75	37
Chloromethane	0.143	ND	0.199	0.183	139	128	1	10.0-159			8.38	37
2-Chlorotoluene	0.143	ND	0.146	0.134	102	93.6	1	10.0-159			8.98	38
4-Chlorotoluene	0.143	ND	0.147	0.135	103	94.4	1	10.0-155			8.91	39
1,2-Dibromo-3-Chloropropane	0.143	ND	0.0882	0.0866	61.8	60.6	1	10.0-151			1.83	39
1,2-Dibromoethane	0.143	ND	0.0930	0.0885	65.1	62.0	1	10.0-148			4.91	34
Dibromomethane	0.143	ND	0.0996	0.0944	69.8	66.1	1	10.0-147			5.42	35
1,2-Dichlorobenzene	0.143	ND	0.115	0.111	80.8	77.9	1	10.0-155			3.63	37
1,3-Dichlorobenzene	0.143	ND	0.127	0.125	88.8	87.2	1	10.0-153			1.82	38
1,4-Dichlorobenzene	0.143	ND	0.118	0.112	82.4	78.2	1	10.0-151			5.18	38
Dichlorodifluoromethane	0.143	ND	0.193	0.176	135	123	1	10.0-160			9.29	35
1,1-Dichloroethane	0.143	ND	0.119	0.111	83.2	77.6	1	10.0-147			6.97	37
1,2-Dichloroethane	0.143	ND	0.113	0.109	79.4	76.6	1	10.0-148			3.59	35
1,1-Dichloroethene	0.143	ND	0.157	0.154	110	108	1	10.0-155			1.47	37
cis-1,2-Dichloroethene	0.143	ND	0.133	0.122	92.8	85.6	1	10.0-149			8.07	37
trans-1,2-Dichloroethene	0.143	ND	0.154	0.141	108	98.4	1	10.0-150			9.30	37
1,2-Dichloropropane	0.143	ND	0.117	0.115	81.6	80.8	1	10.0-148			0.985	37
1,1-Dichloropropene	0.143	ND	0.122	0.114	85.6	79.5	1	10.0-153			7.36	35
1,3-Dichloropropane	0.143	ND	0.108	0.105	75.6	73.5	1	10.0-154			2.79	35
cis-1,3-Dichloropropene	0.143	ND	0.113	0.107	78.9	75.2	1	10.0-151			4.78	37
trans-1,3-Dichloropropene	0.143	ND	0.103	0.104	72.2	72.7	1	10.0-148			0.773	37
2,2-Dichloropropane	0.143	ND	0.122	0.123	85.6	86.4	1	10.0-138			0.930	36
Di-isopropyl ether	0.143	ND	0.137	0.125	96.0	87.2	1	10.0-147			9.61	36
Ethylbenzene	0.143	ND	0.106	0.104	74.4	72.6	1	10.0-160			2.39	38
Hexachloro-1,3-butadiene	0.143	ND	0.154	0.159	108	111	1	10.0-160			2.92	40
Isopropylbenzene	0.143	ND	0.113	0.109	79.0	76.5	1	10.0-155			3.19	38
p-Isopropyltoluene	0.143	ND	0.143	0.138	100	96.8	1	10.0-160			3.25	40
2-Butanone (MEK)	0.714	ND	0.474	0.398	63.0	52.3	1	10.0-160			17.6	40
Methylene Chloride	0.143	ND	0.166	0.169	116	118	1	10.0-141			2.05	37
4-Methyl-2-pentanone (MIBK)	0.714	ND	0.544	0.504	76.2	70.6	1	10.0-160			7.63	35
Methyl tert-butyl ether	0.143	ND	0.146	0.126	102	88.0	1	11.0-147			15.1	35
Naphthalene	0.143	ND	0.104	0.105	72.5	73.8	1	10.0-160			1.86	36
n-Propylbenzene	0.143	ND	0.159	0.152	111	106	1	10.0-158			4.41	38
Styrene	0.143	ND	0.0896	0.0850	62.7	59.5	1	10.0-160			5.24	40
1,1,1,2-Tetrachloroethane	0.143	ND	0.112	0.106	78.2	73.9	1	10.0-149			5.68	39
1,1,2,2-Tetrachloroethane	0.143	ND	0.142	0.130	99.2	91.2	1	10.0-160			8.40	35
Tetrachloroethene	0.143	ND	0.123	0.114	86.4	80.0	1	10.0-156			7.69	39
Toluene	0.143	ND	0.128	0.125	87.2	84.8	1	10.0-156			2.71	38

L1161032-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161032-01 11/24/19 03:36 • (MS) R3475499-3 11/24/19 06:07 • (MSD) R3475499-4 11/24/19 06:25

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
1,1,2-Trichlorotrifluoroethane	0.143	ND	0.147	0.146	103	102	1	10.0-160			0.778	36
1,2,3-Trichlorobenzene	0.143	ND	0.133	0.135	92.8	94.4	1	10.0-160			1.71	40
1,2,4-Trichlorobenzene	0.143	ND	0.129	0.136	90.4	95.2	1	10.0-160			5.17	40
1,1,1-Trichloroethane	0.143	ND	0.157	0.145	110	102	1	10.0-144			7.58	35
1,1,2-Trichloroethane	0.143	ND	0.108	0.105	75.8	73.2	1	10.0-160			3.54	35
Trichloroethene	0.143	ND	0.125	0.120	87.2	84.0	1	10.0-156			3.74	38
Trichlorofluoromethane	0.143	ND	0.129	0.125	90.4	87.2	1	10.0-160			3.60	40
1,2,3-Trichloropropane	0.143	ND	0.127	0.117	88.8	81.6	1	10.0-156			8.45	35
1,2,3-Trimethylbenzene	0.143	ND	0.127	0.118	88.8	82.4	1	10.0-160			7.48	36
1,2,4-Trimethylbenzene	0.143	ND	0.133	0.125	92.8	87.2	1	10.0-160			6.22	36
1,3,5-Trimethylbenzene	0.143	ND	0.138	0.131	96.8	92.0	1	10.0-160			5.08	38
Vinyl chloride	0.143	ND	0.182	0.171	127	120	1	10.0-160			5.83	37
Xylenes, Total	0.428	ND	0.326	0.313	76.0	73.1	1	10.0-160			3.94	38
(S) Toluene-d8					*101*	*101*		*75.0-131*				
(S) 4-Bromofluorobenzene					*88.8*	*88.4*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*95.8*	*95.4*		*70.0-130*				

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

Method Blank (MB)

(MB) R3475744-2 11/24/19 23:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Bromodichloromethane	U		0.000788	0.00250
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*99.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3475744-1 11/24/19 21:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromodichloromethane	0.125	0.138	110	73.0-121	
(S) Toluene-d8			*98.9*	*75.0-131*	
(S) 4-Bromofluorobenzene			*101*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*109*	*70.0-130*	

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

Method Blank (MB)

(MB) R3475845-3 11/24/19 10:20

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3475845-3 11/24/19 10:20

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0344		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	0.00250
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	0.00190	J	0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*88.6*			*70.0-130*

Method Blank (MB) - TENTATIVELY IDENTIFIED COMPOUNDS

(MB) R3475845-3 11/24/19 10:20

	MB Result	MB Qualifier	MB MDL	MB RDL	CAS #
Analyte	mg/kg		mg/kg	mg/kg	

Number of TICs found: 0

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

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

(LCS) R3475845-1 11/24/19 08:55 • (LCSD) R3475845-2 11/24/19 09:16

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	0.379	0.368	60.6	58.9	10.0-160			2.95	31
Acrylonitrile	0.625	0.491	0.498	78.6	79.7	45.0-153			1.42	22
Benzene	0.125	0.113	0.109	90.4	87.2	70.0-123			3.60	20
Bromobenzene	0.125	0.113	0.112	90.4	89.6	73.0-121			0.889	20
Bromodichloromethane	0.125	0.116	0.119	92.8	95.2	73.0-121			2.55	20
Bromoform	0.125	0.121	0.121	96.8	96.8	64.0-132			0.000	20
Bromomethane	0.125	0.109	0.109	87.2	87.2	56.0-147			0.000	20
n-Butylbenzene	0.125	0.114	0.114	91.2	91.2	68.0-135			0.000	20
sec-Butylbenzene	0.125	0.118	0.118	94.4	94.4	74.0-130			0.000	20
tert-Butylbenzene	0.125	0.120	0.116	96.0	92.8	75.0-127			3.39	20
Carbon tetrachloride	0.125	0.123	0.116	98.4	92.8	66.0-128			5.86	20
Chlorobenzene	0.125	0.119	0.115	95.2	92.0	76.0-128			3.42	20
Chlorodibromomethane	0.125	0.131	0.129	105	103	74.0-127			1.54	20
Chloroethane	0.125	0.0996	0.102	79.7	81.6	61.0-134			2.38	20
Chloroform	0.125	0.113	0.106	90.4	84.8	72.0-123			6.39	20
Chloromethane	0.125	0.0996	0.0966	79.7	77.3	51.0-138			3.06	20
2-Chlorotoluene	0.125	0.112	0.109	89.6	87.2	75.0-124			2.71	20
4-Chlorotoluene	0.125	0.113	0.111	90.4	88.8	75.0-124			1.79	20
1,2-Dibromo-3-Chloropropane	0.125	0.0932	0.0863	74.6	69.0	59.0-130			7.69	20
1,2-Dibromoethane	0.125	0.129	0.125	103	100	74.0-128			3.15	20
Dibromomethane	0.125	0.117	0.113	93.6	90.4	75.0-122			3.48	20
1,2-Dichlorobenzene	0.125	0.122	0.117	97.6	93.6	76.0-124			4.18	20
1,3-Dichlorobenzene	0.125	0.121	0.116	96.8	92.8	76.0-125			4.22	20
1,4-Dichlorobenzene	0.125	0.119	0.113	95.2	90.4	77.0-121			5.17	20
Dichlorodifluoromethane	0.125	0.132	0.121	106	96.8	43.0-156			8.70	20
1,1-Dichloroethane	0.125	0.113	0.111	90.4	88.8	70.0-127			1.79	20
1,2-Dichloroethane	0.125	0.108	0.107	86.4	85.6	65.0-131			0.930	20
1,1-Dichloroethene	0.125	0.113	0.112	90.4	89.6	65.0-131			0.889	20
cis-1,2-Dichloroethene	0.125	0.117	0.114	93.6	91.2	73.0-125			2.60	20
trans-1,2-Dichloroethene	0.125	0.110	0.110	88.0	88.0	71.0-125			0.000	20
1,2-Dichloropropane	0.125	0.109	0.108	87.2	86.4	74.0-125			0.922	20
1,1-Dichloropropene	0.125	0.112	0.110	89.6	88.0	73.0-125			1.80	20
1,3-Dichloropropane	0.125	0.123	0.120	98.4	96.0	80.0-125			2.47	20
cis-1,3-Dichloropropene	0.125	0.109	0.105	87.2	84.0	76.0-127			3.74	20
trans-1,3-Dichloropropene	0.125	0.108	0.105	86.4	84.0	73.0-127			2.82	20
2,2-Dichloropropane	0.125	0.123	0.131	98.4	105	59.0-135			6.30	20
Di-isopropyl ether	0.125	0.107	0.103	85.6	82.4	60.0-136			3.81	20
Ethylbenzene	0.125	0.118	0.112	94.4	89.6	74.0-126			5.22	20
Hexachloro-1,3-butadiene	0.125	0.118	0.120	94.4	96.0	57.0-150			1.68	20
Isopropylbenzene	0.125	0.117	0.112	93.6	89.6	72.0-127			4.37	20

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

(LCS) R3475845-1 11/24/19 08:55 • (LCSD) R3475845-2 11/24/19 09:16

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
p-Isopropyltoluene	0.125	0.121	0.119	96.8	95.2	72.0-133			1.67	20
2-Butanone (MEK)	0.625	0.481	0.481	77.0	77.0	30.0-160			0.000	24
Methylene Chloride	0.125	0.110	0.108	88.0	86.4	68.0-123			1.83	20
4-Methyl-2-pentanone (MIBK)	0.625	0.487	0.477	77.9	76.3	56.0-143			2.07	20
Methyl tert-butyl ether	0.125	0.106	0.101	84.8	80.8	66.0-132			4.83	20
Naphthalene	0.125	0.0801	0.0777	64.1	62.2	59.0-130			3.04	20
n-Propylbenzene	0.125	0.112	0.107	89.6	85.6	74.0-126			4.57	20
Styrene	0.125	0.121	0.113	96.8	90.4	72.0-127			6.84	20
1,1,1,2-Tetrachloroethane	0.125	0.131	0.130	105	104	74.0-129			0.766	20
1,1,2,2-Tetrachloroethane	0.125	0.110	0.108	88.0	86.4	68.0-128			1.83	20
Tetrachloroethene	0.125	0.128	0.122	102	97.6	70.0-136			4.80	20
Toluene	0.125	0.117	0.115	93.6	92.0	75.0-121			1.72	20
1,1,2-Trichlorotrifluoroethane	0.125	0.114	0.114	91.2	91.2	61.0-139			0.000	20
1,2,3-Trichlorobenzene	0.125	0.0922	0.0864	73.8	69.1	59.0-139			6.49	20
1,2,4-Trichlorobenzene	0.125	0.108	0.104	86.4	83.2	62.0-137			3.77	20
1,1,1-Trichloroethane	0.125	0.118	0.115	94.4	92.0	69.0-126			2.58	20
1,1,2-Trichloroethane	0.125	0.129	0.125	103	100	78.0-123			3.15	20
Trichloroethene	0.125	0.123	0.122	98.4	97.6	76.0-126			0.816	20
Trichlorofluoromethane	0.125	0.109	0.104	87.2	83.2	61.0-142			4.69	20
1,2,3-Trichloropropane	0.125	0.117	0.114	93.6	91.2	67.0-129			2.60	20
1,2,3-Trimethylbenzene	0.125	0.114	0.113	91.2	90.4	74.0-124			0.881	20
1,2,4-Trimethylbenzene	0.125	0.119	0.116	95.2	92.8	70.0-126			2.55	20
1,3,5-Trimethylbenzene	0.125	0.116	0.115	92.8	92.0	73.0-127			0.866	20
Vinyl chloride	0.125	0.106	0.103	84.8	82.4	63.0-134			2.87	20
Xylenes, Total	0.375	0.344	0.332	91.7	88.5	72.0-127			3.55	20
(S) Toluene-d8				*100*	*99.1*	*75.0-131*				
(S) 4-Bromofluorobenzene				*97.1*	*95.6*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*93.4*	*93.1*	*70.0-130*				

L1161400-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161400-18 11/24/19 22:29 • (MS) R3475845-4 11/24/19 11:41 • (MSD) R3475845-5 11/24/19 12:02

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Acetone	11.5	U	3.94	4.02	34.2	34.9	20	10.0-160			1.97	40
Acrylonitrile	11.5	U	8.24	8.42	71.5	73.0	20	10.0-160			2.15	40
Benzene	2.29	U	1.86	1.90	81.0	82.9	20	10.0-149			2.38	37
Bromobenzene	2.29	U	1.80	1.91	78.5	83.4	20	10.0-156			6.02	38
Bromodichloromethane	2.29	U	2.07	2.17	90.2	94.6	20	10.0-143			4.75	37

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

L1161400-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161400-18 11/24/19 22:29 • (MS) R3475845-4 11/24/19 11:41 • (MSD) R3475845-5 11/24/19 12:02

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Bromoform	2.29	U	2.13	2.08	92.7	90.7	20	10.0-146			2.13	36
Bromomethane	2.29	U	1.82	1.72	79.5	75.1	20	10.0-149			5.68	38
n-Butylbenzene	2.29	U	2.08	2.34	90.7	102	20	10.0-160			11.6	40
sec-Butylbenzene	2.29	U	2.41	2.61	105	114	20	10.0-159			8.04	39
tert-Butylbenzene	2.29	U	2.15	2.36	93.7	103	20	10.0-156			9.43	39
Carbon tetrachloride	2.29	U	2.21	2.26	96.1	98.5	20	10.0-145			2.51	37
Chlorobenzene	2.29	U	2.06	2.06	89.8	89.8	20	10.0-152			0.000	39
Chlorodibromomethane	2.29	U	2.28	2.29	99.5	100	20	10.0-146			0.489	37
Chloroethane	2.29	U	1.91	1.88	83.4	82.0	20	10.0-146			1.77	40
Chloroform	2.29	U	1.95	1.99	84.9	86.8	20	10.0-146			2.27	37
Chloromethane	2.29	U	1.31	1.35	57.1	59.0	20	10.0-159			3.36	37
2-Chlorotoluene	2.29	U	1.82	1.99	79.5	86.8	20	10.0-159			8.80	38
4-Chlorotoluene	2.29	U	1.88	2.03	82.0	88.3	20	10.0-155			7.45	39
1,2-Dibromo-3-Chloropropane	2.29	U	1.46	1.43	63.4	62.4	20	10.0-151			1.55	39
1,2-Dibromoethane	2.29	U	2.03	2.03	88.3	88.3	20	10.0-148			0.000	34
Dibromomethane	2.29	U	1.93	1.93	83.9	83.9	20	10.0-147			0.000	35
1,2-Dichlorobenzene	2.29	U	1.98	2.14	86.3	93.2	20	10.0-155			7.61	37
1,3-Dichlorobenzene	2.29	U	2.04	2.17	88.8	94.6	20	10.0-153			6.38	38
1,4-Dichlorobenzene	2.29	U	1.98	2.12	86.3	92.2	20	10.0-151			6.56	38
Dichlorodifluoromethane	2.29	U	2.25	2.31	98.0	100	20	10.0-160			2.46	35
1,1-Dichloroethane	2.29	U	1.94	2.02	84.4	87.8	20	10.0-147			3.97	37
1,2-Dichloroethane	2.29	U	1.78	1.82	77.6	79.5	20	10.0-148			2.48	35
1,1-Dichloroethene	2.29	U	2.10	2.07	91.7	90.2	20	10.0-155			1.61	37
cis-1,2-Dichloroethene	2.29	U	1.99	1.98	86.8	86.3	20	10.0-149			0.563	37
trans-1,2-Dichloroethene	2.29	U	1.81	1.82	79.0	79.5	20	10.0-150			0.615	37
1,2-Dichloropropane	2.29	U	1.90	1.98	82.9	86.3	20	10.0-148			4.03	37
1,1-Dichloropropene	2.29	U	2.00	2.02	87.3	87.8	20	10.0-153			0.557	35
1,3-Dichloropropane	2.29	U	2.00	2.07	87.3	90.2	20	10.0-154			3.30	35
cis-1,3-Dichloropropene	2.29	U	1.86	1.91	81.0	83.4	20	10.0-151			2.97	37
trans-1,3-Dichloropropene	2.29	U	1.80	1.86	78.5	81.0	20	10.0-148			3.06	37
2,2-Dichloropropane	2.29	U	2.74	2.81	120	122	20	10.0-138			2.42	36
Di-isopropyl ether	2.29	U	1.81	1.86	79.0	81.0	20	10.0-147			2.44	36
Ethylbenzene	2.29	U	2.07	2.15	90.2	93.7	20	10.0-160			3.71	38
Hexachloro-1,3-butadiene	2.29	U	2.38	2.60	104	113	20	10.0-160			8.54	40
Isopropylbenzene	2.29	U	2.22	2.28	96.6	99.5	20	10.0-155			2.99	38
p-Isopropyltoluene	2.29	10.9	11.8	12.6	35.6	74.6	20	10.0-160			7.34	40
2-Butanone (MEK)	11.5	U	3.77	3.62	32.7	31.4	20	10.0-160			4.24	40
Methylene Chloride	2.29	U	1.80	1.77	78.5	77.1	20	10.0-141			1.88	37
4-Methyl-2-pentanone (MIBK)	11.5	U	7.63	8.03	66.2	69.6	20	10.0-160			5.00	35

L1161400-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161400-18 11/24/19 22:29 • (MS) R3475845-4 11/24/19 11:41 • (MSD) R3475845-5 11/24/19 12:02

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Methyl tert-butyl ether	2.29	U	1.66	1.74	72.2	75.6	20	11.0-147			4.62	35
Naphthalene	2.29	U	1.23	1.41	15.7	23.5	20	10.0-160			13.6	36
n-Propylbenzene	2.29	U	1.90	2.08	82.9	90.7	20	10.0-158			8.99	38
Styrene	2.29	U	1.96	1.97	85.4	85.9	20	10.0-160			0.570	40
1,1,1,2-Tetrachloroethane	2.29	U	2.38	2.37	104	103	20	10.0-149			0.471	39
1,1,2,2-Tetrachloroethane	2.29	U	1.82	1.95	79.5	84.9	20	10.0-160			6.53	35
Tetrachloroethene	2.29	U	2.18	2.16	95.1	94.1	20	10.0-156			1.03	39
Toluene	2.29	0.0366	2.06	2.07	88.2	88.6	20	10.0-156			0.542	38
1,1,2-Trichlorotrifluoroethane	2.29	U	2.38	2.27	104	99.0	20	10.0-160			4.81	36
1,2,3-Trichlorobenzene	2.29	U	1.26	1.58	55.1	68.8	20	10.0-160			22.0	40
1,2,4-Trichlorobenzene	2.29	U	1.65	2.02	71.7	87.8	20	10.0-160			20.2	40
1,1,1-Trichloroethane	2.29	U	2.17	2.19	94.6	95.6	20	10.0-144			1.03	35
1,1,2-Trichloroethane	2.29	U	2.25	2.23	98.0	97.1	20	10.0-160			1.00	35
Trichloroethene	2.29	U	2.02	2.05	87.8	89.3	20	10.0-156			1.65	38
Trichlorofluoromethane	2.29	U	2.28	2.28	99.5	99.5	20	10.0-160			0.000	40
1,2,3-Trichloropropane	2.29	U	1.89	1.97	82.4	85.9	20	10.0-156			4.06	35
1,2,3-Trimethylbenzene	2.29	0.0279	2.32	2.53	99.8	109	20	10.0-160			8.78	36
1,2,4-Trimethylbenzene	2.29	0.349	2.29	2.46	84.8	92.1	20	10.0-160			7.06	36
1,3,5-Trimethylbenzene	2.29	U	1.96	2.07	85.4	90.2	20	10.0-160			5.56	38
Vinyl chloride	2.29	U	1.53	1.62	66.8	70.7	20	10.0-160			5.67	37
Xylenes, Total	6.88	U	6.10	6.19	88.6	89.9	20	10.0-160			1.46	38
(S) Toluene-d8					*102*	*99.2*		*75.0-131*				
(S) 4-Bromofluorobenzene					*101*	*101*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*92.5*	*93.0*		*70.0-130*				

Sample Narrative:

OS: Target compounds too high to run at a lower dilution.

Method Blank (MB)

(MB) R3476083-2 11/25/19 11:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Naphthalene	U		0.00312	0.0125
(S) Toluene-d8	*104*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*

Method Blank (MB) - TENTATIVELY IDENTIFIED COMPOUNDS

(MB) R3476083-2 11/25/19 11:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg	CAS #

Number of TICs found: 0

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Laboratory Control Sample (LCS)

(LCS) R3476083-1 11/25/19 09:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.0965	77.2	59.0-130	
(S) Toluene-d8			*99.2*	*75.0-131*	
(S) 4-Bromofluorobenzene			*104*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*113*	*70.0-130*	

WG1383230

QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

L1161400-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18

Method Blank (MB)

(MB) R3474835-1 11/21/19 18:14

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	*69.1*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3474835-2 11/21/19 18:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	36.3	72.6	50.0-150	
(S) o-Terphenyl			*92.0*	*18.0-148*	

Method Blank (MB)

(MB) R3474836-1 11/21/19 18:40

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	*66.8*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3474836-2 11/21/19 18:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	35.4	70.8	50.0-150	
(S) o-Terphenyl			*68.6*	*18.0-148*	

L1161400-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161400-19 11/22/19 03:15 • (MS) R3474836-3 11/22/19 03:28 • (MSD) R3474836-4 11/22/19 03:41

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)	60.7	12.1	52.2	60.8	66.0	80.2	1	50.0-150			15.3	20
(S) o-Terphenyl					*45.5*	*52.6*		*18.0-148*				

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

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
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.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

Qualifier	Description
N	The analyte is tentatively identified and the associated numerical value may not be consistent with the actual concentration present in the sample.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

ACCREDITATIONS & LOCATIONS

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

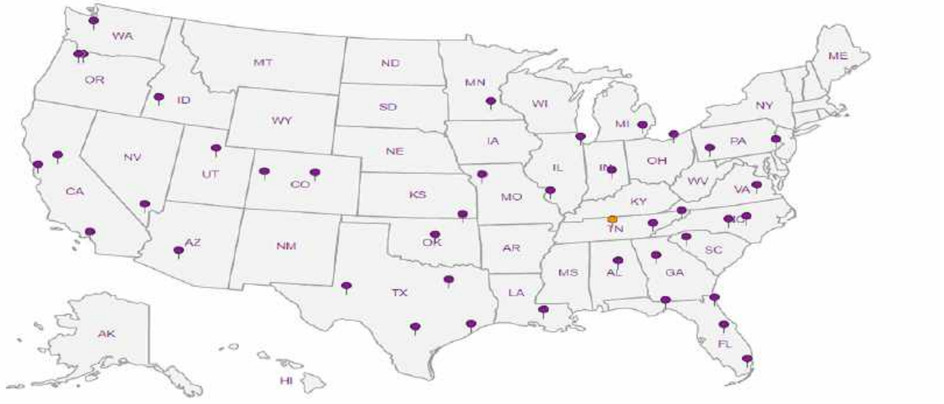
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 1 of 10

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: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

SDG # 1161400

Table #

Collected by (print): TIM CRUMP

Site/Facility ID #

P.O. # **8657**

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P739844**

PM: 134 - Mark W. Beasley

PB:

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

Quote #

Date Results Needed

Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-13(0-1)	Grab	SS	0-1	11/13/19	0811	3	X	X	X		X		01
SB-13(1-2)	Grab	SS	1-2	11/13/19	0812	3						Hold	
SB-13(2-3)	Grab	SS	2-3	11/13/19	0813	3	X	X	X		X		02
SB-13(3-4)	Grab	SS	3-4	11/13/19	0814	3						Hold	
SB-13(4-6)	Grab	SS	4-6	11/13/19	0815	3	X	X	X		X		03
SB-13(6-8)	Grab	SS	6-8	11/13/19	0816	3						Hold	
SB-13(8-9)	Grab	SS	8-9	11/13/19	0817	3	X	X	X		X		04
SB-13(9-10)	Grab	SS	9-10	11/13/19	0818	3						Hold	
SB-14(0-1)	Grab	SS	0-1	11/13/19	0946	3	X	X	X		X		05
SB-14(1-2)	Grab	SS	1-2	11/13/19	0947	3						Hold	

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

Remarks:
4510 1661 9352/ 9885/9841/9874/ 9856/9863/9900

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: 11/14/19	Time: 1400	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 11-14	Time: 1700	Received by: (Signature)	Temp: [illegible] °C 0.1+.2=0.3	Bottles Received: 286
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/19	Time: 830

11-106
11-107
11-108
11-109

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 2 of 10

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: **Kristi Barnette**

Email To: **kristib@tgeresources.com**, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): TIM CRUMP

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N___ Y [✓]

SDG # 1161406
Table #
Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-14(2-3)	Grab	SS	2-3	11/13/19	0948	3	X	X	X		X		06
SB-14(3-4)	Grab	SS	3-4	11/13/19	0949	3						Hold	
SB-14(6-8)	Grab	SS	6-8	11/13/19	0950	3						Hold	
SB-14(10-12)	Grab	SS	10-12	11/13/19	0951	3	X	X	X		X		07
SB-14A(0-1)	Grab	SS	0-1	11/13/19	0850	3						Hold	
SB-14A(1-2)	Grab	SS	1-2	11/13/19	0851	3						Hold	
SB-14A(2-3)	Grab	SS	2-3	11/13/19	0852	3						Hold	
SB-14A(3-4)	Grab	SS	3-4	11/13/19	0853	3						Hold	
SB-14A(6-8)	Grab	SS	6-8	11/13/19	0854	3						Hold	
SB-14A(10-12)	Grab	SS	10-12	11/13/19	0855	3						Hold	

* 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: 11/14/19	Time: 1400	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11-14	Time: 1700	Received by: (Signature)	Temp: AS °C 0.1+.2=0.3 Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

11-110

Condition: NCF / [✓ OK]

TGE Resources 8048 Northcourt Road Houston, TX 77040	Billing Information: Accounts Payable 8048 Northcourt Road Houston, TX 77040	Pres Chk	Chain of Custody Page 3 of 10 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: Kristi Barnette	Email To: kristib@tgeresources.com, tecrump@tgeresources.com		SDG # L1161400
Project Description: Future Federal Way Hospital	City/State Collected: Federal Way, WA	Please Circle: [✓ PT] MT CT ET	Table #
Phone: 713-744-5800 Fax: 713-744-5888	Client Project # R13411.07	Lab Project # TGERESHTX-R13411	Acctnum: TGERESHTX
Collected by (print): TIM CRUMP	Site/Facility ID #	P.O. # 8657	Template: T158754
Collected by (signature):	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	Prelogin: P739844 PM: 134 - Mark W. Beasley PB:
Immediately Packed on Ice N ___ Y X			Shipped Via: FedEX Standard

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-14B(0-1)	Grab	SS	0-1	11/13/19	1034	3											Hold	
SB-14B(1-2)	Grab	SS	1-2	11/13/19	1035	3											Hold	
SB-14B(2-3)	Grab	SS	2-3	11/13/19	1036	3											Hold	
SB-14B(3-4)	Grab	SS	3-4	11/13/19	1037	3											Hold	
SB-14B(6-8)	Grab	SS	6-8	11/13/19	1038	3											Hold	
SB-14B(14-15)	Grab	SS	14-15	11/13/19	1039	3											Hold	
SB-14C(0-1)	Grab	SS	0-1	11/13/19	0920	3											Hold	
SB-14C(1-2)	Grab	SS	1-2	11/13/19	0921	3											Hold	
SB-14C(2-3)	Grab	SS	2-3	11/13/19	0922	3											Hold	
SB-14C(3-4)	Grab	SS	3-4	11/13/19	0923	3											Hold	

* 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: 11/14/19	Time: 1240	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 11-14	Time: 1720	Received by: (Signature)	Temp: AS °C .1+.2=.3	Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Harley M	Date: 11/15/19	Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
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Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 4 of 10

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

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Site/Facility ID #

P.O. # **8657**

Quote #

Collected by (print): Tim Crump

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

SDG # 1161400

Table #

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P739844**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr							Remarks	Sample # (lab only)
SB-14C(6-8)	Grab	SS	6-8	0924	11/13/19	3												Hold	
SB-14C(10-12)	Grab	SS	10-12	0925	11/13/19	3												Hold	
SB-14D(0-1)	Grab	SS	0-1	11/13/19	1008	3												Hold	
SB-14D(1-2)	Grab	SS	1-2	11/13/19	1009	3												Hold	
SB-14D(2-3)	Grab	SS	2-3	11/13/19	1010	3												Hold	
SB-14D(3-4)	Grab	SS	3-4	11/13/19	1011	3												Hold	
SB-14D(6-8)	Grab	SS	6-8	11/13/19	1012	3												Hold	
SB-14D(14-15)	Grab	SS	14-15	11/13/19	1013	3												Hold	
SB-16(0-1)	Grab	SS	0-1	11/13/19	1230	3	X	X	X		X								08
SB-16(1-2)	Grab	SS	1-2	11/13/19	1231	3												Hold	

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

Remarks:

pH ______ Temp ______

Flow ______ Other ______

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

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking #

Relinquished by : (Signature)
Date: 11/14/19
Time: 1400
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
S
[✓ HCl] / MeoH
TBR

Relinquished by : (Signature)
Date: 11-14
Time: 1700
Received by: (Signature)

Temp: 4.5 °C
a1+a2=0.3
Bottles Received: 285

If preservation required by Login: Date/Time

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

Date: 11/15/19
Time: 830

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
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Houston, TX 77040

Pres Chk

Chain of Custody Page 5 of 10

Pace Analytical®
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Phone: 800-767-5859
Fax: 615-758-5859

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #: **R13411.07**

Lab Project #: **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #:

P.O. #: **8657**

Collected by (signature):

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:

Immediately Packed on Ice N ___ Y X

SDG # L1141480

Table #

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr					Remarks	Sample # (lab only)
SB-16 (2-3)	Grab	**SS**	2-3	11/13/19	1232	3	X	X	X		X						09
SB-16 (3-4)	Grab	**SS**	3-4	11/13/19	1233	3										Hold	
SB-16 (6-8)	Grab	**SS**	6-8	11/13/19	1234	3										Hold	
SB-16 (10-12)	Grab	**SS**	10-12	11/13/19	1235	3	X	X	X		X						10
SB-16A (0-1)	Grab	**SS**	0-1	11/13/19	1110	3										Hold	
SB-16A (1-2)	Grab	**SS**	1-2	11/13/19	1111	3										Hold	
SB-16A (2-3)	Grab	**SS**	2-3	11/13/19	1112	3										Hold	
SB-16A (3-4)	Grab	**SS**	3-4	11/13/19	1113	5										Hold	
SB-16A (6-8)	Grab	**SS**	6-8	11/13/19	1114	3										Hold	
SB-16A (10-12)	Grab	**SS**	10-12	11/13/19	1115	3										Hold	

* 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: 11/14/19	Time: 1400	Received by: (Signature)
Relinquished by : (Signature)	Date: 11/14	Time: [illegible]	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Harley

Trip Blank Received: [✓ Yes] / No
5 [✓ HCL] / MeoH
TBR

Temp: [illegible] °C
0.1+.2=0.3

Bottles Received: 285

Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

Chain of Custody Page 6 of 10

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Fax: 615-758-5859

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: Future Federal Way Hospital

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project #: R13411.07

Lab Project #: TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #:

P.O. #: 8657

Collected by (signature):

Quote #:

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

Immediately Packed on Ice N ___ Y X

SDG # 1161400

Table #

Acctnum: TGERESHTX
Template: T158754
Prelogin: P739844
PM: 134 - Mark W. Beasley
PB:
Shipped Via: FedEX Standard

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr					Remarks	Sample # (lab only)
SB-16B (0-1)	Grab	SS	0-1	11/13/19	1132	3										Hold	
SB-16B (1-2)	Grab	SS	1-2	11/13/19	1133	3										Hold	
SB-16B (2-3)	Grab	SS	2-3	11/13/19	1134	3										Hold	
SB-16B (3-4)	Grab	SS	3-4	11/13/19	1135	3										Hold	
SB-16B (6-8)	Grab	SS	6-8	11/13/19	1136	3										Hold	
SB-16B (14-15)	Grab	SS	14-15	11/13/19	1137	3										Hold	
SB-16C (0-1)	Grab	SS	0-1	11/13/19	1255	3										Hold	
SB-16C (1-2)	Grab	SS	1-2	11/13/19	1256	3										Hold	
SB-16C (2-3)	Grab	SS	2-3	11/13/19	1257	3										Hold	
SB-16C (3-4)	Grab	SS	3-4	11/13/19	1258	3										Hold	

* 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: 11/14/19	Time: 1400	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 11-14	Time: 1700	Received by: (Signature)	Temp: [illegible]°C 0.1+.2=0.3 Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Hanley [illegible]	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

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Houston, TX 77040

Billing Information:
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8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 7 of 10

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Phone: 800-767-5859
Fax: 615-758-5859

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #: **R13411.07**

Lab Project #: **TGERESHTX-R13411**

Site/Facility ID #:

P.O. #: **8657**

Quote #:

Collected by (print): Tim Crump

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:

SDG # 1161400

Table #

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-16C (6-8)	Grab	SS	6-8	11/13/19	1259	3											Hold	
SB-16C (12-13)	Grab	SS	12-13	11/13/19	1300	3											Hold	
SB-16D (0-1)	Grab	SS	0-1	11/13/19	1323	3											Hold	
SB-16D (1-2)	Grab	SS	1-2	11/13/19	1324	3											Hold	
SB-16D (2-3)	Grab	SS	2-3	11/13/19	1325	3											Hold	
SB-16D (3-4)	Grab	SS	3-4	11/13/19	1326	3											Hold	
SB-16D (6-8)	Grab	SS	6-8	11/13/19	1327	3											Hold	
SB-16D (14-15)	Grab	SS	14-15	11/13/19	1328	3											Hold	
SB-17 (0-1)	Grab	SS	0-1	11/13/19	1520	3	X	X	X		X							11
SB-17 (1-2)	Grab	SS	1-2	11/13/19	1521	3											Hold	

* 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: 11/14/19	Time:	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR S
Relinquished by : (Signature)	Date: 11-14	Time:	Received by: (Signature)	Temp: ___ °C 0.1+.2=0.3 Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 8 of 10

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Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Ian Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N ___ Y 8

SDG # L1161400

Table #

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P739844**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-17 (2-3)	Grab	SS	2-3	11/13/19	1522	3											Hold	
SB-17 (3-4)	Grab	SS	3-4	11/13/19	1523	3											Hold	
SB-17 (6-8)	Grab	SS	6-8	11/13/19	1524	3	X	X	X		X							12
SB-17 (14-15)	Grab	SS	14-15	11/13/19	1525	3	X	X	X		X							13
SB-17A (0-1)	Grab	SS	0-1	11/13/19	1457	3											Hold	
SB-17A (1-2)	Grab	SS	1-2	11/13/19	1458	3											Hold	
SB-17A (2-3)	Grab	SS	2-3	11/13/19	1459	3											Hold	
SB-17A (3-4)	Grab	SS	3-4	11/13/19	1500	3											Hold	
SB-17A (7-8)	Grab	SS	7-8	11/13/19	1501	3	X	X	X		X							14
SB-17A (12-13)	Grab	SS	12-13	11/13/19	1502	3	X	X	X		X							15

* 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: 11/14/19
Time:
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
S [✓ HCL] / MeoH
TBR

Relinquished by : (Signature)
Date: 11-14
Time: 17
Received by: (Signature)

Temp: TS °C
0.1+.2=.3
Bottles Received: 285

If preservation required by Login: Date/Time

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

Date: 11/15/19
Time: 830

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #: **R13411.07**

Lab Project #: **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #:

P.O. #: **8657**

Collected by (signature):

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

Analysis / Container / Preservative

Chain of Custody Page 9 of 10

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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 # L1161400

Table #

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P739844**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-17C (0-1)	Grab	SS	0-1	11/13/19	1400	3						Hold	
SB-17C (1-2)	Grab	SS	1-2	11/13/19	1401	3						Hold	
SB-17C (2-3)	Grab	SS	2-3	11/13/19	1402	3	X	X	X		X		16
SB-17C (6-7)	Grab	SS	6-7	11/13/19	1403	3						Hold	
SB-17C (9-10)	Grab	SS	9-10	11/13/19	1404	3	X	X	X		X		17
SB-17C (14-15)	Grab	SS	14-15	11/13/19	1405	3	X	X	X		X		18
SB-17D (0-1)	Grab	SS	0-1	11/13/19	1420	3						Hold	
SB-17D (1-2)	Grab	SS	1-2	11/13/19	1421	3						Hold	
SB-17D (2-3)	Grab	SS	2-3	11/13/19	1422	3						Hold	
SB-17D (3-4)	Grab	SS	3-4	11/13/19	1423	3						Hold	

* 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: 11/14/19	Time:	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCl] / MeoH TBR
Relinquished by : (Signature)	Date: 11-14	Time: 1700	Received by: (Signature)	Temp: c. 1+.2=.3 °C Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Harley Mu	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #
8657

Collected by (signature):

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

Immediately Packed on Ice N ___ Y X

Chain of Custody

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

SDG # 1161402

Table #

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P739844**

PM: 134 - Mark W. Beasley

PB:

Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-17D (5-6)	Grab	SS	5-6	11/13/19	1424	3						Hold	
SB-17D (14-15)	Grab	SS	14-15	11/13/19	1425	3						Hold	
		SS											
		SS											
		SS											
		SS											
		SS											
		SS											
		SS											
		SS											

* 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: 11/14/19
Time:
Received by: (Signature)
Trip Blank Received: [✓ Yes] / No 5
[✓ HCL] / MeoH
TBR

Relinquished by : (Signature)
Date: 11-14
Time: [illegible]
Received by: (Signature)
Temp: [illegible] °C 0.1+.2=0.3
Bottles Received: 285

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature)
Date: 11/15/19
Time: 830
Hold:
Condition: NCF / [✓ OK]

Troy Dunlap

Pace Analytical®
National Center for Testing & Innovation

Login #:1161400	**Client: TGERESHTX**	**Date:11/15/19**	**Evaluated by:Hailey M**

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 / Couri
	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: Received samples not on chain
SB 13 (11-12), SB 13 (10-11), SB 13 (14-15).

Client informed by:		Call		Email		Voice Mail	Date: 11/18/19	Time: 1135
TSR Initials: MB	Client Contact: Tim Crump							

Login Instructions:

Place samples on hold

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Report to:
Kristi Barnette

Project Description: **Future Federal Way Hospital**

Phone: **713-744-5800**
Fax: **713-744-5888**

Collected by (print): Tim Crump

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

Site/Facility ID #

P.O. #
8657

Quote #

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

Analysis / Container / Preservative

Chain of Custody Page 7 of 10

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

SDG # L1161400

F069

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-16C (6-8)	Grab	SS	6-8	11/13/19	1259	3						Hold	
SB-16C (12-13)	Grab	SS	12-13	11/13/19	1300	3						Hold	
SB-16D (0-1)	Grab	SS	0-1	11/13/19	1323	3						Hold	
SB-16D (1-2)	Grab	SS	1-2	11/13/19	1324	3						Hold	
SB-16D (2-3)	Grab	SS	2-3	11/13/19	1325	3						Hold	
SB-16D (3-4)	Grab	SS	3-4	11/13/19	1326	3						Hold	
SB-16D (6-8)	Grab	SS	6-8	11/13/19	1327	3						Hold	-19
SB-16D (14-15)	Grab	SS	14-15	11/13/19	1328	3						Hold	-20
SB-17 (0-1)	Grab	SS	0-1	11/13/19	1520	3	X	X	X		X		11
SB-17 (1-2)	Grab	SS	1-2	11/13/19	1521	3						Hold	

* 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: 11/14/19	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date: 11-14	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Harley Mc

Trip Blank Received: [✓ Yes] / No
[✓ HCl] / MeoH
TBR

Temp: ___°C 0.1+.2=0.3 Bottles Received: 2

Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

L1161400

From: Mark Beasley <MBeasley@pacenational.com>
Sent: Monday, November 18, 2019 2:02 PM
To: Project Service <ProjServ@pacenational.com>
Subject: L1161400 *TGERESHTX*

Log SB-16D (6-8) and SB-16D (14-15) previously on hold for V8260C, NWTPHGX, NWTPHDXNOSGT, MRCRA8, TERRACORE, & TS as -19 & -20.

Thanks
Mark Beasley
National Account Manager

Pace Analytical National Center for Testing & Innovation
12065 Lebanon Road | Mt. Juliet, TN 37122
615.773.9672 | Cell 615.330.1602
mbeasley@pacenational.com | pacenational.com

ESC Lab Sciences is now Pace Analytical National Center for Testing & Innovation! Please make note of my new email address and website.

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National Center for Testing & Innovation

ANALYTICAL REPORT

November 29, 2019

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

TGE Resources

Sample Delivery Group:	L1161924
Samples Received:	11/16/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SAMPLE SUMMARY

SB-15(0-1) L1161924-01 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 11:45	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384982	1	11/22/19 16:29	11/22/19 16:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 16:59	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:48	11/20/19 00:29	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 11:45	11/22/19 02:00	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 11:45	11/24/19 23:52	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	50	11/19/19 05:56	11/19/19 19:59	KME	Mt. Juliet, TN

SB-15(2-3) L1161924-02 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 11:47	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384982	1	11/22/19 16:29	11/22/19 16:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:01	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:48	11/20/19 00:31	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 11:47	11/22/19 02:24	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 11:47	11/25/19 00:11	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	1	11/19/19 05:56	11/19/19 16:18	KME	Mt. Juliet, TN

SB-15(10-12) L1161924-03 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 11:50	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384982	1	11/22/19 16:29	11/22/19 16:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:04	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:48	11/20/19 00:34	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 11:50	11/22/19 02:48	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 11:50	11/25/19 00:30	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	1	11/19/19 05:56	11/21/19 06:17	KME	Mt. Juliet, TN

SB-17E(9-10) L1161924-04 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 15:00	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384982	1	11/22/19 16:29	11/22/19 16:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:06	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:48	11/20/19 00:37	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 15:00	11/22/19 03:12	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 15:00	11/25/19 00:49	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	1	11/19/19 05:56	11/19/19 16:44	KME	Mt. Juliet, TN

SB-17E(14-15) L1161924-05 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 15:05	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384982	1	11/22/19 16:29	11/22/19 16:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:14	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:48	11/20/19 00:40	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 15:05	11/22/19 03:36	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 15:05	11/25/19 01:08	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	1	11/19/19 05:56	11/19/19 18:03	KME	Mt. Juliet, TN

SB-17F(10-11) L1161924-06 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 15:47	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384982	1	11/22/19 16:29	11/22/19 16:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:16	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:48	11/20/19 00:48	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 15:47	11/22/19 04:00	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 15:47	11/25/19 01:27	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	10	11/19/19 05:56	11/19/19 18:43	KME	Mt. Juliet, TN

SB-17F(18-20) L1161924-07 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 15:45	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384982	1	11/22/19 16:29	11/22/19 16:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:19	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:48	11/20/19 00:51	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 15:45	11/22/19 04:25	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 15:45	11/25/19 01:46	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	1	11/19/19 05:56	11/19/19 17:50	KME	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	5	11/19/19 05:56	11/21/19 08:36	KME	Mt. Juliet, TN

SB-17F(24-25) L1161924-08 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 15:46	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:22	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:16	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25.3	11/14/19 15:46	11/22/19 04:49	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1.01	11/14/19 15:46	11/25/19 02:05	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	1	11/19/19 05:56	11/19/19 16:57	KME	Mt. Juliet, TN

SB-18(0-1) L1161924-09 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 07:55	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 16:51	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:48	11/20/19 00:53	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 07:55	11/22/19 05:13	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 07:55	11/25/19 02:24	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	50	11/19/19 05:56	11/19/19 21:22	KME	Mt. Juliet, TN

SB-18(2-3) L1161924-10 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 07:57	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:24	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:48	11/20/19 00:56	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 07:57	11/22/19 05:37	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 07:57	11/25/19 02:42	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	50	11/19/19 05:56	11/19/19 21:35	KME	Mt. Juliet, TN

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

SB-18(4-6) L1161924-11 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 07:59	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:27	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:48	11/20/19 00:59	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 07:59	11/22/19 06:01	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 07:59	11/25/19 03:01	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	50	11/19/19 05:56	11/19/19 19:22	KME	Mt. Juliet, TN

SB-19(0-1) L1161924-12 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 08:53	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:29	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:48	11/20/19 01:01	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 08:53	11/22/19 06:25	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 08:53	11/25/19 03:20	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	10	11/19/19 05:56	11/19/19 19:09	KME	Mt. Juliet, TN

SB-19(2-3) L1161924-13 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 08:55	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:32	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:48	11/20/19 01:04	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 08:55	11/22/19 06:49	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 08:55	11/25/19 03:39	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	10	11/19/19 05:56	11/21/19 06:37	KME	Mt. Juliet, TN

SB-19(4-6) L1161924-14 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 08:57	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:34	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:29	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 08:57	11/22/19 07:13	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 08:57	11/25/19 03:58	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	10	11/19/19 05:56	11/21/19 06:50	KME	Mt. Juliet, TN

SB-20(2-3) L1161924-15 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:35	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:37	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:31	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	27.3	11/14/19 09:35	11/22/19 07:37	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1.09	11/14/19 09:35	11/25/19 04:17	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	10	11/19/19 05:56	11/19/19 18:56	KME	Mt. Juliet, TN

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

SB-20(4-6) L1161924-16 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:37	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:54	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:39	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	30.8	11/14/19 09:37	11/22/19 08:01	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1.23	11/14/19 09:37	11/25/19 04:35	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	1	11/19/19 05:56	11/19/19 17:37	KME	Mt. Juliet, TN

SB-20(10-11) L1161924-17 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:39	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:57	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:42	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 09:39	11/22/19 08:25	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 09:39	11/25/19 04:54	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	50	11/19/19 05:56	11/19/19 20:45	KME	Mt. Juliet, TN

SB-21(2-3) L1161924-18 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:07	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384985	1	11/22/19 15:49	11/22/19 16:02	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 17:59	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:44	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 10:07	11/22/19 08:49	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 10:07	11/25/19 05:13	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	50	11/19/19 05:56	11/19/19 21:04	KME	Mt. Juliet, TN

SB-21(6-8) L1161924-19 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:10	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384985	1	11/22/19 15:49	11/22/19 16:02	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 18:02	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:47	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 10:10	11/22/19 09:14	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 10:10	11/25/19 05:32	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	10	11/19/19 05:56	11/19/19 18:16	KME	Mt. Juliet, TN

SB-21(9-11) L1161924-20 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:11	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384985	1	11/22/19 15:49	11/22/19 16:02	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382810	1	11/21/19 09:52	11/21/19 18:04	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:49	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1384475	25	11/14/19 10:11	11/22/19 09:38	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386420	1	11/14/19 10:11	11/25/19 05:51	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382640	5	11/19/19 05:56	11/19/19 18:29	KME	Mt. Juliet, TN

SB-22(0-1) L1161924-21 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:50	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384985	1	11/22/19 15:49	11/22/19 16:02	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 18:27	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:52	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386149	25	11/14/19 09:50	11/24/19 00:16	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386768	1	11/14/19 09:50	11/26/19 02:36	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	20	11/19/19 12:25	11/21/19 12:58	KME	Mt. Juliet, TN

SB-22(2-3) L1161924-22 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:52	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384985	1	11/22/19 15:49	11/22/19 16:02	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 18:29	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:54	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 09:52	11/22/19 05:22	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386768	1	11/14/19 09:52	11/26/19 02:54	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	10	11/19/19 12:25	11/21/19 13:54	KME	Mt. Juliet, TN

SB-22(4-6) L1161924-23 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:54	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384985	1	11/22/19 15:49	11/22/19 16:02	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 18:32	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:57	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 09:54	11/22/19 05:42	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386768	1	11/14/19 09:54	11/26/19 03:13	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	20	11/19/19 12:25	11/21/19 13:12	KME	Mt. Juliet, TN

SB-23(0-1) L1161924-24 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 11:15	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384985	1	11/22/19 15:49	11/22/19 16:02	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 18:35	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:59	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 11:15	11/22/19 06:03	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386768	1	11/14/19 11:15	11/26/19 03:32	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	20	11/19/19 12:25	11/21/19 11:39	KME	Mt. Juliet, TN

SB-23(3-4) L1161924-25 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 11:18	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384985	1	11/22/19 15:49	11/22/19 16:02	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 18:37	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 15:02	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 11:18	11/22/19 06:23	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386768	1	11/14/19 11:18	11/26/19 03:51	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	10	11/19/19 12:25	11/21/19 14:07	KME	Mt. Juliet, TN

SB-23(4-6) L1161924-26 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 11:19	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384985	1	11/22/19 15:49	11/22/19 16:02	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 18:40	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 15:10	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 11:19	11/22/19 06:44	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386768	1	11/14/19 11:19	11/26/19 04:10	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	20	11/19/19 12:25	11/21/19 11:52	KME	Mt. Juliet, TN

SB-24(0-1) L1161924-27 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 11:58	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384985	1	11/22/19 15:49	11/22/19 16:02	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 18:42	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 15:40	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 11:58	11/22/19 07:04	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386768	1	11/14/19 11:58	11/26/19 04:28	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	1	11/19/19 12:25	11/21/19 10:33	KME	Mt. Juliet, TN

SB-24(2-3) L1161924-28 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 12:00	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384986	1	11/22/19 15:27	11/22/19 15:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 18:14	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 15:12	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 12:00	11/22/19 07:25	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386768	1	11/14/19 12:00	11/26/19 04:48	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	10	11/19/19 12:25	11/21/19 14:26	KME	Mt. Juliet, TN

SB-24(4-6) L1161924-29 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 12:02	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384986	1	11/22/19 15:27	11/22/19 15:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 18:45	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 15:15	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 12:02	11/22/19 07:46	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386768	1	11/14/19 12:02	11/26/19 05:06	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	5	11/19/19 12:25	11/21/19 14:52	KME	Mt. Juliet, TN

SB-25(1-2) L1161924-30 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:53	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384986	1	11/22/19 15:27	11/22/19 15:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 18:47	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 15:17	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 09:53	11/22/19 08:06	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1386768	1	11/14/19 09:53	11/26/19 05:25	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	20	11/19/19 12:25	11/21/19 12:19	KME	Mt. Juliet, TN

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

SB-25(3-4) L1161924-31 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:55	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384986	1	11/22/19 15:27	11/22/19 15:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 18:55	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 15:20	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 09:55	11/22/19 08:27	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387176	1	11/14/19 09:55	11/26/19 11:45	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	20	11/19/19 12:25	11/21/19 12:45	KME	Mt. Juliet, TN

SB-25(6-8) L1161924-32 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:57	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384986	1	11/22/19 15:27	11/22/19 15:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 18:57	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 15:22	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 09:57	11/22/19 08:47	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387176	1	11/14/19 09:57	11/26/19 12:04	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	1	11/19/19 12:25	11/21/19 11:26	KME	Mt. Juliet, TN

SB-25(8-9) L1161924-33 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:58	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384986	1	11/22/19 15:27	11/22/19 15:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 19:00	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 15:25	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 09:58	11/22/19 09:08	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387176	1	11/14/19 09:58	11/26/19 12:23	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	1	11/19/19 12:25	11/21/19 10:19	KME	Mt. Juliet, TN

SB-25(10-11) L1161924-34 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:00	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384986	1	11/22/19 15:27	11/22/19 15:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 19:02	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 15:53	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 10:00	11/22/19 09:28	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387176	1	11/14/19 10:00	11/26/19 12:42	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	1	11/19/19 12:25	11/21/19 10:46	KME	Mt. Juliet, TN

SB-25(16-17) L1161924-35 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:03	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384986	1	11/22/19 15:27	11/22/19 15:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 19:05	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 15:55	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	25	11/14/19 10:03	11/22/19 09:49	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387176	1	11/14/19 10:03	11/26/19 13:01	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	1	11/19/19 12:25	11/21/19 10:59	KME	Mt. Juliet, TN

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

SB-25(19-20) L1161924-36 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:05	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384986	1	11/22/19 15:27	11/22/19 15:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 19:08	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:03	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385097	31.8	11/14/19 10:05	11/22/19 10:09	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387176	1	11/14/19 10:05	11/26/19 13:19	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	1	11/19/19 12:25	11/21/19 11:13	KME	Mt. Juliet, TN

SB-26(0-1) L1161924-37 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:17	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384986	1	11/22/19 15:27	11/22/19 15:46	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 19:10	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:06	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 09:17	11/23/19 04:44	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387176	1	11/14/19 09:17	11/26/19 13:38	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	20	11/19/19 12:25	11/21/19 13:25	KME	Mt. Juliet, TN

SB-26(2-3) L1161924-38 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:19	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384988	1	11/22/19 15:07	11/22/19 15:19	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 19:13	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:08	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 09:19	11/23/19 05:08	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387176	1	11/14/19 09:19	11/26/19 13:57	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	10	11/19/19 12:25	11/21/19 14:39	KME	Mt. Juliet, TN

SB-26(4-6) L1161924-39 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:21	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384988	1	11/22/19 15:07	11/22/19 15:19	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 19:15	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:11	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 09:21	11/23/19 05:32	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387176	1	11/14/19 09:21	11/26/19 14:16	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	20	11/19/19 12:25	11/21/19 12:06	KME	Mt. Juliet, TN

SB-26(8-9) L1161924-40 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:23	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384988	1	11/22/19 15:07	11/22/19 15:19	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382811	1	11/21/19 09:56	11/21/19 19:18	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:13	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 09:23	11/23/19 05:56	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387176	1	11/14/19 09:23	11/26/19 14:35	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382641	20	11/19/19 12:25	11/21/19 12:32	KME	Mt. Juliet, TN

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

SB-26(10-11) L1161924-41 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:25	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384988	1	11/22/19 15:07	11/22/19 15:19	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 19:41	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:16	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 09:25	11/23/19 06:21	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387176	1	11/14/19 09:25	11/26/19 14:54	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	50	11/19/19 06:01	11/20/19 07:22	KME	Mt. Juliet, TN

SB-26(16-17) L1161924-42 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:28	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384988	1	11/22/19 15:07	11/22/19 15:19	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 19:43	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:18	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 09:28	11/23/19 06:45	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 09:28	11/26/19 17:04	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	10	11/19/19 06:01	11/20/19 06:33	KME	Mt. Juliet, TN

SB-26(19-20) L1161924-43 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:30	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384988	1	11/22/19 15:07	11/22/19 15:19	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 19:46	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:21	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 09:30	11/23/19 07:09	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 09:30	11/26/19 17:24	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	10	11/19/19 06:01	11/21/19 07:16	KME	Mt. Juliet, TN

SB-27(1-2) L1161924-44 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 08:41	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384988	1	11/22/19 15:07	11/22/19 15:19	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 19:48	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:28	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 08:41	11/23/19 07:33	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 08:41	11/26/19 17:45	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	10	11/19/19 06:01	11/21/19 07:03	KME	Mt. Juliet, TN

SB-27(3-4) L1161924-45 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 08:43	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384988	1	11/22/19 15:07	11/22/19 15:19	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 19:56	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:23	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25.8	11/14/19 08:43	11/23/19 07:57	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 08:43	11/26/19 18:06	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	10	11/19/19 06:01	11/21/19 08:22	KME	Mt. Juliet, TN

SB-27(6-8) L1161924-46 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 08:45	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384988	1	11/22/19 15:07	11/22/19 15:19	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 19:33	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:26	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 08:45	11/23/19 08:22	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 08:45	11/26/19 18:27	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	10	11/19/19 06:01	11/21/19 07:55	KME	Mt. Juliet, TN

SB-27(8-9) L1161924-47 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 08:46	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384988	1	11/22/19 15:07	11/22/19 15:19	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 19:59	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:34	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 08:46	11/23/19 08:46	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 08:46	11/26/19 18:47	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	50	11/19/19 06:01	11/20/19 01:58	KME	Mt. Juliet, TN

SB-27(10-11) L1161924-48 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 08:48	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384990	1	11/22/19 14:50	11/22/19 15:04	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:01	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:36	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 08:48	11/23/19 09:10	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 08:48	11/26/19 19:08	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	10	11/19/19 06:01	11/21/19 07:42	KME	Mt. Juliet, TN

SB-27(16-17) L1161924-49 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 08:51	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384990	1	11/22/19 14:50	11/22/19 15:04	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:04	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:39	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 08:51	11/23/19 09:34	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 08:51	11/26/19 19:28	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	10	11/19/19 06:01	11/20/19 02:38	KME	Mt. Juliet, TN

SB-27(19-20) L1161924-50 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 08:53	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384990	1	11/22/19 14:50	11/22/19 15:04	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:06	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:41	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 08:53	11/23/19 09:59	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 08:53	11/26/19 19:49	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	1	11/19/19 06:01	11/20/19 00:06	JDG	Mt. Juliet, TN

SB-28(0-1) L1161924-51 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 07:46	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384990	1	11/22/19 14:50	11/22/19 15:04	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:09	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:44	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 07:46	11/23/19 10:23	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 07:46	11/26/19 20:10	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	50	11/19/19 06:01	11/20/19 06:52	KME	Mt. Juliet, TN

SB-28(2-3) L1161924-52 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 07:48	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384990	1	11/22/19 14:50	11/22/19 15:04	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:11	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:46	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 07:48	11/23/19 10:47	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 07:48	11/26/19 20:30	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	50	11/19/19 06:01	11/20/19 06:20	KME	Mt. Juliet, TN

SB-28(4-6) L1161924-53 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 07:50	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384990	1	11/22/19 14:50	11/22/19 15:04	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:14	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382681	1	11/19/19 06:41	11/20/19 16:49	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 07:50	11/23/19 11:11	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 07:50	11/26/19 20:51	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	50	11/19/19 06:01	11/20/19 02:11	KME	Mt. Juliet, TN

SB-28(8-9) L1161924-54 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 07:52	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384990	1	11/22/19 14:50	11/22/19 15:04	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:17	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:40	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 07:52	11/23/19 11:36	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 07:52	11/26/19 21:11	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	10	11/19/19 06:01	11/21/19 07:29	KME	Mt. Juliet, TN

SB-28(11-12) L1161924-55 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 07:55	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384990	1	11/22/19 14:50	11/22/19 15:04	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:19	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:43	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 07:55	11/23/19 12:00	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 07:55	11/26/19 21:32	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	50	11/19/19 06:01	11/20/19 07:05	KME	Mt. Juliet, TN

SB-28(16-17) L1161924-56 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 07:57	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384990	1	11/22/19 14:50	11/22/19 15:04	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:27	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:51	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1385620	25	11/14/19 07:57	11/23/19 12:24	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 07:57	11/26/19 21:53	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	10	11/19/19 06:01	11/21/19 08:09	KME	Mt. Juliet, TN

SB-28(19-20) L1161924-57 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 07:59	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384990	1	11/22/19 14:50	11/22/19 15:04	RA	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:29	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:53	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 07:59	11/24/19 06:21	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 07:59	11/26/19 22:13	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	1	11/19/19 06:01	11/20/19 00:19	JDG	Mt. Juliet, TN

SB-29(1-2) L1161924-58 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:41	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384993	1	11/22/19 19:23	11/22/19 19:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:32	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:56	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 10:41	11/24/19 06:45	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 10:41	11/26/19 22:34	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	1	11/19/19 06:01	11/20/19 00:32	JDG	Mt. Juliet, TN

SB-29(3-4) L1161924-59 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:43	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384993	1	11/22/19 19:23	11/22/19 19:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:34	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:58	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 10:43	11/24/19 07:09	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 10:43	11/26/19 22:55	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	5	11/19/19 06:01	11/20/19 07:54	KME	Mt. Juliet, TN

SB-29(6-8) L1161924-60 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:45	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384993	1	11/22/19 19:23	11/22/19 19:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382812	1	11/21/19 10:29	11/21/19 20:37	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 17:01	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 10:45	11/24/19 07:33	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 10:45	11/26/19 23:15	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1382642	1	11/19/19 06:01	11/19/19 23:46	JDG	Mt. Juliet, TN

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

SB-29(9-10) L1161924-61 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:47	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384993	1	11/22/19 19:23	11/22/19 19:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382813	1	11/19/19 12:05	11/19/19 21:18	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 17:03	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 10:47	11/24/19 07:58	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387386	1	11/14/19 10:47	11/26/19 23:36	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1384286	1	11/21/19 07:15	11/21/19 21:44	JDG	Mt. Juliet, TN

SB-29(11-12) L1161924-62 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:49	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384993	1	11/22/19 19:23	11/22/19 19:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382813	1	11/19/19 12:05	11/19/19 21:25	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 17:06	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 10:49	11/24/19 08:22	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387391	1	11/14/19 10:49	11/26/19 20:14	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1384286	1	11/21/19 07:15	11/21/19 21:57	JDG	Mt. Juliet, TN

SB-29(16-17) L1161924-63 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:51	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384993	1	11/22/19 19:23	11/22/19 19:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382813	1	11/19/19 12:05	11/19/19 21:28	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 17:08	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 10:51	11/24/19 08:46	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387391	1	11/14/19 10:51	11/26/19 20:33	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1384286	10	11/21/19 07:15	11/22/19 22:58	JDG	Mt. Juliet, TN

SB-29(19-20) L1161924-64 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:53	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384993	1	11/22/19 19:23	11/22/19 19:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382813	1	11/19/19 12:05	11/19/19 20:45	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 17:11	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	31.8	11/14/19 10:53	11/24/19 09:10	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387391	1	11/14/19 10:53	11/26/19 20:52	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1384286	10	11/21/19 07:15	11/21/19 22:09	JDG	Mt. Juliet, TN

SB-30(0-0.5) L1161924-65 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 13:35	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384993	1	11/22/19 19:23	11/22/19 19:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382813	1	11/19/19 12:05	11/19/19 21:31	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 17:13	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 13:35	11/24/19 09:35	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387391	1	11/14/19 13:35	11/26/19 21:11	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1384286	50	11/21/19 07:15	11/21/19 22:59	JDG	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG1384420	1	11/21/19 14:52	11/23/19 19:49	LEL	Mt. Juliet, TN
OP Pesticides by Method 8141B	WG1382165	20	11/18/19 07:50	11/20/19 19:45	HMH	Mt. Juliet, TN

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

Collected by	Collected date/time	Received date/time
	11/14/19 13:35	11/16/19 09:00

SB-30(0-0.5) L1161924-65 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Pesticides (GC) by Method 8081	WG1382839	1	11/19/19 07:50	11/19/19 14:26	MTJ	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
	11/14/19 13:36	11/16/19 09:00

SB-30(0.5-1) L1161924-66 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384993	1	11/22/19 19:23	11/22/19 19:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382813	1	11/19/19 12:05	11/19/19 21:33	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 15:57	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 13:36	11/24/19 09:59	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387391	1	11/14/19 13:36	11/26/19 21:30	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1384286	50	11/21/19 07:15	11/21/19 23:12	JDG	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG1384420	1	11/21/19 14:52	11/23/19 20:02	LEL	Mt. Juliet, TN
OP Pesticides by Method 8141B	WG1382165	20	11/18/19 07:50	11/20/19 20:16	HMH	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1382839	1	11/19/19 07:50	11/19/19 15:03	MTJ	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
	11/14/19 13:37	11/16/19 09:00

SB-30(1-1.5) L1161924-67 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384993	1	11/22/19 19:23	11/22/19 19:33	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382813	1	11/19/19 12:05	11/19/19 21:36	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:00	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	37.5	11/14/19 13:37	11/24/19 10:23	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387391	1.06	11/14/19 13:37	11/26/19 21:48	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1384286	10	11/21/19 07:15	11/22/19 23:11	JDG	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG1384420	1	11/21/19 14:52	11/23/19 20:16	LEL	Mt. Juliet, TN
OP Pesticides by Method 8141B	WG1382165	1	11/18/19 07:50	11/21/19 13:01	HMH	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1382839	1	11/19/19 07:50	11/19/19 15:15	MTJ	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
	11/14/19 13:38	11/16/19 09:00

SB-30(1.5-2) L1161924-68 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384994	1	11/22/19 19:12	11/22/19 19:22	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382813	1	11/19/19 12:05	11/19/19 21:38	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:02	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 13:38	11/24/19 10:48	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387391	1	11/14/19 13:38	11/26/19 22:07	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1384286	10	11/21/19 07:15	11/22/19 23:23	JDG	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG1384420	1	11/21/19 14:52	11/23/19 21:11	LEL	Mt. Juliet, TN
OP Pesticides by Method 8141B	WG1382165	1	11/18/19 07:50	11/21/19 13:33	HMH	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1382839	1	11/19/19 07:50	11/19/19 15:28	MTJ	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
	11/14/19 14:30	11/16/19 09:00

SB-31(0-0.5) L1161924-69 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384994	1	11/22/19 19:12	11/22/19 19:22	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382813	1	11/19/19 12:05	11/19/19 21:41	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:05	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 14:30	11/24/19 11:12	ACG	Mt. Juliet, TN

SB-31(0-0.5) L1161924-69 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 14:30	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387391	1	11/14/19 14:30	11/26/19 22:25	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1384286	50	11/21/19 07:15	11/21/19 23:49	JDG	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG1384420	1	11/21/19 14:52	11/23/19 21:24	LEL	Mt. Juliet, TN
OP Pesticides by Method 8141B	WG1382165	1	11/18/19 07:50	11/21/19 14:05	HMH	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1382839	1	11/19/19 07:50	11/19/19 15:40	MTJ	Mt. Juliet, TN

SB-31(0.5-1) L1161924-70 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 14:31	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384994	1	11/22/19 19:12	11/22/19 19:22	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382813	1	11/19/19 12:05	11/19/19 21:44	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:07	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 14:31	11/24/19 11:36	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387391	1	11/14/19 14:31	11/26/19 22:44	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1384286	50	11/21/19 07:15	11/22/19 00:02	JDG	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG1384420	1	11/21/19 14:52	11/23/19 21:38	LEL	Mt. Juliet, TN
OP Pesticides by Method 8141B	WG1382165	1	11/18/19 07:50	11/21/19 14:37	HMH	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1382839	1	11/19/19 07:50	11/19/19 15:53	MTJ	Mt. Juliet, TN

SB-31(1-1.5) L1161924-71 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 14:32	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384994	1	11/22/19 19:12	11/22/19 19:22	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382813	1	11/19/19 12:05	11/19/19 21:46	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:10	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 14:32	11/24/19 12:00	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387391	1.15	11/14/19 14:32	11/26/19 23:03	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1384286	10	11/21/19 07:15	11/21/19 22:22	JDG	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG1383608	1	11/20/19 07:05	11/21/19 00:22	MTJ	Mt. Juliet, TN
OP Pesticides by Method 8141B	WG1382165	1	11/18/19 07:50	11/21/19 15:08	HMH	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1382839	1	11/19/19 07:50	11/19/19 16:05	MTJ	Mt. Juliet, TN

SB-31(1.5-2) L1161924-72 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 14:33	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384994	1	11/22/19 19:12	11/22/19 19:22	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1382813	1	11/19/19 12:05	11/19/19 21:49	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 16:12	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1386130	25	11/14/19 14:33	11/24/19 12:25	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1387391	1	11/14/19 14:33	11/26/19 23:22	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1384286	10	11/21/19 07:15	11/21/19 22:34	JDG	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG1383608	1	11/20/19 07:05	11/21/19 00:35	MTJ	Mt. Juliet, TN
OP Pesticides by Method 8141B	WG1382165	1	11/18/19 07:50	11/21/19 12:30	HMH	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1382839	1	11/19/19 07:50	11/19/19 16:18	MTJ	Mt. Juliet, TN

CASE NARRATIVE

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

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 11/29/2019 09:25
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1161924-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71 and 72
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1382839, WG1382165, WG1382813, WG1382657, WG1382640, WG1382642, WG1382641, WG1382679, WG1382681, WG1383608, WG1382810, WG1382811, WG1382812, WG1382684, WG1384286, WG1385097, WG1384994, WG1384993, WG1384990, WG1384988, WG1384986, WG1384985, WG1384983, WG1384982, WG1384475, WG1385620, WG1384420, WG1386130, WG1386149, WG1386768, WG1386420, WG1387176, WG1387386 and WG1387391

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?		X			1
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			2
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?		X			3
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			4
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			5
		Were MS/MSD RPDs within laboratory QC limits?		X			6
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 11/29/2019 09:25
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1161924-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71 and 72
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1382839, WG1382165, WG1382813, WG1382657, WG1382640, WG1382642, WG1382641, WG1382679, WG1382681, WG1383608, WG1382810, WG1382811, WG1382812, WG1382684, WG1384286, WG1385097, WG1384994, WG1384993, WG1384990, WG1384988, WG1384986, WG1384985, WG1384983, WG1384982, WG1384475, WG1385620, WG1384420, WG1386130, WG1386149, WG1386768, WG1386420, WG1387176, WG1387386 and WG1387391

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Supporting Data

ONE LAB. NATIONWIDE.

Laboratory Name: Pace Analytical National	LRC Date: 11/29/2019 09:25
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1161924-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71 and 72
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1382839, WG1382165, WG1382813, WG1382657, WG1382640, WG1382642, WG1382641, WG1382679, WG1382681, WG1383608, WG1382810, WG1382811, WG1382812, WG1382684, WG1384286, WG1385097, WG1384994, WG1384993, WG1384990, WG1384988, WG1384986, WG1384985, WG1384983, WG1384982, WG1384475, WG1385620, WG1384420, WG1386130, WG1386149, WG1386768, WG1386420, WG1387176, WG1387386 and WG1387391

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?		X			7
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			8
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 11/29/2019 09:25
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1161924-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71 and 72
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1382839, WG1382165, WG1382813, WG1382657, WG1382640, WG1382642, WG1382641, WG1382679, WG1382681, WG1383608, WG1382810, WG1382811, WG1382812, WG1382684, WG1384286, WG1385097, WG1384994, WG1384993, WG1384990, WG1384988, WG1384986, WG1384985, WG1384983, WG1384982, WG1384475, WG1385620, WG1384420, WG1386130, WG1386149, WG1386768, WG1386420, WG1387176, WG1387386 and WG1387391

ER #[1]	Description
1	WG1383608 R3474588-4: The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
2	NWTPHDX-NO SGT WG1382640 o-Terphenyl L1161924-01, 07, 09, 10, 11, 15, 17 and 18: Percent Recovery is outside of established control limits. NWTPHDX-NO SGT WG1382641 o-Terphenyl L1161924-21, 23, 24, 26, 30, 31, 37, 39 and 40: Percent Recovery is outside of established control limits. NWTPHDX-NO SGT WG1382642 o-Terphenyl L1161924-41, 47, 51, 52, 53 and 55: Percent Recovery is outside of established control limits. NWTPHDX-NO SGT WG1384286 o-Terphenyl L1161924-65, 66, 69 and 70: Percent Recovery is outside of established control limits. 8141B WG1382165 Triphenyl Phosphate L1161924-65 and 66: Percent Recovery is outside of established control limits. 8151A WG1384420 2,4-Dichlorophenyl Acetic Acid L1161924-65: Percent Recovery is outside of established control limits. WG1382839 Decachlorobiphenyl R3473689-1, 2 and 3: Percent Recovery is outside of established control limits.
3	8260D WG1386420 2-Butanone (MEK) L1161924-04, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20: Concentration in the Blank >MQL. 8260D WG1387386 2-Butanone (MEK) L1161924-42, 43, 44, 45, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60 and 61: Concentration in the Blank >MQL.
4	8141B WG1382165 EPN, Merphos: Percent Recovery is outside of established control limits. 8151A WG1383608 MCPP: Percent Recovery is outside of established control limits. 8151A WG1384420 Dinoseb: Percent Recovery is outside of established control limits. 8260D WG1386420 Chloromethane: Percent Recovery is outside of established control limits. 8260D WG1386768 n-Butylbenzene, Chloroethane, n-Propylbenzene, 1,1,2,2-Tetrachloroethane, Vinyl chloride: Percent Recovery is outside of established control limits. 8260D WG1387176 Chloroethane, Styrene, 1,1,2,2-Tetrachloroethane, Trichlorofluoromethane: Percent Recovery is outside of established control limits. 8260D WG1387391 Chloromethane, 2,2-Dichloropropane, n-Propylbenzene, 1,1,2,2-Tetrachloroethane: Percent Recovery is outside of established control limits.
5	8260D WG1387176 Benzene, n-Butylbenzene, Ethylbenzene, Naphthalene, n-Propylbenzene, Toluene, 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Xylenes, Total: Percent Recovery is outside of established control limits. 8141B WG1382165 Merphos: Percent Recovery is outside of established control limits. 8151A WG1383608 Dinoseb, MCPP: Percent Recovery is outside of established control limits. 8151A WG1384420 Dinoseb, MCPP: Percent Recovery is outside of established control limits. 8260D WG1387176 sec-Butylbenzene, Chloroethane, Dichlorodifluoromethane, 2,2-Dichloropropane, Isopropylbenzene: Percent Recovery is outside of established control limits. 8260D WG1387391 n-Butylbenzene, Chloroethane, Hexachloro-1,3-butadiene, 4-Methyl-2-pentanone (MIBK), Naphthalene, 1,1,2,2-Tetrachloroethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,2-Trichloroethane: Percent Recovery is outside of established control limits. 6010D WG1382679 Chromium: Percent Recovery is outside of established control limits. 6010D WG1382681 Arsenic: Percent Recovery is outside of established control limits.
6	8151A WG1383608 Dichloroprop, Dinoseb, MCPP, 2,4,5-T, 2,4,5-TP (Silvex): Relative Percent Difference is outside of established control limits. 8151A WG1384420 MCPA: Relative Percent Difference is outside of established control limits. 8260D WG1387176 Acetone: Relative Percent Difference is outside of established control limits. 8260D WG1387391 Dichlorodifluoromethane: Relative Percent Difference is outside of established control limits.
7	8081 WG1382839 Dieldrin L1161924-69, 70, 71 and 72: RPD between the primary and confirmatory analysis exceeded 40%.
8	6010D WG1382679 Barium, Chromium: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits. 6010D WG1382681 Arsenic, Barium, Chromium, Lead: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 11/29/2019 09:25
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1161924-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71 and 72
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1382839, WG1382165, WG1382813, WG1382657, WG1382640, WG1382642, WG1382641, WG1382679, WG1382681, WG1383608, WG1382810, WG1382811, WG1382812, WG1382684, WG1384286, WG1385097, WG1384994, WG1384993, WG1384990, WG1384988, WG1384986, WG1384985, WG1384983, WG1384982, WG1384475, WG1385620, WG1384420, WG1386130, WG1386149, WG1386768, WG1386420, WG1387176, WG1387386 and WG1387391

ER #[1]	Description

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	94.9		1	11/22/2019 16:46	WG1384982

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0365	B	0.00295	0.0300	0.0316	1	11/21/2019 16:59	WG1382810

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	43.1		0.484	2.00	2.11	1	11/20/2019 00:29	WG1382657
Barium	36.6		0.179	0.500	0.527	1	11/20/2019 00:29	WG1382657
Cadmium	0.430	J	0.0737	0.500	0.527	1	11/20/2019 00:29	WG1382657
Chromium	22.6		0.147	1.00	1.05	1	11/20/2019 00:29	WG1382657
Lead	107		0.200	0.500	0.527	1	11/20/2019 00:29	WG1382657
Selenium	U		0.653	2.00	2.11	1	11/20/2019 00:29	WG1382657
Silver	0.300	B J	0.126	1.00	1.05	1	11/20/2019 00:29	WG1382657

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.893	0.100	2.63	25	11/22/2019 02:00	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*99.6*				*77.0-120*		*11/22/2019 02:00*	WG1384475

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0144	0.0250	0.0263	1	11/24/2019 23:52	WG1386420
Acrylonitrile	U		0.00200	0.0125	0.0132	1	11/24/2019 23:52	WG1386420
Benzene	0.000488	J	0.000421	0.00100	0.00105	1	11/24/2019 23:52	WG1386420
Bromobenzene	U		0.00111	0.0125	0.0132	1	11/24/2019 23:52	WG1386420
Bromodichloromethane	U		0.000830	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
Bromoform	U		0.00630	0.0250	0.0263	1	11/24/2019 23:52	WG1386420
Bromomethane	U		0.00390	0.0125	0.0132	1	11/24/2019 23:52	WG1386420
n-Butylbenzene	U		0.00404	0.0125	0.0132	1	11/24/2019 23:52	WG1386420
sec-Butylbenzene	U		0.00266	0.0125	0.0132	1	11/24/2019 23:52	WG1386420
tert-Butylbenzene	U		0.00163	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
Carbon tetrachloride	U		0.00114	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
Chlorobenzene	U		0.000603	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
Chlorodibromomethane	U		0.000474	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
Chloroethane	U		0.00114	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
Chloroform	U		0.000437	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
Chloromethane	U	J4	0.00146	0.0125	0.0132	1	11/24/2019 23:52	WG1386420
2-Chlorotoluene	U		0.000969	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
4-Chlorotoluene	U		0.00119	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00537	0.0250	0.0263	1	11/24/2019 23:52	WG1386420
1,2-Dibromoethane	U		0.000553	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
Dibromomethane	U		0.00105	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
1,2-Dichlorobenzene	U		0.00153	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
1,3-Dichlorobenzene	U		0.00179	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
1,4-Dichlorobenzene	U		0.00207	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
Dichlorodifluoromethane	U		0.000862	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
1,1-Dichloroethane	U		0.000606	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
1,2-Dichloroethane	U		0.000500	0.00250	0.00263	1	11/24/2019 23:52	WG1386420

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000527	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
cis-1,2-Dichloroethene	U		0.000727	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
trans-1,2-Dichloroethene	U		0.00151	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
1,2-Dichloropropane	U		0.00134	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
1,1-Dichloropropene	U		0.000737	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
1,3-Dichloropropane	U		0.00184	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
cis-1,3-Dichloropropene	U		0.000714	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
trans-1,3-Dichloropropene	U		0.00161	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
2,2-Dichloropropane	U		0.000835	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
Di-isopropyl ether	U		0.000369	0.00100	0.00105	1	11/24/2019 23:52	WG1386420
Ethylbenzene	U		0.000558	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
Hexachloro-1,3-butadiene	U		0.0134	0.0250	0.0263	1	11/24/2019 23:52	WG1386420
Isopropylbenzene	U		0.000909	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
p-Isopropyltoluene	U		0.00245	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
2-Butanone (MEK)	U		0.0132	0.0250	0.0263	1	11/24/2019 23:52	WG1386420
Methylene Chloride	U		0.00699	0.0250	0.0263	1	11/24/2019 23:52	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0105	0.0250	0.0263	1	11/24/2019 23:52	WG1386420
Methyl tert-butyl ether	U		0.000311	0.00100	0.00105	1	11/24/2019 23:52	WG1386420
Naphthalene	U		0.00329	0.0125	0.0132	1	11/24/2019 23:52	WG1386420
n-Propylbenzene	U		0.00124	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
Styrene	U		0.00288	0.0125	0.0132	1	11/24/2019 23:52	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000527	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000411	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000711	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
Tetrachloroethene	U		0.000737	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
Toluene	0.00440	J	0.00132	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
1,2,3-Trichlorobenzene	U		0.000658	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
1,2,4-Trichlorobenzene	U		0.00508	0.0125	0.0132	1	11/24/2019 23:52	WG1386420
1,1,1-Trichloroethane	U		0.000290	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
1,1,2-Trichloroethane	U		0.000930	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
Trichloroethene	U		0.000421	0.00100	0.00105	1	11/24/2019 23:52	WG1386420
Trichlorofluoromethane	U		0.000527	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
1,2,3-Trichloropropane	U		0.00537	0.0125	0.0132	1	11/24/2019 23:52	WG1386420
1,2,4-Trimethylbenzene	U		0.00122	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
1,2,3-Trimethylbenzene	U		0.00121	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
1,3,5-Trimethylbenzene	U		0.00114	0.00500	0.00527	1	11/24/2019 23:52	WG1386420
Vinyl chloride	U		0.000719	0.00250	0.00263	1	11/24/2019 23:52	WG1386420
Xylenes, Total	U		0.00503	0.00650	0.00685	1	11/24/2019 23:52	WG1386420
(S) Toluene-d8	*104*				*75.0-131*		*11/24/2019 23:52*	WG1386420
(S) 4-Bromofluorobenzene	*88.9*				*67.0-138*		*11/24/2019 23:52*	WG1386420
(S) 1,2-Dichloroethane-d4	*98.2*				*70.0-130*		*11/24/2019 23:52*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	971		70.0	4.00	211	50	11/19/2019 19:59	WG1382640
Residual Range Organics (RRO)	2300		175	10.0	527	50	11/19/2019 19:59	WG1382640
(S) o-Terphenyl	*108*	J7			*18.0-148*		*11/19/2019 19:59*	WG1382640

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.9		1	11/22/2019 16:46	WG1384982

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0316	B J	0.00315	0.0300	0.0338	1	11/21/2019 17:01	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.26		0.518	2.00	2.25	1	11/20/2019 00:31	WG1382657
Barium	67.2		0.191	0.500	0.563	1	11/20/2019 00:31	WG1382657
Cadmium	0.217	J	0.0788	0.500	0.563	1	11/20/2019 00:31	WG1382657
Chromium	33.3		0.158	1.00	1.13	1	11/20/2019 00:31	WG1382657
Lead	14.6		0.214	0.500	0.563	1	11/20/2019 00:31	WG1382657
Selenium	U		0.698	2.00	2.25	1	11/20/2019 00:31	WG1382657
Silver	0.226	B J	0.135	1.00	1.13	1	11/20/2019 00:31	WG1382657

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.954	0.100	2.81	25	11/22/2019 02:24	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/22/2019 02:24*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0154	0.0250	0.0281	1	11/25/2019 00:11	WG1386420
Acrylonitrile	U		0.00214	0.0125	0.0141	1	11/25/2019 00:11	WG1386420
Benzene	U		0.000450	0.00100	0.00113	1	11/25/2019 00:11	WG1386420
Bromobenzene	U		0.00118	0.0125	0.0141	1	11/25/2019 00:11	WG1386420
Bromodichloromethane	U		0.000887	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
Bromoform	U		0.00673	0.0250	0.0281	1	11/25/2019 00:11	WG1386420
Bromomethane	U		0.00416	0.0125	0.0141	1	11/25/2019 00:11	WG1386420
n-Butylbenzene	U		0.00432	0.0125	0.0141	1	11/25/2019 00:11	WG1386420
sec-Butylbenzene	U		0.00285	0.0125	0.0141	1	11/25/2019 00:11	WG1386420
tert-Butylbenzene	U		0.00174	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
Carbon tetrachloride	U		0.00122	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
Chlorobenzene	U		0.000645	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
Chlorodibromomethane	U		0.000506	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
Chloroethane	U		0.00122	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
Chloroform	U		0.000467	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
Chloromethane	U	J4	0.00156	0.0125	0.0141	1	11/25/2019 00:11	WG1386420
2-Chlorotoluene	U		0.00104	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
4-Chlorotoluene	U		0.00127	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00574	0.0250	0.0281	1	11/25/2019 00:11	WG1386420
1,2-Dibromoethane	U		0.000591	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
Dibromomethane	U		0.00113	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
1,2-Dichlorobenzene	U		0.00163	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
1,3-Dichlorobenzene	U		0.00191	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
1,4-Dichlorobenzene	U		0.00222	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
Dichlorodifluoromethane	U		0.000921	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
1,1-Dichloroethane	U		0.000647	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
1,2-Dichloroethane	U		0.000535	0.00250	0.00281	1	11/25/2019 00:11	WG1386420

SB-15(2-3)
Collected date/time: 11/14/19 11:47

SAMPLE RESULTS - 02

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000563	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
cis-1,2-Dichloroethene	U		0.000777	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
trans-1,2-Dichloroethene	U		0.00161	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
1,2-Dichloropropane	U		0.00143	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
1,1-Dichloropropene	U		0.000788	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
1,3-Dichloropropane	U		0.00197	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
cis-1,3-Dichloropropene	U		0.000763	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
trans-1,3-Dichloropropene	U		0.00172	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
2,2-Dichloropropane	U		0.000893	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
Di-isopropyl ether	U		0.000394	0.00100	0.00113	1	11/25/2019 00:11	WG1386420
Ethylbenzene	U		0.000597	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
Hexachloro-1,3-butadiene	U		0.0143	0.0250	0.0281	1	11/25/2019 00:11	WG1386420
Isopropylbenzene	U		0.000971	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
p-Isopropyltoluene	U		0.00262	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
2-Butanone (MEK)	U		0.0141	0.0250	0.0281	1	11/25/2019 00:11	WG1386420
Methylene Chloride	U		0.00747	0.0250	0.0281	1	11/25/2019 00:11	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0113	0.0250	0.0281	1	11/25/2019 00:11	WG1386420
Methyl tert-butyl ether	U		0.000332	0.00100	0.00113	1	11/25/2019 00:11	WG1386420
Naphthalene	U		0.00351	0.0125	0.0141	1	11/25/2019 00:11	WG1386420
n-Propylbenzene	U		0.00133	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
Styrene	U		0.00307	0.0125	0.0141	1	11/25/2019 00:11	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000563	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000439	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000760	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
Tetrachloroethene	U		0.000788	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
Toluene	0.00428	J	0.00141	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
1,2,3-Trichlorobenzene	U		0.000703	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
1,2,4-Trichlorobenzene	U		0.00542	0.0125	0.0141	1	11/25/2019 00:11	WG1386420
1,1,1-Trichloroethane	U		0.000310	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
1,1,2-Trichloroethane	U		0.000994	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
Trichloroethene	U		0.000450	0.00100	0.00113	1	11/25/2019 00:11	WG1386420
Trichlorofluoromethane	U		0.000563	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
1,2,3-Trichloropropane	U		0.00574	0.0125	0.0141	1	11/25/2019 00:11	WG1386420
1,2,4-Trimethylbenzene	U		0.00131	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
1,2,3-Trimethylbenzene	U		0.00129	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
1,3,5-Trimethylbenzene	U		0.00122	0.00500	0.00563	1	11/25/2019 00:11	WG1386420
Vinyl chloride	U		0.000769	0.00250	0.00281	1	11/25/2019 00:11	WG1386420
Xylenes, Total	U		0.00538	0.00650	0.00732	1	11/25/2019 00:11	WG1386420
(S) Toluene-d8	*101*				*75.0-131*		*11/25/2019 00:11*	WG1386420
(S) 4-Bromofluorobenzene	*87.3*				*67.0-138*		*11/25/2019 00:11*	WG1386420
(S) 1,2-Dichloroethane-d4	*93.0*				*70.0-130*		*11/25/2019 00:11*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	10.1		1.50	4.00	4.50	1	11/19/2019 16:18	WG1382640
Residual Range Organics (RRO)	70.7		3.75	10.0	11.3	1	11/19/2019 16:18	WG1382640
(S) o-Terphenyl	*50.5*				*18.0-148*		*11/19/2019 16:18*	WG1382640

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.7		1	11/22/2019 16:46	WG1384982

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0375	B	0.00296	0.0300	0.0317	1	11/21/2019 17:04	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.99	J	0.486	2.00	2.11	1	11/20/2019 00:34	WG1382657
Barium	57.5		0.180	0.500	0.528	1	11/20/2019 00:34	WG1382657
Cadmium	0.186	J	0.0739	0.500	0.528	1	11/20/2019 00:34	WG1382657
Chromium	31.4		0.148	1.00	1.06	1	11/20/2019 00:34	WG1382657
Lead	2.32		0.201	0.500	0.528	1	11/20/2019 00:34	WG1382657
Selenium	U		0.655	2.00	2.11	1	11/20/2019 00:34	WG1382657
Silver	0.260	B J	0.127	1.00	1.06	1	11/20/2019 00:34	WG1382657

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.895	0.100	2.64	25	11/22/2019 02:48	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*99.3*				*77.0-120*		*11/22/2019 02:48*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0145	0.0250	0.0264	1	11/25/2019 00:30	WG1386420
Acrylonitrile	U		0.00201	0.0125	0.0132	1	11/25/2019 00:30	WG1386420
Benzene	U		0.000422	0.00100	0.00106	1	11/25/2019 00:30	WG1386420
Bromobenzene	U		0.00111	0.0125	0.0132	1	11/25/2019 00:30	WG1386420
Bromodichloromethane	U		0.000832	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
Bromoform	U		0.00631	0.0250	0.0264	1	11/25/2019 00:30	WG1386420
Bromomethane	U		0.00391	0.0125	0.0132	1	11/25/2019 00:30	WG1386420
n-Butylbenzene	U		0.00406	0.0125	0.0132	1	11/25/2019 00:30	WG1386420
sec-Butylbenzene	U		0.00267	0.0125	0.0132	1	11/25/2019 00:30	WG1386420
tert-Butylbenzene	U		0.00164	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
Carbon tetrachloride	U		0.00114	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
Chlorobenzene	U		0.000605	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
Chlorodibromomethane	U		0.000475	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
Chloroethane	U		0.00114	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
Chloroform	0.000616	J	0.000438	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
Chloromethane	U	J4	0.00147	0.0125	0.0132	1	11/25/2019 00:30	WG1386420
2-Chlorotoluene	U		0.000972	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
4-Chlorotoluene	U		0.00119	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00539	0.0250	0.0264	1	11/25/2019 00:30	WG1386420
1,2-Dibromoethane	U		0.000554	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
Dibromomethane	U		0.00106	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
1,2-Dichlorobenzene	U		0.00153	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
1,3-Dichlorobenzene	U		0.00180	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
1,4-Dichlorobenzene	U		0.00208	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
Dichlorodifluoromethane	U		0.000864	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
1,1-Dichloroethane	U		0.000607	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
1,2-Dichloroethane	U		0.000502	0.00250	0.00264	1	11/25/2019 00:30	WG1386420

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000528	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
cis-1,2-Dichloroethene	U		0.000729	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
trans-1,2-Dichloroethene	U		0.00151	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
1,2-Dichloropropane	U		0.00134	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
1,1-Dichloropropene	U		0.000739	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
1,3-Dichloropropane	U		0.00185	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
cis-1,3-Dichloropropene	U		0.000716	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
trans-1,3-Dichloropropene	U		0.00162	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
2,2-Dichloropropane	U		0.000837	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
Di-isopropyl ether	U		0.000370	0.00100	0.00106	1	11/25/2019 00:30	WG1386420
Ethylbenzene	U		0.000560	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
Hexachloro-1,3-butadiene	U		0.0134	0.0250	0.0264	1	11/25/2019 00:30	WG1386420
Isopropylbenzene	U		0.000911	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
p-Isopropyltoluene	U		0.00246	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
2-Butanone (MEK)	U		0.0132	0.0250	0.0264	1	11/25/2019 00:30	WG1386420
Methylene Chloride	U		0.00701	0.0250	0.0264	1	11/25/2019 00:30	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0106	0.0250	0.0264	1	11/25/2019 00:30	WG1386420
Methyl tert-butyl ether	U		0.000312	0.00100	0.00106	1	11/25/2019 00:30	WG1386420
Naphthalene	U		0.00329	0.0125	0.0132	1	11/25/2019 00:30	WG1386420
n-Propylbenzene	U		0.00125	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
Styrene	U		0.00288	0.0125	0.0132	1	11/25/2019 00:30	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000528	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000412	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000713	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
Tetrachloroethene	U		0.000739	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
Toluene	0.00228	J	0.00132	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
1,2,3-Trichlorobenzene	U		0.000660	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
1,2,4-Trichlorobenzene	U		0.00509	0.0125	0.0132	1	11/25/2019 00:30	WG1386420
1,1,1-Trichloroethane	U		0.000290	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
1,1,2-Trichloroethane	U		0.000932	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
Trichloroethene	U		0.000422	0.00100	0.00106	1	11/25/2019 00:30	WG1386420
Trichlorofluoromethane	U		0.000528	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
1,2,3-Trichloropropane	U		0.00539	0.0125	0.0132	1	11/25/2019 00:30	WG1386420
1,2,4-Trimethylbenzene	U		0.00122	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
1,2,3-Trimethylbenzene	U		0.00121	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
1,3,5-Trimethylbenzene	U		0.00114	0.00500	0.00528	1	11/25/2019 00:30	WG1386420
Vinyl chloride	U		0.000721	0.00250	0.00264	1	11/25/2019 00:30	WG1386420
Xylenes, Total	U		0.00505	0.00650	0.00686	1	11/25/2019 00:30	WG1386420
(S) Toluene-d8	*101*				*75.0-131*		*11/25/2019 00:30*	WG1386420
(S) 4-Bromofluorobenzene	*87.1*				*67.0-138*		*11/25/2019 00:30*	WG1386420
(S) 1,2-Dichloroethane-d4	*93.9*				*70.0-130*		*11/25/2019 00:30*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	2.76	J	1.40	4.00	4.22	1	11/21/2019 06:17	WG1382640
Residual Range Organics (RRO)	23.1		3.52	10.0	10.6	1	11/21/2019 06:17	WG1382640
(S) o-Terphenyl	*79.6*				*18.0-148*		*11/21/2019 06:17*	WG1382640

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.3		1	11/22/2019 16:46	WG1384982

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0618		0.00324	0.0300	0.0347	1	11/21/2019 17:06	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.30		0.533	2.00	2.32	1	11/20/2019 00:37	WG1382657
Barium	114		0.197	0.500	0.579	1	11/20/2019 00:37	WG1382657
Cadmium	0.284	J	0.0811	0.500	0.579	1	11/20/2019 00:37	WG1382657
Chromium	32.3		0.162	1.00	1.16	1	11/20/2019 00:37	WG1382657
Lead	15.8		0.220	0.500	0.579	1	11/20/2019 00:37	WG1382657
Selenium	0.735	J	0.718	2.00	2.32	1	11/20/2019 00:37	WG1382657
Silver	0.288	B J	0.139	1.00	1.16	1	11/20/2019 00:37	WG1382657

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.982	0.100	2.90	25	11/22/2019 03:12	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*99.4*				*77.0-120*		*11/22/2019 03:12*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0889		0.0159	0.0250	0.0290	1	11/25/2019 00:49	WG1386420
Acrylonitrile	U		0.00220	0.0125	0.0145	1	11/25/2019 00:49	WG1386420
Benzene	0.00184		0.000463	0.00100	0.00116	1	11/25/2019 00:49	WG1386420
Bromobenzene	U		0.00122	0.0125	0.0145	1	11/25/2019 00:49	WG1386420
Bromodichloromethane	U		0.000913	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
Bromoform	U		0.00693	0.0250	0.0290	1	11/25/2019 00:49	WG1386420
Bromomethane	U		0.00429	0.0125	0.0145	1	11/25/2019 00:49	WG1386420
n-Butylbenzene	U		0.00445	0.0125	0.0145	1	11/25/2019 00:49	WG1386420
sec-Butylbenzene	U		0.00293	0.0125	0.0145	1	11/25/2019 00:49	WG1386420
tert-Butylbenzene	U		0.00180	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
Carbon tetrachloride	U		0.00125	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
Chlorobenzene	U		0.000664	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
Chlorodibromomethane	U		0.000521	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
Chloroethane	U		0.00125	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
Chloroform	U		0.000481	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
Chloromethane	U	J4	0.00161	0.0125	0.0145	1	11/25/2019 00:49	WG1386420
2-Chlorotoluene	U		0.00107	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
4-Chlorotoluene	U		0.00131	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00591	0.0250	0.0290	1	11/25/2019 00:49	WG1386420
1,2-Dibromoethane	U		0.000608	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
Dibromomethane	U		0.00116	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
1,2-Dichlorobenzene	U		0.00168	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
1,3-Dichlorobenzene	U		0.00197	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
1,4-Dichlorobenzene	U		0.00228	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
Dichlorodifluoromethane	U		0.000947	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
1,1-Dichloroethane	U		0.000666	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
1,2-Dichloroethane	U		0.000550	0.00250	0.00290	1	11/25/2019 00:49	WG1386420

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000579	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
cis-1,2-Dichloroethene	U		0.000799	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
trans-1,2-Dichloroethene	U		0.00166	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
1,2-Dichloropropane	U		0.00147	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
1,1-Dichloropropene	U		0.000811	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
1,3-Dichloropropane	U		0.00203	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
cis-1,3-Dichloropropene	U		0.000785	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
trans-1,3-Dichloropropene	U		0.00177	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
2,2-Dichloropropane	U		0.000918	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
Di-isopropyl ether	U		0.000405	0.00100	0.00116	1	11/25/2019 00:49	WG1386420
Ethylbenzene	0.00152	J	0.000614	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
Hexachloro-1,3-butadiene	U		0.0147	0.0250	0.0290	1	11/25/2019 00:49	WG1386420
Isopropylbenzene	U		0.000999	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
p-Isopropyltoluene	0.0148		0.00270	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
2-Butanone (MEK)	0.0335	B	0.0145	0.0250	0.0290	1	11/25/2019 00:49	WG1386420
Methylene Chloride	U		0.00769	0.0250	0.0290	1	11/25/2019 00:49	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0116	0.0250	0.0290	1	11/25/2019 00:49	WG1386420
Methyl tert-butyl ether	U		0.000342	0.00100	0.00116	1	11/25/2019 00:49	WG1386420
Naphthalene	U		0.00361	0.0125	0.0145	1	11/25/2019 00:49	WG1386420
n-Propylbenzene	U		0.00137	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
Styrene	U		0.00316	0.0125	0.0145	1	11/25/2019 00:49	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000579	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000452	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000782	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
Tetrachloroethene	U		0.000811	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
Toluene	0.0149		0.00145	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
1,2,3-Trichlorobenzene	U		0.000724	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
1,2,4-Trichlorobenzene	U		0.00558	0.0125	0.0145	1	11/25/2019 00:49	WG1386420
1,1,1-Trichloroethane	U		0.000318	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
1,1,2-Trichloroethane	U		0.00102	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
Trichloroethene	U		0.000463	0.00100	0.00116	1	11/25/2019 00:49	WG1386420
Trichlorofluoromethane	U		0.000579	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
1,2,3-Trichloropropane	U		0.00591	0.0125	0.0145	1	11/25/2019 00:49	WG1386420
1,2,4-Trimethylbenzene	U		0.00134	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
1,2,3-Trimethylbenzene	0.00164	J	0.00133	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
1,3,5-Trimethylbenzene	U		0.00125	0.00500	0.00579	1	11/25/2019 00:49	WG1386420
Vinyl chloride	U		0.000791	0.00250	0.00290	1	11/25/2019 00:49	WG1386420
Xylenes, Total	U		0.00554	0.00650	0.00753	1	11/25/2019 00:49	WG1386420
(S) Toluene-d8	*99.1*				*75.0-131*		*11/25/2019 00:49*	WG1386420
(S) 4-Bromofluorobenzene	*96.3*				*67.0-138*		*11/25/2019 00:49*	WG1386420
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*11/25/2019 00:49*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	13.8		1.54	4.00	4.63	1	11/19/2019 16:44	WG1382640
Residual Range Organics (RRO)	53.3		3.86	10.0	11.6	1	11/19/2019 16:44	WG1382640
(S) o-Terphenyl	*65.0*				*18.0-148*		*11/19/2019 16:44*	WG1382640

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.6		1	11/22/2019 16:46	WG1384982

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0540		0.00331	0.0300	0.0355	1	11/21/2019 17:14	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.89		0.544	2.00	2.36	1	11/20/2019 00:40	WG1382657
Barium	125		0.201	0.500	0.591	1	11/20/2019 00:40	WG1382657
Cadmium	0.350	J	0.0828	0.500	0.591	1	11/20/2019 00:40	WG1382657
Chromium	40.9		0.166	1.00	1.18	1	11/20/2019 00:40	WG1382657
Lead	21.7		0.225	0.500	0.591	1	11/20/2019 00:40	WG1382657
Selenium	0.937	J	0.733	2.00	2.36	1	11/20/2019 00:40	WG1382657
Silver	0.241	B J	0.142	1.00	1.18	1	11/20/2019 00:40	WG1382657

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.00	0.100	2.96	25	11/22/2019 03:36	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*99.6*				*77.0-120*		*11/22/2019 03:36*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0162	0.0250	0.0296	1	11/25/2019 01:08	WG1386420
Acrylonitrile	U		0.00225	0.0125	0.0148	1	11/25/2019 01:08	WG1386420
Benzene	0.00101	J	0.000473	0.00100	0.00118	1	11/25/2019 01:08	WG1386420
Bromobenzene	U		0.00124	0.0125	0.0148	1	11/25/2019 01:08	WG1386420
Bromodichloromethane	U		0.000932	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
Bromoform	U		0.00707	0.0250	0.0296	1	11/25/2019 01:08	WG1386420
Bromomethane	U		0.00437	0.0125	0.0148	1	11/25/2019 01:08	WG1386420
n-Butylbenzene	U		0.00454	0.0125	0.0148	1	11/25/2019 01:08	WG1386420
sec-Butylbenzene	U		0.00299	0.0125	0.0148	1	11/25/2019 01:08	WG1386420
tert-Butylbenzene	U		0.00183	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
Carbon tetrachloride	U		0.00128	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
Chlorobenzene	U		0.000677	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
Chlorodibromomethane	U		0.000532	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
Chloroethane	U		0.00128	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
Chloroform	U		0.000491	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
Chloromethane	U	J4	0.00164	0.0125	0.0148	1	11/25/2019 01:08	WG1386420
2-Chlorotoluene	U		0.00109	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
4-Chlorotoluene	U		0.00134	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00603	0.0250	0.0296	1	11/25/2019 01:08	WG1386420
1,2-Dibromoethane	U		0.000621	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
Dibromomethane	U		0.00118	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
1,2-Dichlorobenzene	U		0.00171	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
1,3-Dichlorobenzene	U		0.00201	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
1,4-Dichlorobenzene	U		0.00233	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
Dichlorodifluoromethane	U		0.000967	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
1,1-Dichloroethane	U		0.000680	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
1,2-Dichloroethane	U		0.000562	0.00250	0.00296	1	11/25/2019 01:08	WG1386420

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000591	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
cis-1,2-Dichloroethene	U		0.000816	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
trans-1,2-Dichloroethene	U		0.00169	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
1,2-Dichloropropane	U		0.00150	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
1,1-Dichloropropene	U		0.000828	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
1,3-Dichloropropane	U		0.00207	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
cis-1,3-Dichloropropene	U		0.000802	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
trans-1,3-Dichloropropene	U		0.00181	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
2,2-Dichloropropane	U		0.000938	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
Di-isopropyl ether	U		0.000414	0.00100	0.00118	1	11/25/2019 01:08	WG1386420
Ethylbenzene	U		0.000627	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
Hexachloro-1,3-butadiene	U		0.0150	0.0250	0.0296	1	11/25/2019 01:08	WG1386420
Isopropylbenzene	U		0.00102	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
p-Isopropyltoluene	0.0712		0.00275	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
2-Butanone (MEK)	U		0.0148	0.0250	0.0296	1	11/25/2019 01:08	WG1386420
Methylene Chloride	U		0.00785	0.0250	0.0296	1	11/25/2019 01:08	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0118	0.0250	0.0296	1	11/25/2019 01:08	WG1386420
Methyl tert-butyl ether	U		0.000349	0.00100	0.00118	1	11/25/2019 01:08	WG1386420
Naphthalene	U		0.00369	0.0125	0.0148	1	11/25/2019 01:08	WG1386420
n-Propylbenzene	U		0.00140	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
Styrene	U		0.00323	0.0125	0.0148	1	11/25/2019 01:08	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000591	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000461	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000798	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
Tetrachloroethene	U		0.000828	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
Toluene	0.00545	J	0.00148	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
1,2,3-Trichlorobenzene	U		0.000739	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
1,2,4-Trichlorobenzene	U		0.00570	0.0125	0.0148	1	11/25/2019 01:08	WG1386420
1,1,1-Trichloroethane	U		0.000325	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
1,1,2-Trichloroethane	U		0.00104	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
Trichloroethene	U		0.000473	0.00100	0.00118	1	11/25/2019 01:08	WG1386420
Trichlorofluoromethane	U		0.000591	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
1,2,3-Trichloropropane	U		0.00603	0.0125	0.0148	1	11/25/2019 01:08	WG1386420
1,2,4-Trimethylbenzene	U		0.00137	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
1,2,3-Trimethylbenzene	U		0.00136	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
1,3,5-Trimethylbenzene	U		0.00128	0.00500	0.00591	1	11/25/2019 01:08	WG1386420
Vinyl chloride	U		0.000808	0.00250	0.00296	1	11/25/2019 01:08	WG1386420
Xylenes, Total	U		0.00565	0.00650	0.00768	1	11/25/2019 01:08	WG1386420
(S) Toluene-d8	*102*				*75.0-131*		*11/25/2019 01:08*	WG1386420
(S) 4-Bromofluorobenzene	*91.6*				*67.0-138*		*11/25/2019 01:08*	WG1386420
(S) 1,2-Dichloroethane-d4	*96.8*				*70.0-130*		*11/25/2019 01:08*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	11.0		1.57	4.00	4.73	1	11/19/2019 18:03	WG1382640
Residual Range Organics (RRO)	60.7		3.94	10.0	11.8	1	11/19/2019 18:03	WG1382640
(S) o-Terphenyl	*57.4*				*18.0-148*		*11/19/2019 18:03*	WG1382640

SB-17F(10-11)

Collected date/time: 11/14/19 15:47

SAMPLE RESULTS - 06

L1161924

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.0		1	11/22/2019 16:46	WG1384982

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0628		0.00337	0.0300	0.0362	1	11/21/2019 17:16	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.40		0.554	2.00	2.41	1	11/20/2019 00:48	WG1382657
Barium	131		0.205	0.500	0.603	1	11/20/2019 00:48	WG1382657
Cadmium	0.541	J	0.0844	0.500	0.603	1	11/20/2019 00:48	WG1382657
Chromium	38.1		0.169	1.00	1.21	1	11/20/2019 00:48	WG1382657
Lead	48.0		0.229	0.500	0.603	1	11/20/2019 00:48	WG1382657
Selenium	0.850	J	0.747	2.00	2.41	1	11/20/2019 00:48	WG1382657
Silver	0.332	B J	0.145	1.00	1.21	1	11/20/2019 00:48	WG1382657

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	26.2		1.02	0.100	3.01	25	11/22/2019 04:00	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/22/2019 04:00*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0165	0.0250	0.0301	1	11/25/2019 01:27	WG1386420
Acrylonitrile	U		0.00229	0.0125	0.0151	1	11/25/2019 01:27	WG1386420
Benzene	0.00245		0.000482	0.00100	0.00121	1	11/25/2019 01:27	WG1386420
Bromobenzene	U		0.00127	0.0125	0.0151	1	11/25/2019 01:27	WG1386420
Bromodichloromethane	U		0.000950	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
Bromoform	U		0.00721	0.0250	0.0301	1	11/25/2019 01:27	WG1386420
Bromomethane	U		0.00446	0.0125	0.0151	1	11/25/2019 01:27	WG1386420
n-Butylbenzene	U		0.00463	0.0125	0.0151	1	11/25/2019 01:27	WG1386420
sec-Butylbenzene	0.0135	J	0.00305	0.0125	0.0151	1	11/25/2019 01:27	WG1386420
tert-Butylbenzene	U		0.00187	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
Carbon tetrachloride	U		0.00130	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
Chlorobenzene	U		0.000691	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
Chlorodibromomethane	U		0.000542	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
Chloroethane	U		0.00130	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
Chloroform	U		0.000500	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
Chloromethane	U	J4	0.00168	0.0125	0.0151	1	11/25/2019 01:27	WG1386420
2-Chlorotoluene	U		0.00111	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
4-Chlorotoluene	U		0.00136	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00615	0.0250	0.0301	1	11/25/2019 01:27	WG1386420
1,2-Dibromoethane	U		0.000633	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
Dibromomethane	U		0.00121	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
1,2-Dichlorobenzene	U		0.00175	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
1,3-Dichlorobenzene	U		0.00205	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
1,4-Dichlorobenzene	U		0.00237	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
Dichlorodifluoromethane	U		0.000986	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
1,1-Dichloroethane	U		0.000693	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
1,2-Dichloroethane	U		0.000573	0.00250	0.00301	1	11/25/2019 01:27	WG1386420

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000603	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
cis-1,2-Dichloroethene	U		0.000832	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
trans-1,2-Dichloroethene	U		0.00172	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
1,2-Dichloropropane	U		0.00153	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
1,1-Dichloropropene	U		0.000844	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
1,3-Dichloropropane	U		0.00211	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
cis-1,3-Dichloropropene	U		0.000817	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
trans-1,3-Dichloropropene	U		0.00184	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
2,2-Dichloropropane	U		0.000956	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
Di-isopropyl ether	U		0.000422	0.00100	0.00121	1	11/25/2019 01:27	WG1386420
Ethylbenzene	0.00219	J	0.000639	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
Hexachloro-1,3-butadiene	U		0.0153	0.0250	0.0301	1	11/25/2019 01:27	WG1386420
Isopropylbenzene	U		0.00104	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
p-Isopropyltoluene	0.704		0.00281	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
2-Butanone (MEK)	U		0.0151	0.0250	0.0301	1	11/25/2019 01:27	WG1386420
Methylene Chloride	U		0.00800	0.0250	0.0301	1	11/25/2019 01:27	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0121	0.0250	0.0301	1	11/25/2019 01:27	WG1386420
Methyl tert-butyl ether	U		0.000356	0.00100	0.00121	1	11/25/2019 01:27	WG1386420
Naphthalene	0.00376	J	0.00376	0.0125	0.0151	1	11/25/2019 01:27	WG1386420
n-Propylbenzene	U		0.00142	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
Styrene	U		0.00329	0.0125	0.0151	1	11/25/2019 01:27	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000603	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000470	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000814	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
Tetrachloroethene	U		0.000844	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
Toluene	0.0155		0.00151	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
1,2,3-Trichlorobenzene	U		0.000753	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
1,2,4-Trichlorobenzene	U		0.00581	0.0125	0.0151	1	11/25/2019 01:27	WG1386420
1,1,1-Trichloroethane	U		0.000331	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
1,1,2-Trichloroethane	U		0.00106	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
Trichloroethene	U		0.000482	0.00100	0.00121	1	11/25/2019 01:27	WG1386420
Trichlorofluoromethane	U		0.000603	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
1,2,3-Trichloropropane	U		0.00615	0.0125	0.0151	1	11/25/2019 01:27	WG1386420
1,2,4-Trimethylbenzene	0.0130		0.00140	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
1,2,3-Trimethylbenzene	0.00388	J	0.00139	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
1,3,5-Trimethylbenzene	0.00131	J	0.00130	0.00500	0.00603	1	11/25/2019 01:27	WG1386420
Vinyl chloride	U		0.000823	0.00250	0.00301	1	11/25/2019 01:27	WG1386420
Xylenes, Total	U		0.00576	0.00650	0.00783	1	11/25/2019 01:27	WG1386420
(S) Toluene-d8	*102*				*75.0-131*		*11/25/2019 01:27*	WG1386420
(S) 4-Bromofluorobenzene	*94.3*				*67.0-138*		*11/25/2019 01:27*	WG1386420
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*11/25/2019 01:27*	WG1386420

Volatile Organic Compounds (GC/MS) by Method 8260D - TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch	CAS #
Tricyclo[2.2.1.02,6]Heptane, 1,3,3-Trimethyl-	2.70	J N	0.000	0.000	0.000	1	11/25/2019 01:27	WG1386420	488-97-1
Camphene	0.410	J N	0.000	0.000	0.000	1	11/25/2019 01:27	WG1386420	79-92-5
Bicyclo[4.1.0]Heptane, 3,7,7-Trimethyl-, [1S-(1.Alpha.,3.Bet	0.242	J N	0.000	0.000	0.000	1	11/25/2019 01:27	WG1386420	2778-68-9
D-Limonene	0.258	J N	0.000	0.000	0.000	1	11/25/2019 01:27	WG1386420	5989-27-5
Benzene, 1-Methyl-4-(1-Methylethyl)-	0.961	J N	0.000	0.000	0.000	1	11/25/2019 01:27	WG1386420	99-87-6
Cyclohexene, 1-Methyl-4-(1-Methylethylidene)-	0.0970	J N	0.000	0.000	0.000	1	11/25/2019 01:27	WG1386420	586-62-9
L-1,2,3-Trimethylbicyclo[2.2.1]-2-Heptanol	0.189	J N	0.000	0.000	0.000	1	11/25/2019 01:27	WG1386420	0-00-0

Volatile Organic Compounds (GC/MS) by Method 8260D - TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch	CAS #

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	60.9		16.0	4.00	48.2	10	11/19/2019 18:43	WG1382640
Residual Range Organics (RRO)	213		40.1	10.0	121	10	11/19/2019 18:43	WG1382640
(S) o-Terphenyl	*66.0*				*18.0-148*		*11/19/2019 18:43*	WG1382640

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	91.0		1	11/22/2019 16:46	WG1384982

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0240	B J	0.00308	0.0300	0.0330	1	11/21/2019 17:19	WG1382810

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	2.78		0.506	2.00	2.20	1	11/20/2019 00:51	WG1382657
Barium	75.2		0.187	0.500	0.550	1	11/20/2019 00:51	WG1382657
Cadmium	0.244	J	0.0770	0.500	0.550	1	11/20/2019 00:51	WG1382657
Chromium	92.4		0.154	1.00	1.10	1	11/20/2019 00:51	WG1382657
Lead	8.01		0.209	0.500	0.550	1	11/20/2019 00:51	WG1382657
Selenium	U		0.682	2.00	2.20	1	11/20/2019 00:51	WG1382657
Silver	0.271	B J	0.132	1.00	1.10	1	11/20/2019 00:51	WG1382657

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	5.84		0.932	0.100	2.75	25	11/22/2019 04:25	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/22/2019 04:25*	WG1384475

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0151	0.0250	0.0275	1	11/25/2019 01:46	WG1386420
Acrylonitrile	U		0.00209	0.0125	0.0137	1	11/25/2019 01:46	WG1386420
Benzene	0.000468	J	0.000440	0.00100	0.00110	1	11/25/2019 01:46	WG1386420
Bromobenzene	U		0.00115	0.0125	0.0137	1	11/25/2019 01:46	WG1386420
Bromodichloromethane	U		0.000866	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
Bromoform	U		0.00657	0.0250	0.0275	1	11/25/2019 01:46	WG1386420
Bromomethane	U		0.00407	0.0125	0.0137	1	11/25/2019 01:46	WG1386420
n-Butylbenzene	U		0.00422	0.0125	0.0137	1	11/25/2019 01:46	WG1386420
sec-Butylbenzene	0.00359	J	0.00278	0.0125	0.0137	1	11/25/2019 01:46	WG1386420
tert-Butylbenzene	U		0.00170	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
Carbon tetrachloride	U		0.00119	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
Chlorobenzene	U		0.000630	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
Chlorodibromomethane	U		0.000495	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
Chloroethane	U		0.00119	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
Chloroform	U		0.000456	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
Chloromethane	U	J4	0.00153	0.0125	0.0137	1	11/25/2019 01:46	WG1386420
2-Chlorotoluene	U		0.00101	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
4-Chlorotoluene	U		0.00124	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00561	0.0250	0.0275	1	11/25/2019 01:46	WG1386420
1,2-Dibromoethane	U		0.000577	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
Dibromomethane	U		0.00110	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
1,2-Dichlorobenzene	U		0.00159	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
1,3-Dichlorobenzene	U		0.00187	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
1,4-Dichlorobenzene	U		0.00217	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
Dichlorodifluoromethane	U		0.000899	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
1,1-Dichloroethane	U		0.000632	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
1,2-Dichloroethane	U		0.000522	0.00250	0.00275	1	11/25/2019 01:46	WG1386420

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000550	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
cis-1,2-Dichloroethene	U		0.000759	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
trans-1,2-Dichloroethene	U		0.00157	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
1,2-Dichloropropane	U		0.00140	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
1,1-Dichloropropene	U		0.000770	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
1,3-Dichloropropane	U		0.00192	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
cis-1,3-Dichloropropene	U		0.000745	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
trans-1,3-Dichloropropene	U		0.00168	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
2,2-Dichloropropane	U		0.000872	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
Di-isopropyl ether	U		0.000385	0.00100	0.00110	1	11/25/2019 01:46	WG1386420
Ethylbenzene	U		0.000583	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
Hexachloro-1,3-butadiene	U		0.0140	0.0250	0.0275	1	11/25/2019 01:46	WG1386420
Isopropylbenzene	U		0.000949	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
p-Isopropyltoluene	0.401		0.00256	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
2-Butanone (MEK)	U		0.0137	0.0250	0.0275	1	11/25/2019 01:46	WG1386420
Methylene Chloride	U		0.00730	0.0250	0.0275	1	11/25/2019 01:46	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0250	0.0275	1	11/25/2019 01:46	WG1386420
Methyl tert-butyl ether	U		0.000324	0.00100	0.00110	1	11/25/2019 01:46	WG1386420
Naphthalene	U		0.00343	0.0125	0.0137	1	11/25/2019 01:46	WG1386420
n-Propylbenzene	U		0.00130	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
Styrene	U		0.00300	0.0125	0.0137	1	11/25/2019 01:46	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000550	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000429	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000742	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
Tetrachloroethene	U		0.000770	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
Toluene	0.00354	J	0.00137	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
1,2,3-Trichlorobenzene	U		0.000687	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
1,2,4-Trichlorobenzene	U		0.00530	0.0125	0.0137	1	11/25/2019 01:46	WG1386420
1,1,1-Trichloroethane	U		0.000302	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
1,1,2-Trichloroethane	U		0.000971	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
Trichloroethene	U		0.000440	0.00100	0.00110	1	11/25/2019 01:46	WG1386420
Trichlorofluoromethane	U		0.000550	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
1,2,3-Trichloropropane	U		0.00561	0.0125	0.0137	1	11/25/2019 01:46	WG1386420
1,2,4-Trimethylbenzene	0.00716		0.00128	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
1,2,3-Trimethylbenzene	U		0.00126	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
1,3,5-Trimethylbenzene	U		0.00119	0.00500	0.00550	1	11/25/2019 01:46	WG1386420
Vinyl chloride	U		0.000751	0.00250	0.00275	1	11/25/2019 01:46	WG1386420
Xylenes, Total	U		0.00525	0.00650	0.00715	1	11/25/2019 01:46	WG1386420
(S) Toluene-d8	*102*				*75.0-131*		*11/25/2019 01:46*	WG1386420
(S) 4-Bromofluorobenzene	*91.5*				*67.0-138*		*11/25/2019 01:46*	WG1386420
(S) 1,2-Dichloroethane-d4	*99.3*				*70.0-130*		*11/25/2019 01:46*	WG1386420

Volatile Organic Compounds (GC/MS) by Method 8260D - TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch	CAS #
Tricyclo[2.2.1.02,6]Heptane, 1,3,3-Trimethyl-	0.931	J N	0.000	0.000	0.000	1	11/25/2019 01:46	WG1386420	488-97-1
Camphene	0.145	J N	0.000	0.000	0.000	1	11/25/2019 01:46	WG1386420	79-92-5
Bicyclo[4.1.0]Heptane, 3,7,7-Trimethyl-, [1S-(1.Alpha.,3.Bet	0.123	J N	0.000	0.000	0.000	1	11/25/2019 01:46	WG1386420	2778-68-9
Benzene, 1-Methyl-3-(1-Methylethyl)-	0.532	J N	0.000	0.000	0.000	1	11/25/2019 01:46	WG1386420	535-77-3
Cyclohexene, 1-Methyl-4-(1-Methylethylidene)-	0.0278	J N	0.000	0.000	0.000	1	11/25/2019 01:46	WG1386420	586-62-9
L-1,2,3-Trimethylbicyclo[2.2.1]-2-Heptanol	0.0707	J N	0.000	0.000	0.000	1	11/25/2019 01:46	WG1386420	0-00-0
1-Cyclohexyl-2-Methyl-2-Propanol	0.0729	J N	0.000	0.000	0.000	1	11/25/2019 01:46	WG1386420	5531-30-6

SB-17F(18-20)

Collected date/time: 11/14/19 15:45

SAMPLE RESULTS - 07

L1161924

Volatile Organic Compounds (GC/MS) by Method 8260D - TENTATIVELY IDENTIFIED COMPOUNDS

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch	CAS #
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time		

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	117		1.46	4.00	4.40	1	11/19/2019 17:50	WG1382640
Residual Range Organics (RRO)	211		18.3	10.0	55.0	5	11/21/2019 08:36	WG1382640
(S) o-Terphenyl	*182*	J1			*18.0-148*		*11/21/2019 08:36*	WG1382640
(S) o-Terphenyl	*175*	J1			*18.0-148*		*11/19/2019 17:50*	WG1382640

Sample Narrative:

L1161924-07 WG1382640: Surrogate failure due to matrix interference

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

SB-17F(24-25)
Collected date/time: 11/14/19 15:46

SAMPLE RESULTS - 08

L1161924

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.6		1	11/22/2019 16:23	WG1384983

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0224	B J	0.00293	0.0300	0.0314	1	11/21/2019 17:22	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.07		0.481	2.00	2.09	1	11/20/2019 14:16	WG1382679
Barium	78.7	O1	0.178	0.500	0.523	1	11/20/2019 14:16	WG1382679
Cadmium	0.175	J	0.0732	0.500	0.523	1	11/20/2019 14:16	WG1382679
Chromium	98.1	J6 O1	0.146	1.00	1.05	1	11/20/2019 14:16	WG1382679
Lead	9.13		0.199	0.500	0.523	1	11/20/2019 14:16	WG1382679
Selenium	U		0.648	2.00	2.09	1	11/20/2019 14:16	WG1382679
Silver	U		0.126	1.00	1.05	1	11/20/2019 14:16	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.897	0.100	2.65	25.3	11/22/2019 04:49	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*99.9*				*77.0-120*		*11/22/2019 04:49*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0397		0.0145	0.0250	0.0265	1.01	11/25/2019 02:05	WG1386420
Acrylonitrile	U		0.00201	0.0125	0.0132	1.01	11/25/2019 02:05	WG1386420
Benzene	0.000898	J	0.000423	0.00100	0.00106	1.01	11/25/2019 02:05	WG1386420
Bromobenzene	U		0.00111	0.0125	0.0132	1.01	11/25/2019 02:05	WG1386420
Bromodichloromethane	U		0.000832	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
Bromoform	U		0.00632	0.0250	0.0265	1.01	11/25/2019 02:05	WG1386420
Bromomethane	U		0.00391	0.0125	0.0132	1.01	11/25/2019 02:05	WG1386420
n-Butylbenzene	U		0.00406	0.0125	0.0132	1.01	11/25/2019 02:05	WG1386420
sec-Butylbenzene	U		0.00267	0.0125	0.0132	1.01	11/25/2019 02:05	WG1386420
tert-Butylbenzene	U		0.00164	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
Carbon tetrachloride	U		0.00114	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
Chlorobenzene	U		0.000605	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
Chlorodibromomethane	U		0.000475	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
Chloroethane	U		0.00114	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
Chloroform	U		0.000438	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
Chloromethane	U	J4	0.00147	0.0125	0.0132	1.01	11/25/2019 02:05	WG1386420
2-Chlorotoluene	U		0.000972	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
4-Chlorotoluene	U		0.00119	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00539	0.0250	0.0265	1.01	11/25/2019 02:05	WG1386420
1,2-Dibromoethane	U		0.000555	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
Dibromomethane	U		0.00106	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
1,2-Dichlorobenzene	U		0.00153	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
1,3-Dichlorobenzene	U		0.00180	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
1,4-Dichlorobenzene	U		0.00208	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
Dichlorodifluoromethane	U		0.000864	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
1,1-Dichloroethane	U		0.000607	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
1,2-Dichloroethane	U		0.000502	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000528	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
cis-1,2-Dichloroethene	U		0.000729	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
trans-1,2-Dichloroethene	U		0.00151	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
1,2-Dichloropropane	U		0.00134	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
1,1-Dichloropropene	U		0.000739	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
1,3-Dichloropropane	U		0.00185	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
cis-1,3-Dichloropropene	U		0.000716	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
trans-1,3-Dichloropropene	U		0.00162	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
2,2-Dichloropropane	U		0.000838	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
Di-isopropyl ether	U		0.000370	0.00100	0.00106	1.01	11/25/2019 02:05	WG1386420
Ethylbenzene	U		0.000560	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
Hexachloro-1,3-butadiene	U		0.0134	0.0250	0.0265	1.01	11/25/2019 02:05	WG1386420
Isopropylbenzene	U		0.000912	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
p-Isopropyltoluene	0.0622		0.00246	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
2-Butanone (MEK)	U		0.0132	0.0250	0.0265	1.01	11/25/2019 02:05	WG1386420
Methylene Chloride	U		0.00701	0.0250	0.0265	1.01	11/25/2019 02:05	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0106	0.0250	0.0265	1.01	11/25/2019 02:05	WG1386420
Methyl tert-butyl ether	U		0.000312	0.00100	0.00106	1.01	11/25/2019 02:05	WG1386420
Naphthalene	U		0.00330	0.0125	0.0132	1.01	11/25/2019 02:05	WG1386420
n-Propylbenzene	U		0.00125	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
Styrene	U		0.00288	0.0125	0.0132	1.01	11/25/2019 02:05	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000528	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000412	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000713	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
Tetrachloroethene	U		0.000739	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
Toluene	0.00689		0.00132	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
1,2,3-Trichlorobenzene	U		0.000660	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
1,2,4-Trichlorobenzene	U		0.00509	0.0125	0.0132	1.01	11/25/2019 02:05	WG1386420
1,1,1-Trichloroethane	U		0.000291	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
1,1,2-Trichloroethane	U		0.000933	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
Trichloroethene	U		0.000423	0.00100	0.00106	1.01	11/25/2019 02:05	WG1386420
Trichlorofluoromethane	U		0.000528	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
1,2,3-Trichloropropane	U		0.00539	0.0125	0.0132	1.01	11/25/2019 02:05	WG1386420
1,2,4-Trimethylbenzene	0.00185	J	0.00123	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
1,2,3-Trimethylbenzene	U		0.00121	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
1,3,5-Trimethylbenzene	U		0.00114	0.00500	0.00528	1.01	11/25/2019 02:05	WG1386420
Vinyl chloride	U		0.000722	0.00250	0.00265	1.01	11/25/2019 02:05	WG1386420
Xylenes, Total	U		0.00505	0.00650	0.00686	1.01	11/25/2019 02:05	WG1386420
(S) Toluene-d8	*100*				*75.0-131*		*11/25/2019 02:05*	WG1386420
(S) 4-Bromofluorobenzene	*96.6*				*67.0-138*		*11/25/2019 02:05*	WG1386420
(S) 1,2-Dichloroethane-d4	*97.0*				*70.0-130*		*11/25/2019 02:05*	WG1386420

Volatile Organic Compounds (GC/MS) by Method 8260D - TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch	CAS #
.Alpha.-Pinene	0.190	J N	0.000	0.000	0.000	1.01	11/25/2019 02:05	WG1386420	80-56-8
Benzene, 1-Methyl-4-(1-Methylethyl)-	0.0918	J N	0.000	0.000	0.000	1.01	11/25/2019 02:05	WG1386420	99-87-6
Cyclohexanemethanol, .Alpha.,.Alpha.,4-Trimethyl-	0.0771	J N	0.000	0.000	0.000	1.01	11/25/2019 02:05	WG1386420	498-81-7

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

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

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	38.5		1.39	4.00	4.18	1	11/19/2019 16:57	WG1382640
Residual Range Organics (RRO)	81.0		3.48	10.0	10.5	1	11/19/2019 16:57	WG1382640
(S) o-Terphenyl	*76.8*				*18.0-148*		*11/19/2019 16:57*	WG1382640

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	90.4		1	11/22/2019 16:23	WG1384983

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0209	B J	0.00310	0.0300	0.0332	1	11/21/2019 16:51	WG1382810

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	2.63		0.509	2.00	2.21	1	11/20/2019 00:53	WG1382657
Barium	67.9		0.188	0.500	0.553	1	11/20/2019 00:53	WG1382657
Cadmium	0.189	J	0.0774	0.500	0.553	1	11/20/2019 00:53	WG1382657
Chromium	25.2		0.155	1.00	1.11	1	11/20/2019 00:53	WG1382657
Lead	13.3		0.210	0.500	0.553	1	11/20/2019 00:53	WG1382657
Selenium	U		0.686	2.00	2.21	1	11/20/2019 00:53	WG1382657
Silver	0.223	B J	0.133	1.00	1.11	1	11/20/2019 00:53	WG1382657

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.938	0.100	2.77	25	11/22/2019 05:13	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*99.1*				*77.0-120*		*11/22/2019 05:13*	WG1384475

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0152	0.0250	0.0277	1	11/25/2019 02:24	WG1386420
Acrylonitrile	U		0.00210	0.0125	0.0138	1	11/25/2019 02:24	WG1386420
Benzene	0.00110	J	0.000443	0.00100	0.00111	1	11/25/2019 02:24	WG1386420
Bromobenzene	U		0.00116	0.0125	0.0138	1	11/25/2019 02:24	WG1386420
Bromodichloromethane	U		0.000872	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
Bromoform	U		0.00662	0.0250	0.0277	1	11/25/2019 02:24	WG1386420
Bromomethane	U		0.00409	0.0125	0.0138	1	11/25/2019 02:24	WG1386420
n-Butylbenzene	U		0.00425	0.0125	0.0138	1	11/25/2019 02:24	WG1386420
sec-Butylbenzene	U		0.00280	0.0125	0.0138	1	11/25/2019 02:24	WG1386420
tert-Butylbenzene	U		0.00171	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
Carbon tetrachloride	U		0.00119	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
Chlorobenzene	U		0.000634	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
Chlorodibromomethane	U		0.000498	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
Chloroethane	U		0.00119	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
Chloroform	U		0.000459	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
Chloromethane	U	J4	0.00154	0.0125	0.0138	1	11/25/2019 02:24	WG1386420
2-Chlorotoluene	U		0.00102	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
4-Chlorotoluene	U		0.00125	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00564	0.0250	0.0277	1	11/25/2019 02:24	WG1386420
1,2-Dibromoethane	U		0.000581	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
Dibromomethane	U		0.00111	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
1,2-Dichlorobenzene	U		0.00160	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
1,3-Dichlorobenzene	U		0.00188	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
1,4-Dichlorobenzene	U		0.00218	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
Dichlorodifluoromethane	U		0.000905	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
1,1-Dichloroethane	U		0.000636	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
1,2-Dichloroethane	U		0.000526	0.00250	0.00277	1	11/25/2019 02:24	WG1386420

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000553	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
cis-1,2-Dichloroethene	U		0.000763	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
trans-1,2-Dichloroethene	U		0.00158	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
1,2-Dichloropropane	U		0.00141	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
1,1-Dichloropropene	U		0.000774	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
1,3-Dichloropropane	U		0.00194	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
cis-1,3-Dichloropropene	U		0.000750	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
trans-1,3-Dichloropropene	U		0.00169	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
2,2-Dichloropropane	U		0.000877	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
Di-isopropyl ether	U		0.000387	0.00100	0.00111	1	11/25/2019 02:24	WG1386420
Ethylbenzene	U		0.000586	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
Hexachloro-1,3-butadiene	U		0.0141	0.0250	0.0277	1	11/25/2019 02:24	WG1386420
Isopropylbenzene	U		0.000955	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
p-Isopropyltoluene	0.00275	J	0.00258	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
2-Butanone (MEK)	0.0283	B	0.0138	0.0250	0.0277	1	11/25/2019 02:24	WG1386420
Methylene Chloride	U		0.00735	0.0250	0.0277	1	11/25/2019 02:24	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0250	0.0277	1	11/25/2019 02:24	WG1386420
Methyl tert-butyl ether	U		0.000326	0.00100	0.00111	1	11/25/2019 02:24	WG1386420
Naphthalene	U		0.00345	0.0125	0.0138	1	11/25/2019 02:24	WG1386420
n-Propylbenzene	U		0.00131	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
Styrene	U		0.00302	0.0125	0.0138	1	11/25/2019 02:24	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000553	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000432	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000747	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
Tetrachloroethene	U		0.000774	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
Toluene	0.00295	J	0.00138	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
1,2,3-Trichlorobenzene	U		0.000692	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
1,2,4-Trichlorobenzene	U		0.00533	0.0125	0.0138	1	11/25/2019 02:24	WG1386420
1,1,1-Trichloroethane	U		0.000304	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
1,1,2-Trichloroethane	U		0.000977	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
Trichloroethene	U		0.000443	0.00100	0.00111	1	11/25/2019 02:24	WG1386420
Trichlorofluoromethane	U		0.000553	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
1,2,3-Trichloropropane	U		0.00564	0.0125	0.0138	1	11/25/2019 02:24	WG1386420
1,2,4-Trimethylbenzene	U		0.00128	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
1,2,3-Trimethylbenzene	U		0.00127	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
1,3,5-Trimethylbenzene	U		0.00119	0.00500	0.00553	1	11/25/2019 02:24	WG1386420
Vinyl chloride	U		0.000756	0.00250	0.00277	1	11/25/2019 02:24	WG1386420
Xylenes, Total	U		0.00529	0.00650	0.00719	1	11/25/2019 02:24	WG1386420
(S) Toluene-d8	*102*				*75.0-131*		*11/25/2019 02:24*	WG1386420
(S) 4-Bromofluorobenzene	*91.8*				*67.0-138*		*11/25/2019 02:24*	WG1386420
(S) 1,2-Dichloroethane-d4	*103*				*70.0-130*		*11/25/2019 02:24*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		73.6	4.00	221	50	11/19/2019 21:22	WG1382640
Residual Range Organics (RRO)	534	J	184	10.0	553	50	11/19/2019 21:22	WG1382640
(S) o-Terphenyl	*80.5*	J7			*18.0-148*		*11/19/2019 21:22*	WG1382640

Sample Narrative:

L1161924-09 WG1382640: Cannot run at lower dilution due to viscosity of extract

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.6		1	11/22/2019 16:23	WG1384983

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0262	B J	0.00306	0.0300	0.0328	1	11/21/2019 17:24	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.84		0.502	2.00	2.18	1	11/20/2019 00:56	WG1382657
Barium	101		0.186	0.500	0.546	1	11/20/2019 00:56	WG1382657
Cadmium	0.204	J	0.0764	0.500	0.546	1	11/20/2019 00:56	WG1382657
Chromium	29.5		0.153	1.00	1.09	1	11/20/2019 00:56	WG1382657
Lead	6.56		0.207	0.500	0.546	1	11/20/2019 00:56	WG1382657
Selenium	U		0.677	2.00	2.18	1	11/20/2019 00:56	WG1382657
Silver	0.275	B J	0.131	1.00	1.09	1	11/20/2019 00:56	WG1382657

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.925	0.100	2.73	25	11/22/2019 05:37	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*98.8*				*77.0-120*		*11/22/2019 05:37*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0150	0.0250	0.0273	1	11/25/2019 02:42	WG1386420
Acrylonitrile	U		0.00207	0.0125	0.0136	1	11/25/2019 02:42	WG1386420
Benzene	0.000503	J	0.000437	0.00100	0.00109	1	11/25/2019 02:42	WG1386420
Bromobenzene	U		0.00115	0.0125	0.0136	1	11/25/2019 02:42	WG1386420
Bromodichloromethane	U		0.000860	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
Bromoform	U		0.00653	0.0250	0.0273	1	11/25/2019 02:42	WG1386420
Bromomethane	U		0.00404	0.0125	0.0136	1	11/25/2019 02:42	WG1386420
n-Butylbenzene	U		0.00419	0.0125	0.0136	1	11/25/2019 02:42	WG1386420
sec-Butylbenzene	U		0.00276	0.0125	0.0136	1	11/25/2019 02:42	WG1386420
tert-Butylbenzene	U		0.00169	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
Carbon tetrachloride	U		0.00118	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
Chlorobenzene	U		0.000626	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
Chlorodibromomethane	U		0.000491	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
Chloroethane	U		0.00118	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
Chloroform	0.000794	J	0.000453	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
Chloromethane	U	J4	0.00152	0.0125	0.0136	1	11/25/2019 02:42	WG1386420
2-Chlorotoluene	U		0.00100	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
4-Chlorotoluene	U		0.00123	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00557	0.0250	0.0273	1	11/25/2019 02:42	WG1386420
1,2-Dibromoethane	U		0.000573	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
Dibromomethane	U		0.00109	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
1,2-Dichlorobenzene	U		0.00158	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
1,3-Dichlorobenzene	U		0.00186	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
1,4-Dichlorobenzene	U		0.00215	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
Dichlorodifluoromethane	U		0.000893	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
1,1-Dichloroethane	U		0.000628	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
1,2-Dichloroethane	U		0.000519	0.00250	0.00273	1	11/25/2019 02:42	WG1386420

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000546	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
cis-1,2-Dichloroethene	U		0.000753	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
trans-1,2-Dichloroethene	U		0.00156	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
1,2-Dichloropropane	U		0.00139	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
1,1-Dichloropropene	U		0.000764	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
1,3-Dichloropropane	U		0.00191	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
cis-1,3-Dichloropropene	U		0.000740	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
trans-1,3-Dichloropropene	U		0.00167	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
2,2-Dichloropropane	U		0.000866	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
Di-isopropyl ether	U		0.000382	0.00100	0.00109	1	11/25/2019 02:42	WG1386420
Ethylbenzene	U		0.000579	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0273	1	11/25/2019 02:42	WG1386420
Isopropylbenzene	U		0.000942	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
p-Isopropyltoluene	U		0.00254	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
2-Butanone (MEK)	0.0249	B J	0.0136	0.0250	0.0273	1	11/25/2019 02:42	WG1386420
Methylene Chloride	U		0.00725	0.0250	0.0273	1	11/25/2019 02:42	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0273	1	11/25/2019 02:42	WG1386420
Methyl tert-butyl ether	U		0.000322	0.00100	0.00109	1	11/25/2019 02:42	WG1386420
Naphthalene	U		0.00341	0.0125	0.0136	1	11/25/2019 02:42	WG1386420
n-Propylbenzene	U		0.00129	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
Styrene	U		0.00298	0.0125	0.0136	1	11/25/2019 02:42	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000546	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000426	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000737	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
Tetrachloroethene	U		0.000764	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
Toluene	0.00210	J	0.00136	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
1,2,3-Trichlorobenzene	U		0.000682	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
1,2,4-Trichlorobenzene	U		0.00526	0.0125	0.0136	1	11/25/2019 02:42	WG1386420
1,1,1-Trichloroethane	U		0.000300	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
1,1,2-Trichloroethane	U		0.000964	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
Trichloroethene	U		0.000437	0.00100	0.00109	1	11/25/2019 02:42	WG1386420
Trichlorofluoromethane	U		0.000546	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
1,2,3-Trichloropropane	U		0.00557	0.0125	0.0136	1	11/25/2019 02:42	WG1386420
1,2,4-Trimethylbenzene	U		0.00127	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
1,2,3-Trimethylbenzene	U		0.00126	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
1,3,5-Trimethylbenzene	U		0.00118	0.00500	0.00546	1	11/25/2019 02:42	WG1386420
Vinyl chloride	U		0.000746	0.00250	0.00273	1	11/25/2019 02:42	WG1386420
Xylenes, Total	U		0.00522	0.00650	0.00710	1	11/25/2019 02:42	WG1386420
(S) Toluene-d8	*103*				*75.0-131*		*11/25/2019 02:42*	WG1386420
(S) 4-Bromofluorobenzene	*89.3*				*67.0-138*		*11/25/2019 02:42*	WG1386420
(S) 1,2-Dichloroethane-d4	*90.5*				*70.0-130*		*11/25/2019 02:42*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		72.6	4.00	218	50	11/19/2019 21:35	WG1382640
Residual Range Organics (RRO)	878		182	10.0	546	50	11/19/2019 21:35	WG1382640
(S) o-Terphenyl	*84.1*	J7			*18.0-148*		*11/19/2019 21:35*	WG1382640

Sample Narrative:

L1161924-10 WG1382640: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.0		1	11/22/2019 16:23	WG1384983

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0435	B	0.00326	0.0300	0.0349	1	11/21/2019 17:27	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.38		0.535	2.00	2.33	1	11/20/2019 00:59	WG1382657
Barium	110		0.198	0.500	0.581	1	11/20/2019 00:59	WG1382657
Cadmium	0.278	J	0.0814	0.500	0.581	1	11/20/2019 00:59	WG1382657
Chromium	30.1		0.163	1.00	1.16	1	11/20/2019 00:59	WG1382657
Lead	65.9		0.221	0.500	0.581	1	11/20/2019 00:59	WG1382657
Selenium	U		0.721	2.00	2.33	1	11/20/2019 00:59	WG1382657
Silver	0.298	B J	0.140	1.00	1.16	1	11/20/2019 00:59	WG1382657

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.985	0.100	2.91	25	11/22/2019 06:01	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*99.6*				*77.0-120*		*11/22/2019 06:01*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0159	0.0250	0.0291	1	11/25/2019 03:01	WG1386420
Acrylonitrile	U		0.00221	0.0125	0.0145	1	11/25/2019 03:01	WG1386420
Benzene	0.000941	J	0.000465	0.00100	0.00116	1	11/25/2019 03:01	WG1386420
Bromobenzene	U		0.00122	0.0125	0.0145	1	11/25/2019 03:01	WG1386420
Bromodichloromethane	U		0.000916	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
Bromoform	U		0.00695	0.0250	0.0291	1	11/25/2019 03:01	WG1386420
Bromomethane	U		0.00430	0.0125	0.0145	1	11/25/2019 03:01	WG1386420
n-Butylbenzene	U		0.00446	0.0125	0.0145	1	11/25/2019 03:01	WG1386420
sec-Butylbenzene	U		0.00294	0.0125	0.0145	1	11/25/2019 03:01	WG1386420
tert-Butylbenzene	U		0.00180	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
Carbon tetrachloride	U		0.00126	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
Chlorobenzene	U		0.000666	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
Chlorodibromomethane	U		0.000523	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
Chloroethane	U		0.00126	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
Chloroform	0.000581	J	0.000483	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
Chloromethane	U	J4	0.00162	0.0125	0.0145	1	11/25/2019 03:01	WG1386420
2-Chlorotoluene	U		0.00107	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
4-Chlorotoluene	U		0.00131	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00593	0.0250	0.0291	1	11/25/2019 03:01	WG1386420
1,2-Dibromoethane	U		0.000610	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
Dibromomethane	U		0.00116	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
1,2-Dichlorobenzene	U		0.00169	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
1,3-Dichlorobenzene	U		0.00198	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
1,4-Dichlorobenzene	U		0.00229	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
Dichlorodifluoromethane	U		0.000951	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
1,1-Dichloroethane	U		0.000669	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
1,2-Dichloroethane	U		0.000552	0.00250	0.00291	1	11/25/2019 03:01	WG1386420

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000581	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
cis-1,2-Dichloroethene	U		0.000802	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
trans-1,2-Dichloroethene	U		0.00166	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
1,2-Dichloropropane	U		0.00148	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
1,1-Dichloropropene	U		0.000814	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
1,3-Dichloropropane	U		0.00203	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
cis-1,3-Dichloropropene	U		0.000788	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
trans-1,3-Dichloropropene	U		0.00178	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
2,2-Dichloropropane	U		0.000922	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
Di-isopropyl ether	U		0.000407	0.00100	0.00116	1	11/25/2019 03:01	WG1386420
Ethylbenzene	U		0.000616	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
Hexachloro-1,3-butadiene	U		0.0148	0.0250	0.0291	1	11/25/2019 03:01	WG1386420
Isopropylbenzene	U		0.00100	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
p-Isopropyltoluene	U		0.00271	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
2-Butanone (MEK)	0.0220	B J	0.0145	0.0250	0.0291	1	11/25/2019 03:01	WG1386420
Methylene Chloride	U		0.00772	0.0250	0.0291	1	11/25/2019 03:01	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0116	0.0250	0.0291	1	11/25/2019 03:01	WG1386420
Methyl tert-butyl ether	U		0.000343	0.00100	0.00116	1	11/25/2019 03:01	WG1386420
Naphthalene	U		0.00363	0.0125	0.0145	1	11/25/2019 03:01	WG1386420
n-Propylbenzene	U		0.00137	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
Styrene	U		0.00317	0.0125	0.0145	1	11/25/2019 03:01	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000581	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000453	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000785	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
Tetrachloroethene	U		0.000814	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
Toluene	0.00309	J	0.00145	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
1,2,3-Trichlorobenzene	U		0.000727	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
1,2,4-Trichlorobenzene	U		0.00560	0.0125	0.0145	1	11/25/2019 03:01	WG1386420
1,1,1-Trichloroethane	U		0.000320	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
1,1,2-Trichloroethane	U		0.00103	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
Trichloroethene	U		0.000465	0.00100	0.00116	1	11/25/2019 03:01	WG1386420
Trichlorofluoromethane	U		0.000581	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
1,2,3-Trichloropropane	U		0.00593	0.0125	0.0145	1	11/25/2019 03:01	WG1386420
1,2,4-Trimethylbenzene	U		0.00135	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
1,2,3-Trimethylbenzene	U		0.00134	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
1,3,5-Trimethylbenzene	U		0.00126	0.00500	0.00581	1	11/25/2019 03:01	WG1386420
Vinyl chloride	U		0.000794	0.00250	0.00291	1	11/25/2019 03:01	WG1386420
Xylenes, Total	U		0.00556	0.00650	0.00756	1	11/25/2019 03:01	WG1386420
(S) Toluene-d8	*102*				*75.0-131*		*11/25/2019 03:01*	WG1386420
(S) 4-Bromofluorobenzene	*91.1*				*67.0-138*		*11/25/2019 03:01*	WG1386420
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*11/25/2019 03:01*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		77.3	4.00	233	50	11/19/2019 19:22	WG1382640
Residual Range Organics (RRO)	585		194	10.0	581	50	11/19/2019 19:22	WG1382640
(S) o-Terphenyl	*63.6*	J7			*18.0-148*		*11/19/2019 19:22*	WG1382640

Sample Narrative:

L1161924-11 WG1382640: Cannot run at lower dilution due to viscosity of extract

SB-19(0-1)

Collected date/time: 11/14/19 08:53

SAMPLE RESULTS - 12

L1161924

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.9		1	11/22/2019 16:23	WG1384983

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0324	B J	0.00308	0.0300	0.0330	1	11/21/2019 17:29	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.10	J	0.506	2.00	2.20	1	11/20/2019 01:01	WG1382657
Barium	61.9		0.187	0.500	0.550	1	11/20/2019 01:01	WG1382657
Cadmium	0.275	J	0.0770	0.500	0.550	1	11/20/2019 01:01	WG1382657
Chromium	32.8		0.154	1.00	1.10	1	11/20/2019 01:01	WG1382657
Lead	12.1		0.209	0.500	0.550	1	11/20/2019 01:01	WG1382657
Selenium	U		0.682	2.00	2.20	1	11/20/2019 01:01	WG1382657
Silver	0.256	B J	0.132	1.00	1.10	1	11/20/2019 01:01	WG1382657

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.932	0.100	2.75	25	11/22/2019 06:25	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*99.3*				*77.0-120*		*11/22/2019 06:25*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0151	0.0250	0.0275	1	11/25/2019 03:20	WG1386420
Acrylonitrile	U		0.00209	0.0125	0.0137	1	11/25/2019 03:20	WG1386420
Benzene	0.000762	J	0.000440	0.00100	0.00110	1	11/25/2019 03:20	WG1386420
Bromobenzene	U		0.00115	0.0125	0.0137	1	11/25/2019 03:20	WG1386420
Bromodichloromethane	U		0.000867	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
Bromoform	U		0.00658	0.0250	0.0275	1	11/25/2019 03:20	WG1386420
Bromomethane	U		0.00407	0.0125	0.0137	1	11/25/2019 03:20	WG1386420
n-Butylbenzene	U		0.00422	0.0125	0.0137	1	11/25/2019 03:20	WG1386420
sec-Butylbenzene	U		0.00278	0.0125	0.0137	1	11/25/2019 03:20	WG1386420
tert-Butylbenzene	U		0.00170	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
Carbon tetrachloride	U		0.00119	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
Chlorobenzene	U		0.000630	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
Chlorodibromomethane	U		0.000495	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
Chloroethane	U		0.00119	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
Chloroform	0.00101	J	0.000456	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
Chloromethane	U	J4	0.00153	0.0125	0.0137	1	11/25/2019 03:20	WG1386420
2-Chlorotoluene	U		0.00101	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
4-Chlorotoluene	U		0.00124	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00561	0.0250	0.0275	1	11/25/2019 03:20	WG1386420
1,2-Dibromoethane	U		0.000577	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
Dibromomethane	U		0.00110	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
1,2-Dichlorobenzene	U		0.00159	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
1,3-Dichlorobenzene	U		0.00187	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
1,4-Dichlorobenzene	U		0.00217	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
Dichlorodifluoromethane	U		0.000900	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
1,1-Dichloroethane	U		0.000632	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
1,2-Dichloroethane	U		0.000522	0.00250	0.00275	1	11/25/2019 03:20	WG1386420

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000550	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
cis-1,2-Dichloroethene	U		0.000759	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
trans-1,2-Dichloroethene	U		0.00157	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
1,2-Dichloropropane	U		0.00140	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
1,1-Dichloropropene	U		0.000770	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
1,3-Dichloropropane	U		0.00192	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
cis-1,3-Dichloropropene	U		0.000746	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
trans-1,3-Dichloropropene	U		0.00168	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
2,2-Dichloropropane	U		0.000872	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
Di-isopropyl ether	U		0.000385	0.00100	0.00110	1	11/25/2019 03:20	WG1386420
Ethylbenzene	U		0.000583	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
Hexachloro-1,3-butadiene	U		0.0140	0.0250	0.0275	1	11/25/2019 03:20	WG1386420
Isopropylbenzene	U		0.000949	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
p-Isopropyltoluene	U		0.00256	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
2-Butanone (MEK)	0.0546	B	0.0137	0.0250	0.0275	1	11/25/2019 03:20	WG1386420
Methylene Chloride	U		0.00730	0.0250	0.0275	1	11/25/2019 03:20	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0250	0.0275	1	11/25/2019 03:20	WG1386420
Methyl tert-butyl ether	U		0.000324	0.00100	0.00110	1	11/25/2019 03:20	WG1386420
Naphthalene	0.00495	J	0.00343	0.0125	0.0137	1	11/25/2019 03:20	WG1386420
n-Propylbenzene	U		0.00130	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
Styrene	U		0.00300	0.0125	0.0137	1	11/25/2019 03:20	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000550	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000429	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000742	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
Tetrachloroethene	U		0.000770	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
Toluene	0.00310	J	0.00137	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
1,2,3-Trichlorobenzene	U		0.000687	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
1,2,4-Trichlorobenzene	U		0.00530	0.0125	0.0137	1	11/25/2019 03:20	WG1386420
1,1,1-Trichloroethane	U		0.000302	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
1,1,2-Trichloroethane	U		0.000971	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
Trichloroethene	U		0.000440	0.00100	0.00110	1	11/25/2019 03:20	WG1386420
Trichlorofluoromethane	U		0.000550	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
1,2,3-Trichloropropane	U		0.00561	0.0125	0.0137	1	11/25/2019 03:20	WG1386420
1,2,4-Trimethylbenzene	U		0.00128	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
1,2,3-Trimethylbenzene	U		0.00126	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
1,3,5-Trimethylbenzene	U		0.00119	0.00500	0.00550	1	11/25/2019 03:20	WG1386420
Vinyl chloride	U		0.000751	0.00250	0.00275	1	11/25/2019 03:20	WG1386420
Xylenes, Total	U		0.00526	0.00650	0.00715	1	11/25/2019 03:20	WG1386420
(S) Toluene-d8	*103*				*75.0-131*		*11/25/2019 03:20*	WG1386420
(S) 4-Bromofluorobenzene	*90.8*				*67.0-138*		*11/25/2019 03:20*	WG1386420
(S) 1,2-Dichloroethane-d4	*105*				*70.0-130*		*11/25/2019 03:20*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	42.3	J	14.6	4.00	44.0	10	11/19/2019 19:09	WG1382640
Residual Range Organics (RRO)	340		36.6	10.0	110	10	11/19/2019 19:09	WG1382640
(S) o-Terphenyl	*73.2*				*18.0-148*		*11/19/2019 19:09*	WG1382640

Sample Narrative:

L1161924-12 WG1382640: Cannot run at lower dilution due to viscosity of extract

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.9		1	11/22/2019 16:23	WG1384983

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0268	B J	0.00315	0.0300	0.0337	1	11/21/2019 17:32	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.00	J	0.517	2.00	2.25	1	11/20/2019 01:04	WG1382657
Barium	62.0		0.191	0.500	0.562	1	11/20/2019 01:04	WG1382657
Cadmium	0.159	J	0.0787	0.500	0.562	1	11/20/2019 01:04	WG1382657
Chromium	30.1		0.157	1.00	1.12	1	11/20/2019 01:04	WG1382657
Lead	6.87		0.214	0.500	0.562	1	11/20/2019 01:04	WG1382657
Selenium	U		0.697	2.00	2.25	1	11/20/2019 01:04	WG1382657
Silver	0.254	B J	0.135	1.00	1.12	1	11/20/2019 01:04	WG1382657

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.953	0.100	2.81	25	11/22/2019 06:49	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*99.6*				*77.0-120*		*11/22/2019 06:49*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0154	0.0250	0.0281	1	11/25/2019 03:39	WG1386420
Acrylonitrile	U		0.00214	0.0125	0.0141	1	11/25/2019 03:39	WG1386420
Benzene	0.000546	J	0.000450	0.00100	0.00112	1	11/25/2019 03:39	WG1386420
Bromobenzene	U		0.00118	0.0125	0.0141	1	11/25/2019 03:39	WG1386420
Bromodichloromethane	U		0.000886	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
Bromoform	U		0.00672	0.0250	0.0281	1	11/25/2019 03:39	WG1386420
Bromomethane	U		0.00416	0.0125	0.0141	1	11/25/2019 03:39	WG1386420
n-Butylbenzene	U		0.00432	0.0125	0.0141	1	11/25/2019 03:39	WG1386420
sec-Butylbenzene	U		0.00284	0.0125	0.0141	1	11/25/2019 03:39	WG1386420
tert-Butylbenzene	U		0.00174	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
Carbon tetrachloride	U		0.00121	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
Chlorobenzene	U		0.000644	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
Chlorodibromomethane	U		0.000506	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
Chloroethane	U		0.00121	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
Chloroform	0.000637	J	0.000467	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
Chloromethane	U	J4	0.00156	0.0125	0.0141	1	11/25/2019 03:39	WG1386420
2-Chlorotoluene	U		0.00103	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
4-Chlorotoluene	U		0.00127	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00573	0.0250	0.0281	1	11/25/2019 03:39	WG1386420
1,2-Dibromoethane	U		0.000590	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
Dibromomethane	U		0.00112	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
1,2-Dichlorobenzene	U		0.00163	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
1,3-Dichlorobenzene	U		0.00191	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
1,4-Dichlorobenzene	U		0.00221	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
Dichlorodifluoromethane	U		0.000920	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
1,1-Dichloroethane	U		0.000646	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
1,2-Dichloroethane	U		0.000534	0.00250	0.00281	1	11/25/2019 03:39	WG1386420

SB-19(2-3)

Collected date/time: 11/14/19 08:55

SAMPLE RESULTS - 13

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000562	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
cis-1,2-Dichloroethene	U		0.000776	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
trans-1,2-Dichloroethene	U		0.00161	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
1,2-Dichloropropane	U		0.00143	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
1,1-Dichloropropene	U		0.000787	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
1,3-Dichloropropane	U		0.00197	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
cis-1,3-Dichloropropene	U		0.000762	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
trans-1,3-Dichloropropene	U		0.00172	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
2,2-Dichloropropane	U		0.000892	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
Di-isopropyl ether	U		0.000394	0.00100	0.00112	1	11/25/2019 03:39	WG1386420
Ethylbenzene	U		0.000596	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
Hexachloro-1,3-butadiene	U		0.0143	0.0250	0.0281	1	11/25/2019 03:39	WG1386420
Isopropylbenzene	U		0.000970	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
p-Isopropyltoluene	U		0.00262	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
2-Butanone (MEK)	0.0223	B J	0.0141	0.0250	0.0281	1	11/25/2019 03:39	WG1386420
Methylene Chloride	U		0.00747	0.0250	0.0281	1	11/25/2019 03:39	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0112	0.0250	0.0281	1	11/25/2019 03:39	WG1386420
Methyl tert-butyl ether	U		0.000332	0.00100	0.00112	1	11/25/2019 03:39	WG1386420
Naphthalene	0.00433	J	0.00351	0.0125	0.0141	1	11/25/2019 03:39	WG1386420
n-Propylbenzene	U		0.00133	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
Styrene	U		0.00307	0.0125	0.0141	1	11/25/2019 03:39	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000562	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000438	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000759	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
Tetrachloroethene	U		0.000787	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
Toluene	0.00227	J	0.00141	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
1,2,3-Trichlorobenzene	U		0.000703	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
1,2,4-Trichlorobenzene	U		0.00542	0.0125	0.0141	1	11/25/2019 03:39	WG1386420
1,1,1-Trichloroethane	U		0.000309	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
1,1,2-Trichloroethane	U		0.000993	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
Trichloroethene	U		0.000450	0.00100	0.00112	1	11/25/2019 03:39	WG1386420
Trichlorofluoromethane	U		0.000562	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
1,2,3-Trichloropropane	U		0.00573	0.0125	0.0141	1	11/25/2019 03:39	WG1386420
1,2,4-Trimethylbenzene	U		0.00130	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
1,2,3-Trimethylbenzene	U		0.00129	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
1,3,5-Trimethylbenzene	U		0.00121	0.00500	0.00562	1	11/25/2019 03:39	WG1386420
Vinyl chloride	U		0.000768	0.00250	0.00281	1	11/25/2019 03:39	WG1386420
Xylenes, Total	U		0.00537	0.00650	0.00731	1	11/25/2019 03:39	WG1386420
(S) Toluene-d8	*103*				*75.0-131*		*11/25/2019 03:39*	WG1386420
(S) 4-Bromofluorobenzene	*88.3*				*67.0-138*		*11/25/2019 03:39*	WG1386420
(S) 1,2-Dichloroethane-d4	*92.4*				*70.0-130*		*11/25/2019 03:39*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	35.0	J	15.0	4.00	45.0	10	11/21/2019 06:37	WG1382640
Residual Range Organics (RRO)	338		37.4	10.0	112	10	11/21/2019 06:37	WG1382640
(S) o-Terphenyl	*70.3*				*18.0-148*		*11/21/2019 06:37*	WG1382640

Sample Narrative:

L1161924-13 WG1382640: Dilution due to matrix impact during extract concentration procedure

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	84.5		1	11/22/2019 16:23	WG1384983

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0519		0.00331	0.0300	0.0355	1	11/21/2019 17:34	WG1382810

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	5.83		0.544	2.00	2.37	1	11/20/2019 14:29	WG1382679
Barium	90.4		0.201	0.500	0.592	1	11/20/2019 14:29	WG1382679
Cadmium	0.219	J	0.0828	0.500	0.592	1	11/20/2019 14:29	WG1382679
Chromium	33.6		0.166	1.00	1.18	1	11/20/2019 14:29	WG1382679
Lead	18.9		0.225	0.500	0.592	1	11/20/2019 14:29	WG1382679
Selenium	0.806	J	0.734	2.00	2.37	1	11/20/2019 14:29	WG1382679
Silver	U		0.142	1.00	1.18	1	11/20/2019 14:29	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.00	0.100	2.96	25	11/22/2019 07:13	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*99.3*				*77.0-120*		*11/22/2019 07:13*	WG1384475

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0162	0.0250	0.0296	1	11/25/2019 03:58	WG1386420
Acrylonitrile	U		0.00225	0.0125	0.0148	1	11/25/2019 03:58	WG1386420
Benzene	0.000987	J	0.000473	0.00100	0.00118	1	11/25/2019 03:58	WG1386420
Bromobenzene	U		0.00124	0.0125	0.0148	1	11/25/2019 03:58	WG1386420
Bromodichloromethane	U		0.000933	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
Bromoform	U		0.00708	0.0250	0.0296	1	11/25/2019 03:58	WG1386420
Bromomethane	U		0.00438	0.0125	0.0148	1	11/25/2019 03:58	WG1386420
n-Butylbenzene	U		0.00454	0.0125	0.0148	1	11/25/2019 03:58	WG1386420
sec-Butylbenzene	U		0.00299	0.0125	0.0148	1	11/25/2019 03:58	WG1386420
tert-Butylbenzene	U		0.00183	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
Carbon tetrachloride	U		0.00128	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
Chlorobenzene	U		0.000678	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
Chlorodibromomethane	U		0.000533	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
Chloroethane	U		0.00128	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
Chloroform	0.000672	J	0.000491	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
Chloromethane	U	J4	0.00165	0.0125	0.0148	1	11/25/2019 03:58	WG1386420
2-Chlorotoluene	U		0.00109	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
4-Chlorotoluene	U		0.00134	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00604	0.0250	0.0296	1	11/25/2019 03:58	WG1386420
1,2-Dibromoethane	U		0.000621	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
Dibromomethane	U		0.00118	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
1,2-Dichlorobenzene	U		0.00172	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
1,3-Dichlorobenzene	U		0.00201	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
1,4-Dichlorobenzene	U		0.00233	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
Dichlorodifluoromethane	U		0.000968	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
1,1-Dichloroethane	U		0.000681	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
1,2-Dichloroethane	U		0.000562	0.00250	0.00296	1	11/25/2019 03:58	WG1386420

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

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000592	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
cis-1,2-Dichloroethene	U		0.000817	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
trans-1,2-Dichloroethene	U		0.00169	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
1,2-Dichloropropane	U		0.00150	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
1,1-Dichloropropene	U		0.000828	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
1,3-Dichloropropane	U		0.00207	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
cis-1,3-Dichloropropene	U		0.000802	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
trans-1,3-Dichloropropene	U		0.00181	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
2,2-Dichloropropane	U		0.000939	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
Di-isopropyl ether	U		0.000414	0.00100	0.00118	1	11/25/2019 03:58	WG1386420
Ethylbenzene	U		0.000627	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
Hexachloro-1,3-butadiene	U		0.0150	0.0250	0.0296	1	11/25/2019 03:58	WG1386420
Isopropylbenzene	U		0.00102	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
p-Isopropyltoluene	U		0.00276	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
2-Butanone (MEK)	0.0219	B J	0.0148	0.0250	0.0296	1	11/25/2019 03:58	WG1386420
Methylene Chloride	U		0.00786	0.0250	0.0296	1	11/25/2019 03:58	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0118	0.0250	0.0296	1	11/25/2019 03:58	WG1386420
Methyl tert-butyl ether	U		0.000349	0.00100	0.00118	1	11/25/2019 03:58	WG1386420
Naphthalene	U		0.00369	0.0125	0.0148	1	11/25/2019 03:58	WG1386420
n-Propylbenzene	U		0.00140	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
Styrene	U		0.00323	0.0125	0.0148	1	11/25/2019 03:58	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000592	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000462	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000799	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
Tetrachloroethene	U		0.000828	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
Toluene	0.00227	J	0.00148	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
1,2,3-Trichlorobenzene	U		0.000740	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
1,2,4-Trichlorobenzene	U		0.00570	0.0125	0.0148	1	11/25/2019 03:58	WG1386420
1,1,1-Trichloroethane	U		0.000325	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
1,1,2-Trichloroethane	U		0.00105	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
Trichloroethene	U		0.000473	0.00100	0.00118	1	11/25/2019 03:58	WG1386420
Trichlorofluoromethane	U		0.000592	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
1,2,3-Trichloropropane	U		0.00604	0.0125	0.0148	1	11/25/2019 03:58	WG1386420
1,2,4-Trimethylbenzene	U		0.00137	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
1,2,3-Trimethylbenzene	U		0.00136	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
1,3,5-Trimethylbenzene	U		0.00128	0.00500	0.00592	1	11/25/2019 03:58	WG1386420
Vinyl chloride	U		0.000808	0.00250	0.00296	1	11/25/2019 03:58	WG1386420
Xylenes, Total	U		0.00566	0.00650	0.00769	1	11/25/2019 03:58	WG1386420
(S) Toluene-d8	*101*				*75.0-131*		*11/25/2019 03:58*	WG1386420
(S) 4-Bromofluorobenzene	*88.6*				*67.0-138*		*11/25/2019 03:58*	WG1386420
(S) 1,2-Dichloroethane-d4	*95.9*				*70.0-130*		*11/25/2019 03:58*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	110		15.7	4.00	47.3	10	11/21/2019 06:50	WG1382640
Residual Range Organics (RRO)	1000		39.4	10.0	118	10	11/21/2019 06:50	WG1382640
(S) o-Terphenyl	*72.3*				*18.0-148*		*11/21/2019 06:50*	WG1382640

SB-20(2-3)

Collected date/time: 11/14/19 09:35

SAMPLE RESULTS - 15

L1161924

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.2		1	11/22/2019 16:23	WG1384983

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0378	B	0.00310	0.0300	0.0333	1	11/21/2019 17:37	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.62		0.510	2.00	2.22	1	11/20/2019 14:31	WG1382679
Barium	86.9		0.189	0.500	0.554	1	11/20/2019 14:31	WG1382679
Cadmium	0.158	J	0.0776	0.500	0.554	1	11/20/2019 14:31	WG1382679
Chromium	28.0		0.155	1.00	1.11	1	11/20/2019 14:31	WG1382679
Lead	5.07		0.211	0.500	0.554	1	11/20/2019 14:31	WG1382679
Selenium	U		0.687	2.00	2.22	1	11/20/2019 14:31	WG1382679
Silver	U		0.133	1.00	1.11	1	11/20/2019 14:31	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	116		1.03	0.100	3.03	27.3	11/22/2019 07:37	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/22/2019 07:37*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0166	0.0250	0.0303	1.09	11/25/2019 04:17	WG1386420
Acrylonitrile	U		0.00230	0.0125	0.0151	1.09	11/25/2019 04:17	WG1386420
Benzene	0.000574	J	0.000483	0.00100	0.00121	1.09	11/25/2019 04:17	WG1386420
Bromobenzene	U		0.00127	0.0125	0.0151	1.09	11/25/2019 04:17	WG1386420
Bromodichloromethane	U		0.000952	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
Bromoform	U		0.00723	0.0250	0.0303	1.09	11/25/2019 04:17	WG1386420
Bromomethane	U		0.00447	0.0125	0.0151	1.09	11/25/2019 04:17	WG1386420
n-Butylbenzene	0.308		0.00464	0.0125	0.0151	1.09	11/25/2019 04:17	WG1386420
sec-Butylbenzene	0.123		0.00306	0.0125	0.0151	1.09	11/25/2019 04:17	WG1386420
tert-Butylbenzene	0.00345	J	0.00187	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
Carbon tetrachloride	U		0.00131	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
Chlorobenzene	U		0.000693	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
Chlorodibromomethane	U		0.000544	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
Chloroethane	U		0.00131	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
Chloroform	U		0.000502	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
Chloromethane	U	J4	0.00168	0.0125	0.0151	1.09	11/25/2019 04:17	WG1386420
2-Chlorotoluene	U		0.00111	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
4-Chlorotoluene	U		0.00137	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00616	0.0250	0.0303	1.09	11/25/2019 04:17	WG1386420
1,2-Dibromoethane	U		0.000635	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
Dibromomethane	U		0.00121	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
1,2-Dichlorobenzene	U		0.00175	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
1,3-Dichlorobenzene	U		0.00205	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
1,4-Dichlorobenzene	U		0.00238	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
Dichlorodifluoromethane	U		0.000989	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
1,1-Dichloroethane	U		0.000695	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
1,2-Dichloroethane	U		0.000574	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000604	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
cis-1,2-Dichloroethene	U		0.000834	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
trans-1,2-Dichloroethene	U		0.00173	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
1,2-Dichloropropane	U		0.00153	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
1,1-Dichloropropene	U		0.000846	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
1,3-Dichloropropane	U		0.00212	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
cis-1,3-Dichloropropene	U		0.000819	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
trans-1,3-Dichloropropene	U		0.00185	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
2,2-Dichloropropane	U		0.000958	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
Di-isopropyl ether	U		0.000423	0.00100	0.00121	1.09	11/25/2019 04:17	WG1386420
Ethylbenzene	0.00587		0.000641	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
Hexachloro-1,3-butadiene	U		0.0153	0.0250	0.0303	1.09	11/25/2019 04:17	WG1386420
Isopropylbenzene	0.0150		0.00104	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
p-Isopropyltoluene	0.142		0.00282	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
2-Butanone (MEK)	0.0386	B	0.0151	0.0250	0.0303	1.09	11/25/2019 04:17	WG1386420
Methylene Chloride	U		0.00803	0.0250	0.0303	1.09	11/25/2019 04:17	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0121	0.0250	0.0303	1.09	11/25/2019 04:17	WG1386420
Methyl tert-butyl ether	U		0.000357	0.00100	0.00121	1.09	11/25/2019 04:17	WG1386420
Naphthalene	0.448		0.00377	0.0125	0.0151	1.09	11/25/2019 04:17	WG1386420
n-Propylbenzene	0.0526		0.00143	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
Styrene	U		0.00330	0.0125	0.0151	1.09	11/25/2019 04:17	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000604	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000471	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000816	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
Tetrachloroethene	U		0.000846	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
Toluene	0.00217	J	0.00151	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
1,2,3-Trichlorobenzene	U		0.000755	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
1,2,4-Trichlorobenzene	U		0.00583	0.0125	0.0151	1.09	11/25/2019 04:17	WG1386420
1,1,1-Trichloroethane	U		0.000332	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
1,1,2-Trichloroethane	U		0.00107	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
Trichloroethene	U		0.000483	0.00100	0.00121	1.09	11/25/2019 04:17	WG1386420
Trichlorofluoromethane	U		0.000604	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
1,2,3-Trichloropropane	U		0.00616	0.0125	0.0151	1.09	11/25/2019 04:17	WG1386420
1,2,4-Trimethylbenzene	0.701		0.00140	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
1,2,3-Trimethylbenzene	0.612		0.00139	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
1,3,5-Trimethylbenzene	0.425		0.00131	0.00500	0.00604	1.09	11/25/2019 04:17	WG1386420
Vinyl chloride	U		0.000825	0.00250	0.00303	1.09	11/25/2019 04:17	WG1386420
Xylenes, Total	0.0202		0.00578	0.00650	0.00785	1.09	11/25/2019 04:17	WG1386420
(S) Toluene-d8	*99.3*				*75.0-131*		*11/25/2019 04:17*	WG1386420
(S) 4-Bromofluorobenzene	*109*				*67.0-138*		*11/25/2019 04:17*	WG1386420
(S) 1,2-Dichloroethane-d4	*102*				*70.0-130*		*11/25/2019 04:17*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	687		14.7	4.00	44.4	10	11/19/2019 18:56	WG1382640
Residual Range Organics (RRO)	182		36.9	10.0	111	10	11/19/2019 18:56	WG1382640
(S) o-Terphenyl	*151*	J1			*18.0-148*		*11/19/2019 18:56*	WG1382640

Sample Narrative:

L1161924-15 WG1382640: Surrogate failure due to matrix interference

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.2		1	11/22/2019 16:23	WG1384983

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0396	B	0.00314	0.0300	0.0336	1	11/21/2019 17:54	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.89		0.516	2.00	2.24	1	11/20/2019 14:39	WG1382679
Barium	101		0.191	0.500	0.561	1	11/20/2019 14:39	WG1382679
Cadmium	0.217	J	0.0785	0.500	0.561	1	11/20/2019 14:39	WG1382679
Chromium	32.7		0.157	1.00	1.12	1	11/20/2019 14:39	WG1382679
Lead	17.8		0.213	0.500	0.561	1	11/20/2019 14:39	WG1382679
Selenium	U		0.695	2.00	2.24	1	11/20/2019 14:39	WG1382679
Silver	U		0.135	1.00	1.12	1	11/20/2019 14:39	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	78.4		1.17	0.100	3.45	30.8	11/22/2019 08:01	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/22/2019 08:01*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0189	0.0250	0.0345	1.23	11/25/2019 04:35	WG1386420
Acrylonitrile	U		0.00262	0.0125	0.0173	1.23	11/25/2019 04:35	WG1386420
Benzene	0.00214		0.000552	0.00100	0.00138	1.23	11/25/2019 04:35	WG1386420
Bromobenzene	U		0.00145	0.0125	0.0173	1.23	11/25/2019 04:35	WG1386420
Bromodichloromethane	U		0.00109	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
Bromoform	U		0.00825	0.0250	0.0345	1.23	11/25/2019 04:35	WG1386420
Bromomethane	U		0.00510	0.0125	0.0173	1.23	11/25/2019 04:35	WG1386420
n-Butylbenzene	0.296		0.00530	0.0125	0.0173	1.23	11/25/2019 04:35	WG1386420
sec-Butylbenzene	0.105		0.00349	0.0125	0.0173	1.23	11/25/2019 04:35	WG1386420
tert-Butylbenzene	U		0.00214	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
Carbon tetrachloride	U		0.00149	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
Chlorobenzene	U		0.000790	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
Chlorodibromomethane	U		0.000621	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
Chloroethane	U		0.00149	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
Chloroform	U		0.000572	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
Chloromethane	U	J4	0.00192	0.0125	0.0173	1.23	11/25/2019 04:35	WG1386420
2-Chlorotoluene	U		0.00127	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
4-Chlorotoluene	U		0.00156	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00704	0.0250	0.0345	1.23	11/25/2019 04:35	WG1386420
1,2-Dibromoethane	U		0.000724	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
Dibromomethane	U		0.00138	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
1,2-Dichlorobenzene	U		0.00200	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
1,3-Dichlorobenzene	U		0.00235	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
1,4-Dichlorobenzene	U		0.00272	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
Dichlorodifluoromethane	U		0.00113	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
1,1-Dichloroethane	U		0.000793	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
1,2-Dichloroethane	U		0.000655	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420

SB-20(4-6)

Collected date/time: 11/14/19 09:37

SAMPLE RESULTS - 16

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000690	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
cis-1,2-Dichloroethene	U		0.000952	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
trans-1,2-Dichloroethene	U		0.00197	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
1,2-Dichloropropane	U		0.00175	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
1,1-Dichloropropene	U		0.000966	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
1,3-Dichloropropane	U		0.00241	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
cis-1,3-Dichloropropene	U		0.000935	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
trans-1,3-Dichloropropene	U		0.00211	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
2,2-Dichloropropane	U		0.00109	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
Di-isopropyl ether	U		0.000483	0.00100	0.00138	1.23	11/25/2019 04:35	WG1386420
Ethylbenzene	0.00934		0.000731	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
Hexachloro-1,3-butadiene	U		0.0175	0.0250	0.0345	1.23	11/25/2019 04:35	WG1386420
Isopropylbenzene	0.0145		0.00119	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
p-Isopropyltoluene	0.135		0.00321	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
2-Butanone (MEK)	0.0458	B	0.0172	0.0250	0.0345	1.23	11/25/2019 04:35	WG1386420
Methylene Chloride	U		0.00916	0.0250	0.0345	1.23	11/25/2019 04:35	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0138	0.0250	0.0345	1.23	11/25/2019 04:35	WG1386420
Methyl tert-butyl ether	U		0.000407	0.00100	0.00138	1.23	11/25/2019 04:35	WG1386420
Naphthalene	0.643		0.00430	0.0125	0.0173	1.23	11/25/2019 04:35	WG1386420
n-Propylbenzene	0.0551		0.00163	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
Styrene	U		0.00377	0.0125	0.0173	1.23	11/25/2019 04:35	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000690	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000538	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000931	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
Tetrachloroethene	U		0.000966	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
Toluene	0.00449	J	0.00172	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
1,2,3-Trichlorobenzene	U		0.000862	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
1,2,4-Trichlorobenzene	U		0.00665	0.0125	0.0173	1.23	11/25/2019 04:35	WG1386420
1,1,1-Trichloroethane	U		0.000379	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
1,1,2-Trichloroethane	U		0.00122	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
Trichloroethene	U		0.000552	0.00100	0.00138	1.23	11/25/2019 04:35	WG1386420
Trichlorofluoromethane	U		0.000690	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
1,2,3-Trichloropropane	U		0.00704	0.0125	0.0173	1.23	11/25/2019 04:35	WG1386420
1,2,4-Trimethylbenzene	0.695		0.00160	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
1,2,3-Trimethylbenzene	0.580		0.00159	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
1,3,5-Trimethylbenzene	0.387		0.00149	0.00500	0.00690	1.23	11/25/2019 04:35	WG1386420
Vinyl chloride	U		0.000942	0.00250	0.00345	1.23	11/25/2019 04:35	WG1386420
Xylenes, Total	0.0478		0.00659	0.00650	0.00897	1.23	11/25/2019 04:35	WG1386420
(S) Toluene-d8	*99.7*				*75.0-131*		*11/25/2019 04:35*	WG1386420
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*11/25/2019 04:35*	WG1386420
(S) 1,2-Dichloroethane-d4	*92.5*				*70.0-130*		*11/25/2019 04:35*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	243		1.49	4.00	4.49	1	11/19/2019 17:37	WG1382640
Residual Range Organics (RRO)	83.8		3.73	10.0	11.2	1	11/19/2019 17:37	WG1382640
(S) o-Terphenyl	*89.4*				*18.0-148*		*11/19/2019 17:37*	WG1382640

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.0		1	11/22/2019 16:23	WG1384983

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0483	B	0.00318	0.0300	0.0341	1	11/21/2019 17:57	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.52		0.523	2.00	2.27	1	11/20/2019 14:42	WG1382679
Barium	85.6		0.193	0.500	0.568	1	11/20/2019 14:42	WG1382679
Cadmium	0.280	J	0.0795	0.500	0.568	1	11/20/2019 14:42	WG1382679
Chromium	30.5		0.159	1.00	1.14	1	11/20/2019 14:42	WG1382679
Lead	25.9		0.216	0.500	0.568	1	11/20/2019 14:42	WG1382679
Selenium	U		0.705	2.00	2.27	1	11/20/2019 14:42	WG1382679
Silver	U		0.136	1.00	1.14	1	11/20/2019 14:42	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	21.2		0.963	0.100	2.84	25	11/22/2019 08:25	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/22/2019 08:25*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0156	0.0250	0.0284	1	11/25/2019 04:54	WG1386420
Acrylonitrile	U		0.00216	0.0125	0.0142	1	11/25/2019 04:54	WG1386420
Benzene	0.000886	J	0.000455	0.00100	0.00114	1	11/25/2019 04:54	WG1386420
Bromobenzene	U		0.00119	0.0125	0.0142	1	11/25/2019 04:54	WG1386420
Bromodichloromethane	U		0.000895	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
Bromoform	U		0.00680	0.0250	0.0284	1	11/25/2019 04:54	WG1386420
Bromomethane	U		0.00420	0.0125	0.0142	1	11/25/2019 04:54	WG1386420
n-Butylbenzene	0.0817		0.00436	0.0125	0.0142	1	11/25/2019 04:54	WG1386420
sec-Butylbenzene	0.0395		0.00287	0.0125	0.0142	1	11/25/2019 04:54	WG1386420
tert-Butylbenzene	U		0.00176	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
Carbon tetrachloride	U		0.00123	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
Chlorobenzene	U		0.000651	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
Chlorodibromomethane	U		0.000511	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
Chloroethane	U		0.00123	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
Chloroform	U		0.000472	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
Chloromethane	U	J4	0.00158	0.0125	0.0142	1	11/25/2019 04:54	WG1386420
2-Chlorotoluene	U		0.00105	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
4-Chlorotoluene	U		0.00128	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00580	0.0250	0.0284	1	11/25/2019 04:54	WG1386420
1,2-Dibromoethane	U		0.000597	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
Dibromomethane	U		0.00114	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
1,2-Dichlorobenzene	U		0.00165	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
1,3-Dichlorobenzene	U		0.00193	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
1,4-Dichlorobenzene	U		0.00224	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
Dichlorodifluoromethane	U		0.000930	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
1,1-Dichloroethane	U		0.000653	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
1,2-Dichloroethane	U		0.000540	0.00250	0.00284	1	11/25/2019 04:54	WG1386420

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000568	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
cis-1,2-Dichloroethene	U		0.000784	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
trans-1,2-Dichloroethene	U		0.00162	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
1,2-Dichloropropane	U		0.00144	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
1,1-Dichloropropene	U		0.000795	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
1,3-Dichloropropane	U		0.00199	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
cis-1,3-Dichloropropene	U		0.000770	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
trans-1,3-Dichloropropene	U		0.00174	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
2,2-Dichloropropane	U		0.000901	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
Di-isopropyl ether	U		0.000398	0.00100	0.00114	1	11/25/2019 04:54	WG1386420
Ethylbenzene	0.00534		0.000602	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
Hexachloro-1,3-butadiene	U		0.0144	0.0250	0.0284	1	11/25/2019 04:54	WG1386420
Isopropylbenzene	0.00620		0.000981	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
p-Isopropyltoluene	0.0462		0.00265	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
2-Butanone (MEK)	0.0285	B	0.0142	0.0250	0.0284	1	11/25/2019 04:54	WG1386420
Methylene Chloride	U		0.00755	0.0250	0.0284	1	11/25/2019 04:54	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0114	0.0250	0.0284	1	11/25/2019 04:54	WG1386420
Methyl tert-butyl ether	U		0.000335	0.00100	0.00114	1	11/25/2019 04:54	WG1386420
Naphthalene	0.255		0.00355	0.0125	0.0142	1	11/25/2019 04:54	WG1386420
n-Propylbenzene	0.0219		0.00134	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
Styrene	U		0.00310	0.0125	0.0142	1	11/25/2019 04:54	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000568	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000443	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000767	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
Tetrachloroethene	U		0.000795	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
Toluene	0.00191	J	0.00142	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
1,2,3-Trichlorobenzene	U		0.000710	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
1,2,4-Trichlorobenzene	U		0.00548	0.0125	0.0142	1	11/25/2019 04:54	WG1386420
1,1,1-Trichloroethane	U		0.000312	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
1,1,2-Trichloroethane	U		0.00100	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
Trichloroethene	U		0.000455	0.00100	0.00114	1	11/25/2019 04:54	WG1386420
Trichlorofluoromethane	U		0.000568	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
1,2,3-Trichloropropane	U		0.00580	0.0125	0.0142	1	11/25/2019 04:54	WG1386420
1,2,4-Trimethylbenzene	0.276		0.00132	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
1,2,3-Trimethylbenzene	0.227		0.00131	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
1,3,5-Trimethylbenzene	0.153		0.00123	0.00500	0.00568	1	11/25/2019 04:54	WG1386420
Vinyl chloride	U		0.000776	0.00250	0.00284	1	11/25/2019 04:54	WG1386420
Xylenes, Total	0.0194		0.00543	0.00650	0.00739	1	11/25/2019 04:54	WG1386420
(S) Toluene-d8	*102*				*75.0-131*		*11/25/2019 04:54*	WG1386420
(S) 4-Bromofluorobenzene	*108*				*67.0-138*		*11/25/2019 04:54*	WG1386420
(S) 1,2-Dichloroethane-d4	*92.4*				*70.0-130*		*11/25/2019 04:54*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	369		75.6	4.00	227	50	11/19/2019 20:45	WG1382640
Residual Range Organics (RRO)	1010		189	10.0	568	50	11/19/2019 20:45	WG1382640
(S) o-Terphenyl	*122*	J7			*18.0-148*		*11/19/2019 20:45*	WG1382640

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.4		1	11/22/2019 16:02	WG1384985

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0371	B	0.00328	0.0300	0.0351	1	11/21/2019 17:59	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.23		0.538	2.00	2.34	1	11/20/2019 14:44	WG1382679
Barium	84.4		0.199	0.500	0.585	1	11/20/2019 14:44	WG1382679
Cadmium	0.203	J	0.0819	0.500	0.585	1	11/20/2019 14:44	WG1382679
Chromium	182		0.164	1.00	1.17	1	11/20/2019 14:44	WG1382679
Lead	684		0.222	0.500	0.585	1	11/20/2019 14:44	WG1382679
Selenium	U		0.726	2.00	2.34	1	11/20/2019 14:44	WG1382679
Silver	U		0.140	1.00	1.17	1	11/20/2019 14:44	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	22.7		0.992	0.100	2.93	25	11/22/2019 08:49	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/22/2019 08:49*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0160	0.0250	0.0293	1	11/25/2019 05:13	WG1386420
Acrylonitrile	U		0.00222	0.0125	0.0146	1	11/25/2019 05:13	WG1386420
Benzene	0.00112	J	0.000468	0.00100	0.00117	1	11/25/2019 05:13	WG1386420
Bromobenzene	U		0.00123	0.0125	0.0146	1	11/25/2019 05:13	WG1386420
Bromodichloromethane	U		0.000922	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
Bromoform	U		0.00700	0.0250	0.0293	1	11/25/2019 05:13	WG1386420
Bromomethane	U		0.00433	0.0125	0.0146	1	11/25/2019 05:13	WG1386420
n-Butylbenzene	0.00564	J	0.00449	0.0125	0.0146	1	11/25/2019 05:13	WG1386420
sec-Butylbenzene	U		0.00296	0.0125	0.0146	1	11/25/2019 05:13	WG1386420
tert-Butylbenzene	U		0.00181	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
Carbon tetrachloride	U		0.00126	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
Chlorobenzene	U		0.000671	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
Chlorodibromomethane	U		0.000527	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
Chloroethane	U		0.00126	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
Chloroform	U		0.000486	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
Chloromethane	U	J4	0.00163	0.0125	0.0146	1	11/25/2019 05:13	WG1386420
2-Chlorotoluene	U		0.00108	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
4-Chlorotoluene	U		0.00132	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00597	0.0250	0.0293	1	11/25/2019 05:13	WG1386420
1,2-Dibromoethane	U		0.000615	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
Dibromomethane	U		0.00117	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
1,2-Dichlorobenzene	U		0.00170	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
1,3-Dichlorobenzene	U		0.00199	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
1,4-Dichlorobenzene	U		0.00231	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
Dichlorodifluoromethane	U		0.000957	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
1,1-Dichloroethane	U		0.000673	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
1,2-Dichloroethane	U		0.000556	0.00250	0.00293	1	11/25/2019 05:13	WG1386420

SB-21(2-3)
Collected date/time: 11/14/19 10:07

SAMPLE RESULTS - 18

L1161924

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

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000585	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
cis-1,2-Dichloroethene	U		0.000808	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
trans-1,2-Dichloroethene	U		0.00167	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
1,2-Dichloropropane	U		0.00149	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
1,1-Dichloropropene	U		0.000819	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
1,3-Dichloropropane	U		0.00205	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
cis-1,3-Dichloropropene	U		0.000794	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
trans-1,3-Dichloropropene	U		0.00179	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
2,2-Dichloropropane	U		0.000928	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
Di-isopropyl ether	U		0.000410	0.00100	0.00117	1	11/25/2019 05:13	WG1386420
Ethylbenzene	0.165		0.000620	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
Hexachloro-1,3-butadiene	U		0.0149	0.0250	0.0293	1	11/25/2019 05:13	WG1386420
Isopropylbenzene	U		0.00101	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
p-Isopropyltoluene	0.00826		0.00273	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
2-Butanone (MEK)	0.0494	B	0.0146	0.0250	0.0293	1	11/25/2019 05:13	WG1386420
Methylene Chloride	U		0.00777	0.0250	0.0293	1	11/25/2019 05:13	WG1386420
4-Methyl-2-pentanone (MIBK)	0.0167	J	0.0117	0.0250	0.0293	1	11/25/2019 05:13	WG1386420
Methyl tert-butyl ether	U		0.000345	0.00100	0.00117	1	11/25/2019 05:13	WG1386420
Naphthalene	0.0289		0.00365	0.0125	0.0146	1	11/25/2019 05:13	WG1386420
n-Propylbenzene	0.00506	J	0.00138	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
Styrene	U		0.00320	0.0125	0.0146	1	11/25/2019 05:13	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000585	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
1,1,2,2-Tetrachloroethane	0.0236		0.000457	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000790	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
Tetrachloroethene	U		0.000819	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
Toluene	0.0220		0.00146	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
1,2,3-Trichlorobenzene	U		0.000732	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
1,2,4-Trichlorobenzene	0.00740	J	0.00564	0.0125	0.0146	1	11/25/2019 05:13	WG1386420
1,1,1-Trichloroethane	U		0.000322	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
1,1,2-Trichloroethane	U		0.00103	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
Trichloroethene	U		0.000468	0.00100	0.00117	1	11/25/2019 05:13	WG1386420
Trichlorofluoromethane	U		0.000585	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
1,2,3-Trichloropropane	U		0.00597	0.0125	0.0146	1	11/25/2019 05:13	WG1386420
1,2,4-Trimethylbenzene	0.0178		0.00136	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
1,2,3-Trimethylbenzene	0.0171		0.00135	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
1,3,5-Trimethylbenzene	0.0212		0.00126	0.00500	0.00585	1	11/25/2019 05:13	WG1386420
Vinyl chloride	U		0.000799	0.00250	0.00293	1	11/25/2019 05:13	WG1386420
Xylenes, Total	0.344		0.00560	0.00650	0.00761	1	11/25/2019 05:13	WG1386420
(S) Toluene-d8	*100*				*75.0-131*		*11/25/2019 05:13*	WG1386420
(S) 4-Bromofluorobenzene	*99.7*				*67.0-138*		*11/25/2019 05:13*	WG1386420
(S) 1,2-Dichloroethane-d4	*89.7*				*70.0-130*		*11/25/2019 05:13*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	310		77.8	4.00	234	50	11/19/2019 21:04	WG1382640
Residual Range Organics (RRO)	632		195	10.0	585	50	11/19/2019 21:04	WG1382640
(S) o-Terphenyl	*109*	J7			*18.0-148*		*11/19/2019 21:04*	WG1382640

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.3		1	11/22/2019 16:02	WG1384985

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0645		0.00328	0.0300	0.0352	1	11/21/2019 18:02	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.28		0.539	2.00	2.34	1	11/20/2019 14:47	WG1382679
Barium	95.7		0.199	0.500	0.586	1	11/20/2019 14:47	WG1382679
Cadmium	0.287	J	0.0820	0.500	0.586	1	11/20/2019 14:47	WG1382679
Chromium	77.1		0.164	1.00	1.17	1	11/20/2019 14:47	WG1382679
Lead	256		0.223	0.500	0.586	1	11/20/2019 14:47	WG1382679
Selenium	U		0.727	2.00	2.34	1	11/20/2019 14:47	WG1382679
Silver	U		0.141	1.00	1.17	1	11/20/2019 14:47	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	4.34		0.993	0.100	2.93	25	11/22/2019 09:14	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*99.7*				*77.0-120*		*11/22/2019 09:14*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.158		0.0161	0.0250	0.0293	1	11/25/2019 05:32	WG1386420
Acrylonitrile	U		0.00223	0.0125	0.0147	1	11/25/2019 05:32	WG1386420
Benzene	0.00338		0.000469	0.00100	0.00117	1	11/25/2019 05:32	WG1386420
Bromobenzene	U		0.00123	0.0125	0.0147	1	11/25/2019 05:32	WG1386420
Bromodichloromethane	U		0.000924	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
Bromoform	U		0.00701	0.0250	0.0293	1	11/25/2019 05:32	WG1386420
Bromomethane	U		0.00434	0.0125	0.0147	1	11/25/2019 05:32	WG1386420
n-Butylbenzene	U		0.00450	0.0125	0.0147	1	11/25/2019 05:32	WG1386420
sec-Butylbenzene	U		0.00297	0.0125	0.0147	1	11/25/2019 05:32	WG1386420
tert-Butylbenzene	U		0.00182	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
Carbon tetrachloride	U		0.00127	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
Chlorobenzene	U		0.000672	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
Chlorodibromomethane	U		0.000527	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
Chloroethane	U		0.00127	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
Chloroform	U		0.000486	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
Chloromethane	U	J4	0.00163	0.0125	0.0147	1	11/25/2019 05:32	WG1386420
2-Chlorotoluene	U		0.00108	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
4-Chlorotoluene	U		0.00132	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00598	0.0250	0.0293	1	11/25/2019 05:32	WG1386420
1,2-Dibromoethane	U		0.000615	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
Dibromomethane	U		0.00117	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
1,2-Dichlorobenzene	U		0.00170	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
1,3-Dichlorobenzene	U		0.00199	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
1,4-Dichlorobenzene	U		0.00231	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
Dichlorodifluoromethane	U		0.000959	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
1,1-Dichloroethane	U		0.000674	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
1,2-Dichloroethane	U		0.000557	0.00250	0.00293	1	11/25/2019 05:32	WG1386420

SB-21(6-8)

Collected date/time: 11/14/19 10:10

SAMPLE RESULTS - 19

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000586	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
cis-1,2-Dichloroethene	U		0.000809	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
trans-1,2-Dichloroethene	U		0.00168	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
1,2-Dichloropropane	U		0.00149	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
1,1-Dichloropropene	U		0.000820	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
1,3-Dichloropropane	U		0.00205	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
cis-1,3-Dichloropropene	U		0.000795	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
trans-1,3-Dichloropropene	U		0.00179	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
2,2-Dichloropropane	U		0.000929	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
Di-isopropyl ether	U		0.000410	0.00100	0.00117	1	11/25/2019 05:32	WG1386420
Ethylbenzene	0.0662		0.000621	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
Hexachloro-1,3-butadiene	U		0.0149	0.0250	0.0293	1	11/25/2019 05:32	WG1386420
Isopropylbenzene	0.00209	J	0.00101	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
p-Isopropyltoluene	0.0318		0.00273	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
2-Butanone (MEK)	0.0505	B	0.0147	0.0250	0.0293	1	11/25/2019 05:32	WG1386420
Methylene Chloride	U		0.00778	0.0250	0.0293	1	11/25/2019 05:32	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0250	0.0293	1	11/25/2019 05:32	WG1386420
Methyl tert-butyl ether	U		0.000346	0.00100	0.00117	1	11/25/2019 05:32	WG1386420
Naphthalene	0.0141	J	0.00366	0.0125	0.0147	1	11/25/2019 05:32	WG1386420
n-Propylbenzene	0.00227	J	0.00138	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
Styrene	U		0.00320	0.0125	0.0147	1	11/25/2019 05:32	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000586	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000457	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000791	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
Tetrachloroethene	U		0.000820	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
Toluene	0.0307		0.00147	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
1,2,3-Trichlorobenzene	U		0.000733	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
1,2,4-Trichlorobenzene	U		0.00565	0.0125	0.0147	1	11/25/2019 05:32	WG1386420
1,1,1-Trichloroethane	U		0.000322	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
1,1,2-Trichloroethane	U		0.00103	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
Trichloroethene	U		0.000469	0.00100	0.00117	1	11/25/2019 05:32	WG1386420
Trichlorofluoromethane	U		0.000586	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
1,2,3-Trichloropropane	U		0.00598	0.0125	0.0147	1	11/25/2019 05:32	WG1386420
1,2,4-Trimethylbenzene	0.00760		0.00136	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
1,2,3-Trimethylbenzene	0.0109		0.00135	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
1,3,5-Trimethylbenzene	0.00847		0.00127	0.00500	0.00586	1	11/25/2019 05:32	WG1386420
Vinyl chloride	U		0.000801	0.00250	0.00293	1	11/25/2019 05:32	WG1386420
Xylenes, Total	0.144		0.00560	0.00650	0.00762	1	11/25/2019 05:32	WG1386420
(S) Toluene-d8	*101*				*75.0-131*		*11/25/2019 05:32*	WG1386420
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*11/25/2019 05:32*	WG1386420
(S) 1,2-Dichloroethane-d4	*95.8*				*70.0-130*		*11/25/2019 05:32*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	151		15.6	4.00	46.9	10	11/19/2019 18:16	WG1382640
Residual Range Organics (RRO)	429		39.0	10.0	117	10	11/19/2019 18:16	WG1382640
(S) o-Terphenyl	*80.6*				*18.0-148*		*11/19/2019 18:16*	WG1382640

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

SB-21(9-11)
Collected date/time: 11/14/19 10:11

SAMPLE RESULTS - 20

L1161924

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	74.0		1	11/22/2019 16:02	WG1384985

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.169		0.00379	0.0300	0.0406	1	11/21/2019 18:04	WG1382810

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.42		0.622	2.00	2.70	1	11/20/2019 14:49	WG1382679
Barium	125		0.230	0.500	0.676	1	11/20/2019 14:49	WG1382679
Cadmium	0.307	J	0.0947	0.500	0.676	1	11/20/2019 14:49	WG1382679
Chromium	48.9		0.189	1.00	1.35	1	11/20/2019 14:49	WG1382679
Lead	105		0.257	0.500	0.676	1	11/20/2019 14:49	WG1382679
Selenium	U		0.838	2.00	2.70	1	11/20/2019 14:49	WG1382679
Silver	U		0.162	1.00	1.35	1	11/20/2019 14:49	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	6.44		1.15	0.100	3.38	25	11/22/2019 09:38	WG1384475
(S) a,a,a-Trifluorotoluene(FID)	*99.6*				*77.0-120*		*11/22/2019 09:38*	WG1384475

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.145		0.0185	0.0250	0.0338	1	11/25/2019 05:51	WG1386420
Acrylonitrile	U		0.00257	0.0125	0.0169	1	11/25/2019 05:51	WG1386420
Benzene	0.00262		0.000541	0.00100	0.00135	1	11/25/2019 05:51	WG1386420
Bromobenzene	U		0.00142	0.0125	0.0169	1	11/25/2019 05:51	WG1386420
Bromodichloromethane	U		0.00107	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
Bromoform	U		0.00809	0.0250	0.0338	1	11/25/2019 05:51	WG1386420
Bromomethane	U		0.00500	0.0125	0.0169	1	11/25/2019 05:51	WG1386420
n-Butylbenzene	U		0.00519	0.0125	0.0169	1	11/25/2019 05:51	WG1386420
sec-Butylbenzene	U		0.00342	0.0125	0.0169	1	11/25/2019 05:51	WG1386420
tert-Butylbenzene	U		0.00210	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
Carbon tetrachloride	U		0.00146	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
Chlorobenzene	U		0.000775	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
Chlorodibromomethane	U		0.000608	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
Chloroethane	U		0.00146	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
Chloroform	U		0.000561	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
Chloromethane	U	J4	0.00188	0.0125	0.0169	1	11/25/2019 05:51	WG1386420
2-Chlorotoluene	U		0.00124	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
4-Chlorotoluene	U		0.00153	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
1,2-Dibromo-3-Chloropropane	U		0.00690	0.0250	0.0338	1	11/25/2019 05:51	WG1386420
1,2-Dibromoethane	U		0.000710	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
Dibromomethane	U		0.00135	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
1,2-Dichlorobenzene	U		0.00196	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
1,3-Dichlorobenzene	U		0.00230	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
1,4-Dichlorobenzene	U		0.00266	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
Dichlorodifluoromethane	U		0.00111	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
1,1-Dichloroethane	U		0.000778	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
1,2-Dichloroethane	U		0.000642	0.00250	0.00338	1	11/25/2019 05:51	WG1386420

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

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000676	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
cis-1,2-Dichloroethene	U		0.000933	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
trans-1,2-Dichloroethene	U		0.00193	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
1,2-Dichloropropane	U		0.00172	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
1,1-Dichloropropene	U		0.000947	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
1,3-Dichloropropane	U		0.00237	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
cis-1,3-Dichloropropene	U		0.000917	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
trans-1,3-Dichloropropene	U		0.00207	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
2,2-Dichloropropane	U		0.00107	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
Di-isopropyl ether	U		0.000473	0.00100	0.00135	1	11/25/2019 05:51	WG1386420
Ethylbenzene	0.0208		0.000717	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
Hexachloro-1,3-butadiene	U		0.0172	0.0250	0.0338	1	11/25/2019 05:51	WG1386420
Isopropylbenzene	U		0.00117	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
p-Isopropyltoluene	0.172		0.00315	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
2-Butanone (MEK)	0.0788	B	0.0169	0.0250	0.0338	1	11/25/2019 05:51	WG1386420
Methylene Chloride	U		0.00898	0.0250	0.0338	1	11/25/2019 05:51	WG1386420
4-Methyl-2-pentanone (MIBK)	U		0.0135	0.0250	0.0338	1	11/25/2019 05:51	WG1386420
Methyl tert-butyl ether	U		0.000399	0.00100	0.00135	1	11/25/2019 05:51	WG1386420
Naphthalene	0.00784	J	0.00422	0.0125	0.0169	1	11/25/2019 05:51	WG1386420
n-Propylbenzene	0.00323	J	0.00160	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
Styrene	U		0.00369	0.0125	0.0169	1	11/25/2019 05:51	WG1386420
1,1,1,2-Tetrachloroethane	U		0.000676	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
1,1,2,2-Tetrachloroethane	U		0.000527	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
1,1,2-Trichlorotrifluoroethane	U		0.000913	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
Tetrachloroethene	U		0.000947	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
Toluene	0.0247		0.00169	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
1,2,3-Trichlorobenzene	U		0.000845	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
1,2,4-Trichlorobenzene	U		0.00652	0.0125	0.0169	1	11/25/2019 05:51	WG1386420
1,1,1-Trichloroethane	U		0.000372	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
1,1,2-Trichloroethane	U		0.00119	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
Trichloroethene	U		0.000541	0.00100	0.00135	1	11/25/2019 05:51	WG1386420
Trichlorofluoromethane	U		0.000676	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
1,2,3-Trichloropropane	U		0.00690	0.0125	0.0169	1	11/25/2019 05:51	WG1386420
1,2,4-Trimethylbenzene	0.00396	J	0.00157	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
1,2,3-Trimethylbenzene	0.00886		0.00156	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
1,3,5-Trimethylbenzene	0.00285	J	0.00146	0.00500	0.00676	1	11/25/2019 05:51	WG1386420
Vinyl chloride	U		0.000924	0.00250	0.00338	1	11/25/2019 05:51	WG1386420
Xylenes, Total	0.0473		0.00646	0.00650	0.00879	1	11/25/2019 05:51	WG1386420
(S) Toluene-d8	*100*				*75.0-131*		*11/25/2019 05:51*	WG1386420
(S) 4-Bromofluorobenzene	*95.8*				*67.0-138*		*11/25/2019 05:51*	WG1386420
(S) 1,2-Dichloroethane-d4	*97.2*				*70.0-130*		*11/25/2019 05:51*	WG1386420

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	102		8.99	4.00	27.0	5	11/19/2019 18:29	WG1382640
Residual Range Organics (RRO)	279		22.5	10.0	67.6	5	11/19/2019 18:29	WG1382640
(S) o-Terphenyl	*57.2*				*18.0-148*		*11/19/2019 18:29*	WG1382640

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.2		1	11/22/2019 16:02	WG1384985

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0346		0.00317	0.0300	0.0340	1	11/21/2019 18:27	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	12.3		0.521	2.00	2.27	1	11/20/2019 14:52	WG1382679
Barium	70.8		0.193	0.500	0.567	1	11/20/2019 14:52	WG1382679
Cadmium	0.220	J	0.0793	0.500	0.567	1	11/20/2019 14:52	WG1382679
Chromium	31.2		0.159	1.00	1.13	1	11/20/2019 14:52	WG1382679
Lead	54.7		0.215	0.500	0.567	1	11/20/2019 14:52	WG1382679
Selenium	U		0.703	2.00	2.27	1	11/20/2019 14:52	WG1382679
Silver	U		0.136	1.00	1.13	1	11/20/2019 14:52	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.38	J	0.960	0.100	2.83	25	11/24/2019 00:16	WG1386149
(S) a,a,a-Trifluorotoluene(FID)	*97.6*				*77.0-120*		*11/24/2019 00:16*	WG1386149

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0155	0.0250	0.0283	1	11/26/2019 02:36	WG1386768
Acrylonitrile	U		0.00215	0.0125	0.0142	1	11/26/2019 02:36	WG1386768
Benzene	0.000949	J	0.000453	0.00100	0.00113	1	11/26/2019 02:36	WG1386768
Bromobenzene	U		0.00119	0.0125	0.0142	1	11/26/2019 02:36	WG1386768
Bromodichloromethane	U		0.000893	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
Bromoform	U		0.00678	0.0250	0.0283	1	11/26/2019 02:36	WG1386768
Bromomethane	U		0.00419	0.0125	0.0142	1	11/26/2019 02:36	WG1386768
n-Butylbenzene	U	J4	0.00435	0.0125	0.0142	1	11/26/2019 02:36	WG1386768
sec-Butylbenzene	U		0.00287	0.0125	0.0142	1	11/26/2019 02:36	WG1386768
tert-Butylbenzene	U		0.00176	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
Carbon tetrachloride	U		0.00122	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
Chlorobenzene	U		0.000649	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
Chlorodibromomethane	U		0.000510	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
Chloroethane	U	J4	0.00122	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
Chloroform	0.000712	B J	0.000470	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
Chloromethane	U		0.00158	0.0125	0.0142	1	11/26/2019 02:36	WG1386768
2-Chlorotoluene	U		0.00104	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
4-Chlorotoluene	U		0.00128	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
1,2-Dibromo-3-Chloropropane	U		0.00578	0.0250	0.0283	1	11/26/2019 02:36	WG1386768
1,2-Dibromoethane	U		0.000595	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
Dibromomethane	U		0.00113	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
1,2-Dichlorobenzene	U		0.00164	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
1,3-Dichlorobenzene	U		0.00193	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
1,4-Dichlorobenzene	U		0.00223	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
Dichlorodifluoromethane	U		0.000927	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
1,1-Dichloroethane	U		0.000652	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
1,2-Dichloroethane	U		0.000538	0.00250	0.00283	1	11/26/2019 02:36	WG1386768

SB-22(0-1)

Collected date/time: 11/14/19 09:50

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000567	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
cis-1,2-Dichloroethene	U		0.000782	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
trans-1,2-Dichloroethene	U		0.00162	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
1,2-Dichloropropane	U		0.00144	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
1,1-Dichloropropene	U		0.000793	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
1,3-Dichloropropane	U		0.00198	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
cis-1,3-Dichloropropene	U		0.000768	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
trans-1,3-Dichloropropene	U		0.00173	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
2,2-Dichloropropane	U		0.000899	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
Di-isopropyl ether	U		0.000397	0.00100	0.00113	1	11/26/2019 02:36	WG1386768
Ethylbenzene	0.000606	J	0.000601	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
Hexachloro-1,3-butadiene	U		0.0144	0.0250	0.0283	1	11/26/2019 02:36	WG1386768
Isopropylbenzene	U		0.000978	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
p-Isopropyltoluene	U		0.00264	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
2-Butanone (MEK)	0.0173	B J	0.0142	0.0250	0.0283	1	11/26/2019 02:36	WG1386768
Methylene Chloride	U		0.00752	0.0250	0.0283	1	11/26/2019 02:36	WG1386768
4-Methyl-2-pentanone (MIBK)	U		0.0113	0.0250	0.0283	1	11/26/2019 02:36	WG1386768
Methyl tert-butyl ether	U		0.000334	0.00100	0.00113	1	11/26/2019 02:36	WG1386768
Naphthalene	U		0.00354	0.0125	0.0142	1	11/26/2019 02:36	WG1386768
n-Propylbenzene	U	J4	0.00134	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
Styrene	U		0.00309	0.0125	0.0142	1	11/26/2019 02:36	WG1386768
1,1,1,2-Tetrachloroethane	U		0.000567	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
1,1,2,2-Tetrachloroethane	U	J4	0.000442	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
1,1,2-Trichlorotrifluoroethane	U		0.000765	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
Tetrachloroethene	U		0.000793	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
Toluene	0.00424	J	0.00142	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
1,2,3-Trichlorobenzene	U		0.000708	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
1,2,4-Trichlorobenzene	U		0.00546	0.0125	0.0142	1	11/26/2019 02:36	WG1386768
1,1,1-Trichloroethane	U		0.000312	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
1,1,2-Trichloroethane	U		0.00100	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
Trichloroethene	U		0.000453	0.00100	0.00113	1	11/26/2019 02:36	WG1386768
Trichlorofluoromethane	U		0.000567	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
1,2,3-Trichloropropane	U		0.00578	0.0125	0.0142	1	11/26/2019 02:36	WG1386768
1,2,4-Trimethylbenzene	U		0.00131	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
1,2,3-Trimethylbenzene	U		0.00130	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
1,3,5-Trimethylbenzene	U		0.00122	0.00500	0.00567	1	11/26/2019 02:36	WG1386768
Vinyl chloride	U	J4	0.000774	0.00250	0.00283	1	11/26/2019 02:36	WG1386768
Xylenes, Total	U		0.00542	0.00650	0.00737	1	11/26/2019 02:36	WG1386768
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 02:36*	WG1386768
(S) 4-Bromofluorobenzene	*86.5*				*67.0-138*		*11/26/2019 02:36*	WG1386768
(S) 1,2-Dichloroethane-d4	*91.4*				*70.0-130*		*11/26/2019 02:36*	WG1386768

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	47.1	J	30.1	4.00	90.7	20	11/21/2019 12:58	WG1382641
Residual Range Organics (RRO)	558		75.5	10.0	227	20	11/21/2019 12:58	WG1382641
(S) o-Terphenyl	*79.8*	J7			*18.0-148*		*11/21/2019 12:58*	WG1382641

Sample Narrative:

L1161924-21 WG1382641: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.0		1	11/22/2019 16:02	WG1384985

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0299	J	0.00305	0.0300	0.0326	1	11/21/2019 18:29	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.38		0.500	2.00	2.18	1	11/20/2019 14:54	WG1382679
Barium	81.8		0.185	0.500	0.544	1	11/20/2019 14:54	WG1382679
Cadmium	0.188	J	0.0761	0.500	0.544	1	11/20/2019 14:54	WG1382679
Chromium	34.1		0.152	1.00	1.09	1	11/20/2019 14:54	WG1382679
Lead	20.9		0.207	0.500	0.544	1	11/20/2019 14:54	WG1382679
Selenium	U		0.674	2.00	2.18	1	11/20/2019 14:54	WG1382679
Silver	U		0.131	1.00	1.09	1	11/20/2019 14:54	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	3.99	B	0.922	0.100	2.72	25	11/22/2019 05:22	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*11/22/2019 05:22*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0149	0.0250	0.0272	1	11/26/2019 02:54	WG1386768
Acrylonitrile	U		0.00207	0.0125	0.0136	1	11/26/2019 02:54	WG1386768
Benzene	0.000445	J	0.000435	0.00100	0.00109	1	11/26/2019 02:54	WG1386768
Bromobenzene	U		0.00114	0.0125	0.0136	1	11/26/2019 02:54	WG1386768
Bromodichloromethane	U		0.000857	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
Bromoform	U		0.00650	0.0250	0.0272	1	11/26/2019 02:54	WG1386768
Bromomethane	U		0.00402	0.0125	0.0136	1	11/26/2019 02:54	WG1386768
n-Butylbenzene	U	J4	0.00418	0.0125	0.0136	1	11/26/2019 02:54	WG1386768
sec-Butylbenzene	U		0.00275	0.0125	0.0136	1	11/26/2019 02:54	WG1386768
tert-Butylbenzene	U		0.00169	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
Carbon tetrachloride	U		0.00117	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
Chlorobenzene	U		0.000623	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
Chlorodibromomethane	U		0.000489	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
Chloroethane	U	J4	0.00117	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
Chloroform	U		0.000451	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
Chloromethane	U		0.00151	0.0125	0.0136	1	11/26/2019 02:54	WG1386768
2-Chlorotoluene	U		0.00100	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
4-Chlorotoluene	U		0.00123	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
1,2-Dibromo-3-Chloropropane	U		0.00555	0.0250	0.0272	1	11/26/2019 02:54	WG1386768
1,2-Dibromoethane	U		0.000571	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
Dibromomethane	U		0.00109	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
1,2-Dichlorobenzene	U		0.00158	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
1,3-Dichlorobenzene	U		0.00185	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
1,4-Dichlorobenzene	U		0.00214	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
Dichlorodifluoromethane	U		0.000890	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
1,1-Dichloroethane	U		0.000625	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
1,2-Dichloroethane	U		0.000517	0.00250	0.00272	1	11/26/2019 02:54	WG1386768

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000544	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
cis-1,2-Dichloroethene	U		0.000750	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
trans-1,2-Dichloroethene	U		0.00156	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
1,2-Dichloropropane	U		0.00138	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
1,1-Dichloropropene	U		0.000761	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
1,3-Dichloropropane	U		0.00190	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
cis-1,3-Dichloropropene	U		0.000737	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
trans-1,3-Dichloropropene	U		0.00166	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
2,2-Dichloropropane	U		0.000862	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
Di-isopropyl ether	U		0.000381	0.00100	0.00109	1	11/26/2019 02:54	WG1386768
Ethylbenzene	U		0.000576	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
Hexachloro-1,3-butadiene	U		0.0138	0.0250	0.0272	1	11/26/2019 02:54	WG1386768
Isopropylbenzene	U		0.000939	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
p-Isopropyltoluene	U		0.00253	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
2-Butanone (MEK)	0.0165	B J	0.0136	0.0250	0.0272	1	11/26/2019 02:54	WG1386768
Methylene Chloride	U		0.00722	0.0250	0.0272	1	11/26/2019 02:54	WG1386768
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0272	1	11/26/2019 02:54	WG1386768
Methyl tert-butyl ether	U		0.000321	0.00100	0.00109	1	11/26/2019 02:54	WG1386768
Naphthalene	U		0.00339	0.0125	0.0136	1	11/26/2019 02:54	WG1386768
n-Propylbenzene	U	J4	0.00128	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
Styrene	U		0.00297	0.0125	0.0136	1	11/26/2019 02:54	WG1386768
1,1,1,2-Tetrachloroethane	U		0.000544	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
1,1,2,2-Tetrachloroethane	U	J4	0.000424	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
1,1,2-Trichlorotrifluoroethane	U		0.000734	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
Tetrachloroethene	U		0.000761	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
Toluene	0.00140	J	0.00136	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
1,2,3-Trichlorobenzene	U		0.000680	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
1,2,4-Trichlorobenzene	U		0.00524	0.0125	0.0136	1	11/26/2019 02:54	WG1386768
1,1,1-Trichloroethane	U		0.000299	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
1,1,2-Trichloroethane	U		0.000960	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
Trichloroethene	U		0.000435	0.00100	0.00109	1	11/26/2019 02:54	WG1386768
Trichlorofluoromethane	U		0.000544	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
1,2,3-Trichloropropane	U		0.00555	0.0125	0.0136	1	11/26/2019 02:54	WG1386768
1,2,4-Trimethylbenzene	U		0.00126	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
1,2,3-Trimethylbenzene	U		0.00125	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
1,3,5-Trimethylbenzene	U		0.00117	0.00500	0.00544	1	11/26/2019 02:54	WG1386768
Vinyl chloride	U	J4	0.000743	0.00250	0.00272	1	11/26/2019 02:54	WG1386768
Xylenes, Total	U		0.00520	0.00650	0.00707	1	11/26/2019 02:54	WG1386768
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 02:54*	WG1386768
(S) 4-Bromofluorobenzene	*83.4*				*67.0-138*		*11/26/2019 02:54*	WG1386768
(S) 1,2-Dichloroethane-d4	*95.3*				*70.0-130*		*11/26/2019 02:54*	WG1386768

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	30.6	J	14.5	4.00	43.5	10	11/21/2019 13:54	WG1382641
Residual Range Organics (RRO)	252		36.2	10.0	109	10	11/21/2019 13:54	WG1382641
(S) o-Terphenyl	*90.2*				*18.0-148*		*11/21/2019 13:54*	WG1382641

Sample Narrative:

L1161924-22 WG1382641: Dilution due to matrix impact during extract concentration procedure

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.8		1	11/22/2019 16:02	WG1384985

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0283	J	0.00302	0.0300	0.0323	1	11/21/2019 18:32	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.93		0.496	2.00	2.16	1	11/20/2019 14:57	WG1382679
Barium	78.1		0.183	0.500	0.539	1	11/20/2019 14:57	WG1382679
Cadmium	0.206	J	0.0754	0.500	0.539	1	11/20/2019 14:57	WG1382679
Chromium	36.3		0.151	1.00	1.08	1	11/20/2019 14:57	WG1382679
Lead	25.5		0.205	0.500	0.539	1	11/20/2019 14:57	WG1382679
Selenium	U		0.668	2.00	2.16	1	11/20/2019 14:57	WG1382679
Silver	U		0.129	1.00	1.08	1	11/20/2019 14:57	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.69	B J	0.913	0.100	2.69	25	11/22/2019 05:42	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*104*				*77.0-120*		*11/22/2019 05:42*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0148	0.0250	0.0269	1	11/26/2019 03:13	WG1386768
Acrylonitrile	U		0.00205	0.0125	0.0135	1	11/26/2019 03:13	WG1386768
Benzene	0.000624	J	0.000431	0.00100	0.00108	1	11/26/2019 03:13	WG1386768
Bromobenzene	U		0.00113	0.0125	0.0135	1	11/26/2019 03:13	WG1386768
Bromodichloromethane	U		0.000849	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
Bromoform	U		0.00644	0.0250	0.0269	1	11/26/2019 03:13	WG1386768
Bromomethane	U		0.00399	0.0125	0.0135	1	11/26/2019 03:13	WG1386768
n-Butylbenzene	U	J4	0.00414	0.0125	0.0135	1	11/26/2019 03:13	WG1386768
sec-Butylbenzene	U		0.00273	0.0125	0.0135	1	11/26/2019 03:13	WG1386768
tert-Butylbenzene	U		0.00167	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
Carbon tetrachloride	U		0.00116	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
Chlorobenzene	U		0.000617	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
Chlorodibromomethane	U		0.000485	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
Chloroethane	U	J4	0.00116	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
Chloroform	U		0.000447	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
Chloromethane	U		0.00150	0.0125	0.0135	1	11/26/2019 03:13	WG1386768
2-Chlorotoluene	U		0.000991	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
4-Chlorotoluene	U		0.00122	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
1,2-Dibromo-3-Chloropropane	U		0.00550	0.0250	0.0269	1	11/26/2019 03:13	WG1386768
1,2-Dibromoethane	U		0.000566	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
Dibromomethane	U		0.00108	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
1,2-Dichlorobenzene	U		0.00156	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
1,3-Dichlorobenzene	U		0.00183	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
1,4-Dichlorobenzene	U		0.00212	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
Dichlorodifluoromethane	U		0.000881	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
1,1-Dichloroethane	U		0.000620	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
1,2-Dichloroethane	U		0.000512	0.00250	0.00269	1	11/26/2019 03:13	WG1386768

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000539	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
cis-1,2-Dichloroethene	U		0.000743	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
trans-1,2-Dichloroethene	U		0.00154	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
1,2-Dichloropropane	U		0.00137	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
1,1-Dichloropropene	U		0.000754	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
1,3-Dichloropropane	U		0.00189	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
cis-1,3-Dichloropropene	U		0.000731	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
trans-1,3-Dichloropropene	U		0.00165	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
2,2-Dichloropropane	U		0.000854	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
Di-isopropyl ether	U		0.000377	0.00100	0.00108	1	11/26/2019 03:13	WG1386768
Ethylbenzene	U		0.000571	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
Hexachloro-1,3-butadiene	U		0.0137	0.0250	0.0269	1	11/26/2019 03:13	WG1386768
Isopropylbenzene	U		0.000930	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
p-Isopropyltoluene	0.00444	J	0.00251	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
2-Butanone (MEK)	0.0233	B J	0.0135	0.0250	0.0269	1	11/26/2019 03:13	WG1386768
Methylene Chloride	U		0.00715	0.0250	0.0269	1	11/26/2019 03:13	WG1386768
4-Methyl-2-pentanone (MIBK)	U		0.0108	0.0250	0.0269	1	11/26/2019 03:13	WG1386768
Methyl tert-butyl ether	U		0.000318	0.00100	0.00108	1	11/26/2019 03:13	WG1386768
Naphthalene	U		0.00336	0.0125	0.0135	1	11/26/2019 03:13	WG1386768
n-Propylbenzene	U	J4	0.00127	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
Styrene	U		0.00294	0.0125	0.0135	1	11/26/2019 03:13	WG1386768
1,1,1,2-Tetrachloroethane	U		0.000539	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
1,1,2,2-Tetrachloroethane	U	J4	0.000420	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
1,1,2-Trichlorotrifluoroethane	U		0.000727	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
Tetrachloroethene	U		0.000754	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
Toluene	0.00151	J	0.00135	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
1,2,3-Trichlorobenzene	U		0.000673	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
1,2,4-Trichlorobenzene	U		0.00519	0.0125	0.0135	1	11/26/2019 03:13	WG1386768
1,1,1-Trichloroethane	U		0.000296	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
1,1,2-Trichloroethane	U		0.000951	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
Trichloroethene	U		0.000431	0.00100	0.00108	1	11/26/2019 03:13	WG1386768
Trichlorofluoromethane	U		0.000539	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
1,2,3-Trichloropropane	U		0.00550	0.0125	0.0135	1	11/26/2019 03:13	WG1386768
1,2,4-Trimethylbenzene	U		0.00125	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
1,2,3-Trimethylbenzene	U		0.00124	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
1,3,5-Trimethylbenzene	U		0.00116	0.00500	0.00539	1	11/26/2019 03:13	WG1386768
Vinyl chloride	U	J4	0.000736	0.00250	0.00269	1	11/26/2019 03:13	WG1386768
Xylenes, Total	U		0.00515	0.00650	0.00700	1	11/26/2019 03:13	WG1386768
(S) Toluene-d8	*103*				*75.0-131*		*11/26/2019 03:13*	WG1386768
(S) 4-Bromofluorobenzene	*87.0*				*67.0-138*		*11/26/2019 03:13*	WG1386768
(S) 1,2-Dichloroethane-d4	*89.8*				*70.0-130*		*11/26/2019 03:13*	WG1386768

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	49.1	J	28.7	4.00	86.2	20	11/21/2019 13:12	WG1382641
Residual Range Organics (RRO)	470		71.8	10.0	216	20	11/21/2019 13:12	WG1382641
(S) o-Terphenyl	*98.2*	J7			*18.0-148*		*11/21/2019 13:12*	WG1382641

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.1		1	11/22/2019 16:02	WG1384985

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0234	J	0.00304	0.0300	0.0326	1	11/21/2019 18:35	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.37		0.499	2.00	2.17	1	11/20/2019 14:59	WG1382679
Barium	77.7		0.185	0.500	0.543	1	11/20/2019 14:59	WG1382679
Cadmium	0.236	J	0.0760	0.500	0.543	1	11/20/2019 14:59	WG1382679
Chromium	56.4		0.152	1.00	1.09	1	11/20/2019 14:59	WG1382679
Lead	162		0.206	0.500	0.543	1	11/20/2019 14:59	WG1382679
Selenium	U		0.673	2.00	2.17	1	11/20/2019 14:59	WG1382679
Silver	U		0.130	1.00	1.09	1	11/20/2019 14:59	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.27	B J	0.920	0.100	2.71	25	11/22/2019 06:03	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*11/22/2019 06:03*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0149	0.0250	0.0271	1	11/26/2019 03:32	WG1386768
Acrylonitrile	U		0.00206	0.0125	0.0136	1	11/26/2019 03:32	WG1386768
Benzene	0.00223		0.000434	0.00100	0.00109	1	11/26/2019 03:32	WG1386768
Bromobenzene	U		0.00114	0.0125	0.0136	1	11/26/2019 03:32	WG1386768
Bromodichloromethane	U		0.000855	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
Bromoform	U		0.00649	0.0250	0.0271	1	11/26/2019 03:32	WG1386768
Bromomethane	U		0.00402	0.0125	0.0136	1	11/26/2019 03:32	WG1386768
n-Butylbenzene	U	J4	0.00417	0.0125	0.0136	1	11/26/2019 03:32	WG1386768
sec-Butylbenzene	U		0.00275	0.0125	0.0136	1	11/26/2019 03:32	WG1386768
tert-Butylbenzene	U		0.00168	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
Carbon tetrachloride	U		0.00117	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
Chlorobenzene	U		0.000622	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
Chlorodibromomethane	U		0.000488	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
Chloroethane	U	J4	0.00117	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
Chloroform	0.000514	B J	0.000450	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
Chloromethane	U		0.00151	0.0125	0.0136	1	11/26/2019 03:32	WG1386768
2-Chlorotoluene	U		0.000999	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
4-Chlorotoluene	U		0.00123	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
1,2-Dibromo-3-Chloropropane	U		0.00554	0.0250	0.0271	1	11/26/2019 03:32	WG1386768
1,2-Dibromoethane	U		0.000570	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
Dibromomethane	U		0.00109	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
1,2-Dichlorobenzene	U		0.00157	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
1,3-Dichlorobenzene	U		0.00185	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
1,4-Dichlorobenzene	U		0.00214	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
Dichlorodifluoromethane	U		0.000888	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
1,1-Dichloroethane	U		0.000624	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
1,2-Dichloroethane	U		0.000516	0.00250	0.00271	1	11/26/2019 03:32	WG1386768

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000543	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
cis-1,2-Dichloroethene	U		0.000749	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
trans-1,2-Dichloroethene	U		0.00155	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
1,2-Dichloropropane	U		0.00138	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
1,1-Dichloropropene	U		0.000760	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
1,3-Dichloropropane	U		0.00190	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
cis-1,3-Dichloropropene	U		0.000736	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
trans-1,3-Dichloropropene	U		0.00166	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
2,2-Dichloropropane	U		0.000861	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
Di-isopropyl ether	U		0.000380	0.00100	0.00109	1	11/26/2019 03:32	WG1386768
Ethylbenzene	0.00193	J	0.000575	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
Hexachloro-1,3-butadiene	U		0.0138	0.0250	0.0271	1	11/26/2019 03:32	WG1386768
Isopropylbenzene	U		0.000937	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
p-Isopropyltoluene	U		0.00253	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
2-Butanone (MEK)	0.0257	B J	0.0136	0.0250	0.0271	1	11/26/2019 03:32	WG1386768
Methylene Chloride	U		0.00721	0.0250	0.0271	1	11/26/2019 03:32	WG1386768
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0271	1	11/26/2019 03:32	WG1386768
Methyl tert-butyl ether	U		0.000320	0.00100	0.00109	1	11/26/2019 03:32	WG1386768
Naphthalene	0.00442	J	0.00339	0.0125	0.0136	1	11/26/2019 03:32	WG1386768
n-Propylbenzene	U	J4	0.00128	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
Styrene	U		0.00296	0.0125	0.0136	1	11/26/2019 03:32	WG1386768
1,1,1,2-Tetrachloroethane	U		0.000543	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
1,1,2,2-Tetrachloroethane	U	J4	0.000423	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
1,1,2-Trichlorotrifluoroethane	U		0.000733	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
Tetrachloroethene	U		0.000760	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
Toluene	0.00596		0.00136	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
1,2,3-Trichlorobenzene	U		0.000678	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
1,2,4-Trichlorobenzene	U		0.00523	0.0125	0.0136	1	11/26/2019 03:32	WG1386768
1,1,1-Trichloroethane	U		0.000298	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
1,1,2-Trichloroethane	U		0.000958	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
Trichloroethene	U		0.000434	0.00100	0.00109	1	11/26/2019 03:32	WG1386768
Trichlorofluoromethane	U		0.000543	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
1,2,3-Trichloropropane	U		0.00554	0.0125	0.0136	1	11/26/2019 03:32	WG1386768
1,2,4-Trimethylbenzene	0.00141	J	0.00126	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
1,2,3-Trimethylbenzene	0.00148	J	0.00125	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
1,3,5-Trimethylbenzene	U		0.00117	0.00500	0.00543	1	11/26/2019 03:32	WG1386768
Vinyl chloride	U	J4	0.000741	0.00250	0.00271	1	11/26/2019 03:32	WG1386768
Xylenes, Total	0.0115		0.00519	0.00650	0.00706	1	11/26/2019 03:32	WG1386768
(S) Toluene-d8	*105*				*75.0-131*		*11/26/2019 03:32*	WG1386768
(S) 4-Bromofluorobenzene	*87.1*				*67.0-138*		*11/26/2019 03:32*	WG1386768
(S) 1,2-Dichloroethane-d4	*96.2*				*70.0-130*		*11/26/2019 03:32*	WG1386768

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	123		28.9	4.00	86.8	20	11/21/2019 11:39	WG1382641
Residual Range Organics (RRO)	1450		72.3	10.0	217	20	11/21/2019 11:39	WG1382641
(S) o-Terphenyl	*95.3*	J7			*18.0-148*		*11/21/2019 11:39*	WG1382641

SB-23(3-4)

Collected date/time: 11/14/19 11:18

SAMPLE RESULTS - 25

L1161924

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.7		1	11/22/2019 16:02	WG1384985

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0266	J	0.00312	0.0300	0.0335	1	11/21/2019 18:37	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.11		0.513	2.00	2.23	1	11/20/2019 15:02	WG1382679
Barium	80.7		0.190	0.500	0.558	1	11/20/2019 15:02	WG1382679
Cadmium	0.146	J	0.0781	0.500	0.558	1	11/20/2019 15:02	WG1382679
Chromium	30.7		0.156	1.00	1.12	1	11/20/2019 15:02	WG1382679
Lead	10.3		0.212	0.500	0.558	1	11/20/2019 15:02	WG1382679
Selenium	U		0.691	2.00	2.23	1	11/20/2019 15:02	WG1382679
Silver	U		0.134	1.00	1.12	1	11/20/2019 15:02	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.42	B J	0.945	0.100	2.79	25	11/22/2019 06:23	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*98.0*				*77.0-120*		*11/22/2019 06:23*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0250	J	0.0153	0.0250	0.0279	1	11/26/2019 03:51	WG1386768
Acrylonitrile	U		0.00212	0.0125	0.0139	1	11/26/2019 03:51	WG1386768
Benzene	0.000713	J	0.000446	0.00100	0.00112	1	11/26/2019 03:51	WG1386768
Bromobenzene	U		0.00117	0.0125	0.0139	1	11/26/2019 03:51	WG1386768
Bromodichloromethane	U		0.000879	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
Bromoform	U		0.00667	0.0250	0.0279	1	11/26/2019 03:51	WG1386768
Bromomethane	U		0.00413	0.0125	0.0139	1	11/26/2019 03:51	WG1386768
n-Butylbenzene	U	J4	0.00428	0.0125	0.0139	1	11/26/2019 03:51	WG1386768
sec-Butylbenzene	U		0.00282	0.0125	0.0139	1	11/26/2019 03:51	WG1386768
tert-Butylbenzene	U		0.00173	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
Carbon tetrachloride	U		0.00120	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
Chlorobenzene	U		0.000639	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
Chlorodibromomethane	U		0.000502	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
Chloroethane	U	J4	0.00120	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
Chloroform	U		0.000463	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
Chloromethane	U		0.00155	0.0125	0.0139	1	11/26/2019 03:51	WG1386768
2-Chlorotoluene	U		0.00103	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
4-Chlorotoluene	U		0.00126	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
1,2-Dibromo-3-Chloropropane	U		0.00569	0.0250	0.0279	1	11/26/2019 03:51	WG1386768
1,2-Dibromoethane	U		0.000586	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
Dibromomethane	U		0.00112	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
1,2-Dichlorobenzene	U		0.00162	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
1,3-Dichlorobenzene	U		0.00190	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
1,4-Dichlorobenzene	U		0.00220	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
Dichlorodifluoromethane	U		0.000912	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
1,1-Dichloroethane	U		0.000641	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
1,2-Dichloroethane	U		0.000530	0.00250	0.00279	1	11/26/2019 03:51	WG1386768

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000558	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
cis-1,2-Dichloroethene	U		0.000770	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
trans-1,2-Dichloroethene	U		0.00159	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
1,2-Dichloropropane	U		0.00142	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
1,1-Dichloropropene	U		0.000781	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
1,3-Dichloropropane	U		0.00195	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
cis-1,3-Dichloropropene	U		0.000756	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
trans-1,3-Dichloropropene	U		0.00171	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
2,2-Dichloropropane	U		0.000884	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
Di-isopropyl ether	U		0.000390	0.00100	0.00112	1	11/26/2019 03:51	WG1386768
Ethylbenzene	U		0.000591	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
Hexachloro-1,3-butadiene	U		0.0142	0.0250	0.0279	1	11/26/2019 03:51	WG1386768
Isopropylbenzene	U		0.000963	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
p-Isopropyltoluene	U		0.00260	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
2-Butanone (MEK)	0.0501	B	0.0139	0.0250	0.0279	1	11/26/2019 03:51	WG1386768
Methylene Chloride	U		0.00741	0.0250	0.0279	1	11/26/2019 03:51	WG1386768
4-Methyl-2-pentanone (MIBK)	U		0.0112	0.0250	0.0279	1	11/26/2019 03:51	WG1386768
Methyl tert-butyl ether	U		0.000329	0.00100	0.00112	1	11/26/2019 03:51	WG1386768
Naphthalene	U		0.00348	0.0125	0.0139	1	11/26/2019 03:51	WG1386768
n-Propylbenzene	U	J4	0.00132	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
Styrene	U		0.00304	0.0125	0.0139	1	11/26/2019 03:51	WG1386768
1,1,1,2-Tetrachloroethane	U		0.000558	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
1,1,2,2-Tetrachloroethane	U	J4	0.000435	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
1,1,2-Trichlorotrifluoroethane	U		0.000753	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
Tetrachloroethene	U		0.000781	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
Toluene	0.00281	J	0.00139	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
1,2,3-Trichlorobenzene	U		0.000697	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
1,2,4-Trichlorobenzene	U		0.00538	0.0125	0.0139	1	11/26/2019 03:51	WG1386768
1,1,1-Trichloroethane	U		0.000307	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
1,1,2-Trichloroethane	U		0.000985	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
Trichloroethene	U		0.000446	0.00100	0.00112	1	11/26/2019 03:51	WG1386768
Trichlorofluoromethane	U		0.000558	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
1,2,3-Trichloropropane	U		0.00569	0.0125	0.0139	1	11/26/2019 03:51	WG1386768
1,2,4-Trimethylbenzene	U		0.00129	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
1,2,3-Trimethylbenzene	U		0.00128	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
1,3,5-Trimethylbenzene	U		0.00120	0.00500	0.00558	1	11/26/2019 03:51	WG1386768
Vinyl chloride	U	J4	0.000762	0.00250	0.00279	1	11/26/2019 03:51	WG1386768
Xylenes, Total	U		0.00533	0.00650	0.00725	1	11/26/2019 03:51	WG1386768
(S) Toluene-d8	*99.0*				*75.0-131*		*11/26/2019 03:51*	WG1386768
(S) 4-Bromofluorobenzene	*93.6*				*67.0-138*		*11/26/2019 03:51*	WG1386768
(S) 1,2-Dichloroethane-d4	*116*				*70.0-130*		*11/26/2019 03:51*	WG1386768

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	49.4		14.8	4.00	44.6	10	11/21/2019 14:07	WG1382641
Residual Range Organics (RRO)	483		37.1	10.0	112	10	11/21/2019 14:07	WG1382641
(S) o-Terphenyl	*100*				*18.0-148*		*11/21/2019 14:07*	WG1382641

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	91.0		1	11/22/2019 16:02	WG1384985

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0441		0.00308	0.0300	0.0330	1	11/21/2019 18:40	WG1382811

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	5.51		0.505	2.00	2.20	1	11/20/2019 15:10	WG1382679
Barium	75.8		0.187	0.500	0.549	1	11/20/2019 15:10	WG1382679
Cadmium	0.224	J	0.0769	0.500	0.549	1	11/20/2019 15:10	WG1382679
Chromium	24.7		0.154	1.00	1.10	1	11/20/2019 15:10	WG1382679
Lead	27.5		0.209	0.500	0.549	1	11/20/2019 15:10	WG1382679
Selenium	U		0.681	2.00	2.20	1	11/20/2019 15:10	WG1382679
Silver	U		0.132	1.00	1.10	1	11/20/2019 15:10	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	1.21	B J	0.931	0.100	2.75	25	11/22/2019 06:44	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*99.1*				*77.0-120*		*11/22/2019 06:44*	WG1385097

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0150	0.0250	0.0275	1	11/26/2019 04:10	WG1386768
Acrylonitrile	U		0.00209	0.0125	0.0137	1	11/26/2019 04:10	WG1386768
Benzene	0.00156		0.000439	0.00100	0.00110	1	11/26/2019 04:10	WG1386768
Bromobenzene	U		0.00115	0.0125	0.0137	1	11/26/2019 04:10	WG1386768
Bromodichloromethane	U		0.000866	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
Bromoform	U		0.00657	0.0250	0.0275	1	11/26/2019 04:10	WG1386768
Bromomethane	U		0.00406	0.0125	0.0137	1	11/26/2019 04:10	WG1386768
n-Butylbenzene	U	J4	0.00422	0.0125	0.0137	1	11/26/2019 04:10	WG1386768
sec-Butylbenzene	U		0.00278	0.0125	0.0137	1	11/26/2019 04:10	WG1386768
tert-Butylbenzene	U		0.00170	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
Carbon tetrachloride	U		0.00119	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
Chlorobenzene	U		0.000629	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
Chlorodibromomethane	U		0.000494	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
Chloroethane	U	J4	0.00119	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
Chloroform	U		0.000456	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
Chloromethane	U		0.00153	0.0125	0.0137	1	11/26/2019 04:10	WG1386768
2-Chlorotoluene	U		0.00101	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
4-Chlorotoluene	U		0.00124	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
1,2-Dibromo-3-Chloropropane	U		0.00560	0.0250	0.0275	1	11/26/2019 04:10	WG1386768
1,2-Dibromoethane	U		0.000577	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
Dibromomethane	U		0.00110	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
1,2-Dichlorobenzene	U		0.00159	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
1,3-Dichlorobenzene	U		0.00187	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
1,4-Dichlorobenzene	U		0.00216	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
Dichlorodifluoromethane	U		0.000899	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
1,1-Dichloroethane	U		0.000632	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
1,2-Dichloroethane	U		0.000522	0.00250	0.00275	1	11/26/2019 04:10	WG1386768

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000549	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
cis-1,2-Dichloroethene	U		0.000758	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
trans-1,2-Dichloroethene	U		0.00157	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
1,2-Dichloropropane	U		0.00139	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
1,1-Dichloropropene	U		0.000769	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
1,3-Dichloropropane	U		0.00192	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
cis-1,3-Dichloropropene	U		0.000745	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
trans-1,3-Dichloropropene	U		0.00168	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
2,2-Dichloropropane	U		0.000871	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
Di-isopropyl ether	U		0.000384	0.00100	0.00110	1	11/26/2019 04:10	WG1386768
Ethylbenzene	0.00106	J	0.000582	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0275	1	11/26/2019 04:10	WG1386768
Isopropylbenzene	U		0.000948	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
p-Isopropyltoluene	U		0.00256	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
2-Butanone (MEK)	0.0221	B J	0.0137	0.0250	0.0275	1	11/26/2019 04:10	WG1386768
Methylene Chloride	U		0.00729	0.0250	0.0275	1	11/26/2019 04:10	WG1386768
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0250	0.0275	1	11/26/2019 04:10	WG1386768
Methyl tert-butyl ether	U		0.000324	0.00100	0.00110	1	11/26/2019 04:10	WG1386768
Naphthalene	0.00494	J	0.00343	0.0125	0.0137	1	11/26/2019 04:10	WG1386768
n-Propylbenzene	U	J4	0.00130	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
Styrene	U		0.00300	0.0125	0.0137	1	11/26/2019 04:10	WG1386768
1,1,1,2-Tetrachloroethane	U		0.000549	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
1,1,2,2-Tetrachloroethane	U	J4	0.000428	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
1,1,2-Trichlorotrifluoroethane	U		0.000741	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
Tetrachloroethene	U		0.000769	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
Toluene	0.00513	J	0.00137	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
1,2,3-Trichlorobenzene	U		0.000687	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
1,2,4-Trichlorobenzene	U		0.00529	0.0125	0.0137	1	11/26/2019 04:10	WG1386768
1,1,1-Trichloroethane	U		0.000302	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
1,1,2-Trichloroethane	U		0.000970	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
Trichloroethene	U		0.000439	0.00100	0.00110	1	11/26/2019 04:10	WG1386768
Trichlorofluoromethane	U		0.000549	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
1,2,3-Trichloropropane	U		0.00560	0.0125	0.0137	1	11/26/2019 04:10	WG1386768
1,2,4-Trimethylbenzene	0.00149	J	0.00127	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
1,2,3-Trimethylbenzene	0.00148	J	0.00126	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
1,3,5-Trimethylbenzene	U		0.00119	0.00500	0.00549	1	11/26/2019 04:10	WG1386768
Vinyl chloride	U	J4	0.000750	0.00250	0.00275	1	11/26/2019 04:10	WG1386768
Xylenes, Total	0.00538	J	0.00525	0.00650	0.00714	1	11/26/2019 04:10	WG1386768
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 04:10*	WG1386768
(S) 4-Bromofluorobenzene	*86.9*				*67.0-138*		*11/26/2019 04:10*	WG1386768
(S) 1,2-Dichloroethane-d4	*98.9*				*70.0-130*		*11/26/2019 04:10*	WG1386768

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	108		29.2	4.00	87.9	20	11/21/2019 11:52	WG1382641
Residual Range Organics (RRO)	1270		73.2	10.0	220	20	11/21/2019 11:52	WG1382641
(S) o-Terphenyl	*90.4*	J7			*18.0-148*		*11/21/2019 11:52*	WG1382641

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.8		1	11/22/2019 16:02	WG1384985

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0564		0.00312	0.0300	0.0334	1	11/21/2019 18:42	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	102	J6 O1	0.513	2.00	2.23	1	11/20/2019 15:40	WG1382681
Barium	68.1	O1	0.189	0.500	0.557	1	11/20/2019 15:40	WG1382681
Cadmium	0.179	J	0.0780	0.500	0.557	1	11/20/2019 15:40	WG1382681
Chromium	32.1	O1	0.156	1.00	1.11	1	11/20/2019 15:40	WG1382681
Lead	37.0	O1	0.212	0.500	0.557	1	11/20/2019 15:40	WG1382681
Selenium	0.724	J	0.691	2.00	2.23	1	11/20/2019 15:40	WG1382681
Silver	U		0.134	1.00	1.11	1	11/20/2019 15:40	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.02	B J	0.944	0.100	2.79	25	11/22/2019 07:04	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*11/22/2019 07:04*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0153	0.0250	0.0279	1	11/26/2019 04:28	WG1386768
Acrylonitrile	U		0.00212	0.0125	0.0139	1	11/26/2019 04:28	WG1386768
Benzene	0.000455	J	0.000446	0.00100	0.00111	1	11/26/2019 04:28	WG1386768
Bromobenzene	U		0.00117	0.0125	0.0139	1	11/26/2019 04:28	WG1386768
Bromodichloromethane	U		0.000878	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
Bromoform	U		0.00666	0.0250	0.0279	1	11/26/2019 04:28	WG1386768
Bromomethane	U		0.00412	0.0125	0.0139	1	11/26/2019 04:28	WG1386768
n-Butylbenzene	U	J4	0.00428	0.0125	0.0139	1	11/26/2019 04:28	WG1386768
sec-Butylbenzene	U		0.00282	0.0125	0.0139	1	11/26/2019 04:28	WG1386768
tert-Butylbenzene	U		0.00173	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
Carbon tetrachloride	U		0.00120	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
Chlorobenzene	U		0.000638	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
Chlorodibromomethane	U		0.000501	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
Chloroethane	U	J4	0.00120	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
Chloroform	0.000701	B J	0.000462	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
Chloromethane	U		0.00155	0.0125	0.0139	1	11/26/2019 04:28	WG1386768
2-Chlorotoluene	U		0.00103	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
4-Chlorotoluene	U		0.00126	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
1,2-Dibromo-3-Chloropropane	U		0.00568	0.0250	0.0279	1	11/26/2019 04:28	WG1386768
1,2-Dibromoethane	U		0.000585	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
Dibromomethane	U		0.00111	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
1,2-Dichlorobenzene	U		0.00162	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
1,3-Dichlorobenzene	U		0.00189	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
1,4-Dichlorobenzene	U		0.00219	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
Dichlorodifluoromethane	U		0.000911	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
1,1-Dichloroethane	U		0.000641	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
1,2-Dichloroethane	U		0.000529	0.00250	0.00279	1	11/26/2019 04:28	WG1386768

SB-24(0-1)

Collected date/time: 11/14/19 11:58

SAMPLE RESULTS - 27

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000557	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
cis-1,2-Dichloroethene	U		0.000769	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
trans-1,2-Dichloroethene	U		0.00159	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
1,2-Dichloropropane	U		0.00141	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
1,1-Dichloropropene	U		0.000780	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
1,3-Dichloropropane	U		0.00195	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
cis-1,3-Dichloropropene	U		0.000755	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
trans-1,3-Dichloropropene	U		0.00170	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
2,2-Dichloropropane	U		0.000884	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
Di-isopropyl ether	U		0.000390	0.00100	0.00111	1	11/26/2019 04:28	WG1386768
Ethylbenzene	U		0.000590	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
Hexachloro-1,3-butadiene	U		0.0141	0.0250	0.0279	1	11/26/2019 04:28	WG1386768
Isopropylbenzene	U		0.000962	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
p-Isopropyltoluene	U		0.00260	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
2-Butanone (MEK)	0.0456	B	0.0139	0.0250	0.0279	1	11/26/2019 04:28	WG1386768
Methylene Chloride	U		0.00740	0.0250	0.0279	1	11/26/2019 04:28	WG1386768
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0250	0.0279	1	11/26/2019 04:28	WG1386768
Methyl tert-butyl ether	U		0.000329	0.00100	0.00111	1	11/26/2019 04:28	WG1386768
Naphthalene	U		0.00348	0.0125	0.0139	1	11/26/2019 04:28	WG1386768
n-Propylbenzene	U	J4	0.00131	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
Styrene	U		0.00304	0.0125	0.0139	1	11/26/2019 04:28	WG1386768
1,1,1,2-Tetrachloroethane	U		0.000557	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
1,1,2,2-Tetrachloroethane	U	J4	0.000435	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
1,1,2-Trichlorotrifluoroethane	U		0.000752	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
Tetrachloroethene	U		0.000780	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
Toluene	0.00246	J	0.00139	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
1,2,3-Trichlorobenzene	U		0.000696	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
1,2,4-Trichlorobenzene	U		0.00537	0.0125	0.0139	1	11/26/2019 04:28	WG1386768
1,1,1-Trichloroethane	U		0.000306	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
1,1,2-Trichloroethane	U		0.000984	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
Trichloroethene	U		0.000446	0.00100	0.00111	1	11/26/2019 04:28	WG1386768
Trichlorofluoromethane	U		0.000557	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
1,2,3-Trichloropropane	U		0.00568	0.0125	0.0139	1	11/26/2019 04:28	WG1386768
1,2,4-Trimethylbenzene	U		0.00129	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
1,2,3-Trimethylbenzene	U		0.00128	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
1,3,5-Trimethylbenzene	U		0.00120	0.00500	0.00557	1	11/26/2019 04:28	WG1386768
Vinyl chloride	U	J4	0.000761	0.00250	0.00279	1	11/26/2019 04:28	WG1386768
Xylenes, Total	U		0.00533	0.00650	0.00724	1	11/26/2019 04:28	WG1386768
(S) Toluene-d8	*99.6*				*75.0-131*		*11/26/2019 04:28*	WG1386768
(S) 4-Bromofluorobenzene	*90.3*				*67.0-138*		*11/26/2019 04:28*	WG1386768
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*11/26/2019 04:28*	WG1386768

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	6.36		1.48	4.00	4.46	1	11/21/2019 10:33	WG1382641
Residual Range Organics (RRO)	66.5		3.71	10.0	11.1	1	11/21/2019 10:33	WG1382641
(S) o-Terphenyl	*70.9*				*18.0-148*		*11/21/2019 10:33*	WG1382641

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.3		1	11/22/2019 15:46	WG1384986

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0359		0.00288	0.0300	0.0308	1	11/21/2019 18:14	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.22		0.473	2.00	2.05	1	11/20/2019 15:12	WG1382679
Barium	68.4		0.175	0.500	0.514	1	11/20/2019 15:12	WG1382679
Cadmium	0.194	J	0.0719	0.500	0.514	1	11/20/2019 15:12	WG1382679
Chromium	24.9		0.144	1.00	1.03	1	11/20/2019 15:12	WG1382679
Lead	33.3		0.195	0.500	0.514	1	11/20/2019 15:12	WG1382679
Selenium	U		0.637	2.00	2.05	1	11/20/2019 15:12	WG1382679
Silver	U		0.123	1.00	1.03	1	11/20/2019 15:12	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.871	0.100	2.57	25	11/22/2019 07:25	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/22/2019 07:25*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0141	0.0250	0.0257	1	11/26/2019 04:48	WG1386768
Acrylonitrile	U		0.00195	0.0125	0.0128	1	11/26/2019 04:48	WG1386768
Benzene	U		0.000411	0.00100	0.00103	1	11/26/2019 04:48	WG1386768
Bromobenzene	U		0.00108	0.0125	0.0128	1	11/26/2019 04:48	WG1386768
Bromodichloromethane	U		0.000809	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
Bromoform	U		0.00614	0.0250	0.0257	1	11/26/2019 04:48	WG1386768
Bromomethane	U		0.00380	0.0125	0.0128	1	11/26/2019 04:48	WG1386768
n-Butylbenzene	U	J4	0.00394	0.0125	0.0128	1	11/26/2019 04:48	WG1386768
sec-Butylbenzene	U		0.00260	0.0125	0.0128	1	11/26/2019 04:48	WG1386768
tert-Butylbenzene	U		0.00159	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
Carbon tetrachloride	U		0.00111	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
Chlorobenzene	U		0.000589	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
Chlorodibromomethane	U		0.000462	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
Chloroethane	U	J4	0.00111	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
Chloroform	0.000472	B J	0.000426	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
Chloromethane	U		0.00143	0.0125	0.0128	1	11/26/2019 04:48	WG1386768
2-Chlorotoluene	U		0.000945	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
4-Chlorotoluene	U		0.00116	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
1,2-Dibromo-3-Chloropropane	U		0.00524	0.0250	0.0257	1	11/26/2019 04:48	WG1386768
1,2-Dibromoethane	U		0.000539	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
Dibromomethane	U		0.00103	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
1,2-Dichlorobenzene	U		0.00149	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
1,3-Dichlorobenzene	U		0.00175	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
1,4-Dichlorobenzene	U		0.00202	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
Dichlorodifluoromethane	U		0.000840	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
1,1-Dichloroethane	U		0.000591	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
1,2-Dichloroethane	U		0.000488	0.00250	0.00257	1	11/26/2019 04:48	WG1386768

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000514	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
cis-1,2-Dichloroethene	U		0.000709	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
trans-1,2-Dichloroethene	U		0.00147	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
1,2-Dichloropropane	U		0.00130	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
1,1-Dichloropropene	U		0.000719	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
1,3-Dichloropropane	U		0.00180	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
cis-1,3-Dichloropropene	U		0.000696	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
trans-1,3-Dichloropropene	U		0.00157	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
2,2-Dichloropropane	U		0.000815	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
Di-isopropyl ether	U		0.000360	0.00100	0.00103	1	11/26/2019 04:48	WG1386768
Ethylbenzene	U		0.000544	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
Hexachloro-1,3-butadiene	U		0.0130	0.0250	0.0257	1	11/26/2019 04:48	WG1386768
Isopropylbenzene	U		0.000887	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
p-Isopropyltoluene	U		0.00239	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
2-Butanone (MEK)	0.0380	B	0.0128	0.0250	0.0257	1	11/26/2019 04:48	WG1386768
Methylene Chloride	U		0.00682	0.0250	0.0257	1	11/26/2019 04:48	WG1386768
4-Methyl-2-pentanone (MIBK)	U		0.0103	0.0250	0.0257	1	11/26/2019 04:48	WG1386768
Methyl tert-butyl ether	U		0.000303	0.00100	0.00103	1	11/26/2019 04:48	WG1386768
Naphthalene	U		0.00321	0.0125	0.0128	1	11/26/2019 04:48	WG1386768
n-Propylbenzene	U	J4	0.00121	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
Styrene	U		0.00280	0.0125	0.0128	1	11/26/2019 04:48	WG1386768
1,1,1,2-Tetrachloroethane	U		0.000514	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
1,1,2,2-Tetrachloroethane	U	J4	0.000401	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
1,1,2-Trichlorotrifluoroethane	U		0.000693	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
Tetrachloroethene	U		0.000719	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
Toluene	U		0.00128	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
1,2,3-Trichlorobenzene	U		0.000642	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
1,2,4-Trichlorobenzene	U		0.00495	0.0125	0.0128	1	11/26/2019 04:48	WG1386768
1,1,1-Trichloroethane	U		0.000283	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
1,1,2-Trichloroethane	U		0.000907	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
Trichloroethene	U		0.000411	0.00100	0.00103	1	11/26/2019 04:48	WG1386768
Trichlorofluoromethane	U		0.000514	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
1,2,3-Trichloropropane	U		0.00524	0.0125	0.0128	1	11/26/2019 04:48	WG1386768
1,2,4-Trimethylbenzene	U		0.00119	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
1,2,3-Trimethylbenzene	U		0.00118	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
1,3,5-Trimethylbenzene	U		0.00111	0.00500	0.00514	1	11/26/2019 04:48	WG1386768
Vinyl chloride	U	J4	0.000702	0.00250	0.00257	1	11/26/2019 04:48	WG1386768
Xylenes, Total	U		0.00491	0.00650	0.00668	1	11/26/2019 04:48	WG1386768
(S) Toluene-d8	*98.7*				*75.0-131*		*11/26/2019 04:48*	WG1386768
(S) 4-Bromofluorobenzene	*91.6*				*67.0-138*		*11/26/2019 04:48*	WG1386768
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*11/26/2019 04:48*	WG1386768

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	24.1	J	13.7	4.00	41.1	10	11/21/2019 14:26	WG1382641
Residual Range Organics (RRO)	226		34.2	10.0	103	10	11/21/2019 14:26	WG1382641
(S) o-Terphenyl	*71.9*				*18.0-148*		*11/21/2019 14:26*	WG1382641

Sample Narrative:

L1161924-28 WG1382641: Dilution due to matrix impact during extract concentration procedure

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

SB-24(4-6)

Collected date/time: 11/14/19 12:02

SAMPLE RESULTS - 29

L1161924

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.1		1	11/22/2019 15:46	WG1384986

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0308	J	0.00307	0.0300	0.0329	1	11/21/2019 18:45	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.26		0.505	2.00	2.19	1	11/20/2019 15:15	WG1382679
Barium	109		0.187	0.500	0.549	1	11/20/2019 15:15	WG1382679
Cadmium	0.179	J	0.0768	0.500	0.549	1	11/20/2019 15:15	WG1382679
Chromium	33.1		0.154	1.00	1.10	1	11/20/2019 15:15	WG1382679
Lead	27.3		0.208	0.500	0.549	1	11/20/2019 15:15	WG1382679
Selenium	U		0.680	2.00	2.19	1	11/20/2019 15:15	WG1382679
Silver	U		0.132	1.00	1.10	1	11/20/2019 15:15	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.28	B J	0.930	0.100	2.74	25	11/22/2019 07:46	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*11/22/2019 07:46*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0150	0.0250	0.0274	1	11/26/2019 05:06	WG1386768
Acrylonitrile	U		0.00208	0.0125	0.0137	1	11/26/2019 05:06	WG1386768
Benzene	U		0.000439	0.00100	0.00110	1	11/26/2019 05:06	WG1386768
Bromobenzene	U		0.00115	0.0125	0.0137	1	11/26/2019 05:06	WG1386768
Bromodichloromethane	U		0.000865	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
Bromoform	U		0.00656	0.0250	0.0274	1	11/26/2019 05:06	WG1386768
Bromomethane	U		0.00406	0.0125	0.0137	1	11/26/2019 05:06	WG1386768
n-Butylbenzene	U	J4	0.00421	0.0125	0.0137	1	11/26/2019 05:06	WG1386768
sec-Butylbenzene	U		0.00278	0.0125	0.0137	1	11/26/2019 05:06	WG1386768
tert-Butylbenzene	U		0.00170	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
Carbon tetrachloride	U		0.00119	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
Chlorobenzene	U		0.000629	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
Chlorodibromomethane	U		0.000494	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
Chloroethane	U	J4	0.00119	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
Chloroform	U		0.000455	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
Chloromethane	U		0.00153	0.0125	0.0137	1	11/26/2019 05:06	WG1386768
2-Chlorotoluene	U		0.00101	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
4-Chlorotoluene	U		0.00124	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
1,2-Dibromo-3-Chloropropane	U		0.00560	0.0250	0.0274	1	11/26/2019 05:06	WG1386768
1,2-Dibromoethane	U		0.000576	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
Dibromomethane	U		0.00110	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
1,2-Dichlorobenzene	U		0.00159	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
1,3-Dichlorobenzene	U		0.00187	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
1,4-Dichlorobenzene	U		0.00216	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
Dichlorodifluoromethane	U		0.000898	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
1,1-Dichloroethane	U		0.000631	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
1,2-Dichloroethane	U		0.000521	0.00250	0.00274	1	11/26/2019 05:06	WG1386768

SB-24(4-6)

Collected date/time: 11/14/19 12:02

SAMPLE RESULTS - 29

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000549	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
cis-1,2-Dichloroethene	U		0.000757	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
trans-1,2-Dichloroethene	U		0.00157	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
1,2-Dichloropropane	U		0.00139	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
1,1-Dichloropropene	U		0.000768	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
1,3-Dichloropropane	U		0.00192	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
cis-1,3-Dichloropropene	U		0.000744	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
trans-1,3-Dichloropropene	U		0.00168	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
2,2-Dichloropropane	U		0.000870	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
Di-isopropyl ether	U		0.000384	0.00100	0.00110	1	11/26/2019 05:06	WG1386768
Ethylbenzene	U		0.000582	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0274	1	11/26/2019 05:06	WG1386768
Isopropylbenzene	U		0.000947	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
p-Isopropyltoluene	U		0.00256	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
2-Butanone (MEK)	0.0244	B J	0.0137	0.0250	0.0274	1	11/26/2019 05:06	WG1386768
Methylene Chloride	U		0.00729	0.0250	0.0274	1	11/26/2019 05:06	WG1386768
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0250	0.0274	1	11/26/2019 05:06	WG1386768
Methyl tert-butyl ether	U		0.000324	0.00100	0.00110	1	11/26/2019 05:06	WG1386768
Naphthalene	U		0.00342	0.0125	0.0137	1	11/26/2019 05:06	WG1386768
n-Propylbenzene	U	J4	0.00129	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
Styrene	U		0.00300	0.0125	0.0137	1	11/26/2019 05:06	WG1386768
1,1,1,2-Tetrachloroethane	U		0.000549	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
1,1,2,2-Tetrachloroethane	U	J4	0.000428	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
1,1,2-Trichlorotrifluoroethane	U		0.000741	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
Tetrachloroethene	U		0.000768	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
Toluene	U		0.00137	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
1,2,3-Trichlorobenzene	U		0.000686	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
1,2,4-Trichlorobenzene	U		0.00529	0.0125	0.0137	1	11/26/2019 05:06	WG1386768
1,1,1-Trichloroethane	U		0.000302	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
1,1,2-Trichloroethane	U		0.000969	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
Trichloroethene	U		0.000439	0.00100	0.00110	1	11/26/2019 05:06	WG1386768
Trichlorofluoromethane	U		0.000549	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
1,2,3-Trichloropropane	U		0.00560	0.0125	0.0137	1	11/26/2019 05:06	WG1386768
1,2,4-Trimethylbenzene	U		0.00127	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
1,2,3-Trimethylbenzene	U		0.00126	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
1,3,5-Trimethylbenzene	U		0.00119	0.00500	0.00549	1	11/26/2019 05:06	WG1386768
Vinyl chloride	U	J4	0.000750	0.00250	0.00274	1	11/26/2019 05:06	WG1386768
Xylenes, Total	U		0.00525	0.00650	0.00713	1	11/26/2019 05:06	WG1386768
(S) Toluene-d8	*104*				*75.0-131*		*11/26/2019 05:06*	WG1386768
(S) 4-Bromofluorobenzene	*85.6*				*67.0-138*		*11/26/2019 05:06*	WG1386768
(S) 1,2-Dichloroethane-d4	*93.3*				*70.0-130*		*11/26/2019 05:06*	WG1386768

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	10.4	J	7.30	4.00	21.9	5	11/21/2019 14:52	WG1382641
Residual Range Organics (RRO)	102		18.3	10.0	54.9	5	11/21/2019 14:52	WG1382641
(S) o-Terphenyl	*81.3*				*18.0-148*		*11/21/2019 14:52*	WG1382641

Sample Narrative:

L1161924-29 WG1382641: Cannot run at lower dilution due to viscosity of extract

SB-25(1-2)

Collected date/time: 11/14/19 09:53

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.5		1	11/22/2019 15:46	WG1384986

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0156	J	0.00309	0.0300	0.0331	1	11/21/2019 18:47	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.39		0.508	2.00	2.21	1	11/20/2019 15:17	WG1382679
Barium	92.4		0.188	0.500	0.552	1	11/20/2019 15:17	WG1382679
Cadmium	0.140	J	0.0773	0.500	0.552	1	11/20/2019 15:17	WG1382679
Chromium	25.2		0.155	1.00	1.10	1	11/20/2019 15:17	WG1382679
Lead	7.82		0.210	0.500	0.552	1	11/20/2019 15:17	WG1382679
Selenium	U		0.685	2.00	2.21	1	11/20/2019 15:17	WG1382679
Silver	U		0.133	1.00	1.10	1	11/20/2019 15:17	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.87	B J	0.936	0.100	2.76	25	11/22/2019 08:06	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*99.6*				*77.0-120*		*11/22/2019 08:06*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0151	0.0250	0.0276	1	11/26/2019 05:25	WG1386768
Acrylonitrile	U		0.00210	0.0125	0.0138	1	11/26/2019 05:25	WG1386768
Benzene	0.000483	J	0.000442	0.00100	0.00110	1	11/26/2019 05:25	WG1386768
Bromobenzene	U		0.00116	0.0125	0.0138	1	11/26/2019 05:25	WG1386768
Bromodichloromethane	U		0.000871	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
Bromoform	U		0.00661	0.0250	0.0276	1	11/26/2019 05:25	WG1386768
Bromomethane	U		0.00409	0.0125	0.0138	1	11/26/2019 05:25	WG1386768
n-Butylbenzene	U	J4	0.00424	0.0125	0.0138	1	11/26/2019 05:25	WG1386768
sec-Butylbenzene	U		0.00280	0.0125	0.0138	1	11/26/2019 05:25	WG1386768
tert-Butylbenzene	U		0.00171	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
Carbon tetrachloride	U		0.00119	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
Chlorobenzene	U		0.000633	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
Chlorodibromomethane	U		0.000497	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
Chloroethane	U	J4	0.00119	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
Chloroform	U		0.000459	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
Chloromethane	U		0.00154	0.0125	0.0138	1	11/26/2019 05:25	WG1386768
2-Chlorotoluene	U		0.00102	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
4-Chlorotoluene	U		0.00125	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
1,2-Dibromo-3-Chloropropane	U		0.00564	0.0250	0.0276	1	11/26/2019 05:25	WG1386768
1,2-Dibromoethane	U		0.000580	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
Dibromomethane	U		0.00110	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
1,2-Dichlorobenzene	U		0.00160	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
1,3-Dichlorobenzene	U		0.00188	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
1,4-Dichlorobenzene	U		0.00218	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
Dichlorodifluoromethane	U		0.000904	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
1,1-Dichloroethane	U		0.000635	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
1,2-Dichloroethane	U		0.000525	0.00250	0.00276	1	11/26/2019 05:25	WG1386768

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000552	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
cis-1,2-Dichloroethene	U		0.000762	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
trans-1,2-Dichloroethene	U		0.00158	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
1,2-Dichloropropane	U		0.00140	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
1,1-Dichloropropene	U		0.000773	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
1,3-Dichloropropane	U		0.00193	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
cis-1,3-Dichloropropene	U		0.000749	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
trans-1,3-Dichloropropene	U		0.00169	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
2,2-Dichloropropane	U		0.000876	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
Di-isopropyl ether	U		0.000387	0.00100	0.00110	1	11/26/2019 05:25	WG1386768
Ethylbenzene	U		0.000586	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
Hexachloro-1,3-butadiene	U		0.0140	0.0250	0.0276	1	11/26/2019 05:25	WG1386768
Isopropylbenzene	U		0.000954	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
p-Isopropyltoluene	U		0.00257	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
2-Butanone (MEK)	U		0.0138	0.0250	0.0276	1	11/26/2019 05:25	WG1386768
Methylene Chloride	U		0.00734	0.0250	0.0276	1	11/26/2019 05:25	WG1386768
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0250	0.0276	1	11/26/2019 05:25	WG1386768
Methyl tert-butyl ether	U		0.000326	0.00100	0.00110	1	11/26/2019 05:25	WG1386768
Naphthalene	U		0.00345	0.0125	0.0138	1	11/26/2019 05:25	WG1386768
n-Propylbenzene	U	J4	0.00130	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
Styrene	U		0.00302	0.0125	0.0138	1	11/26/2019 05:25	WG1386768
1,1,1,2-Tetrachloroethane	U		0.000552	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
1,1,2,2-Tetrachloroethane	U	J4	0.000431	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
1,1,2-Trichlorotrifluoroethane	U		0.000746	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
Tetrachloroethene	U		0.000773	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
Toluene	0.00455	J	0.00138	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
1,2,3-Trichlorobenzene	U		0.000691	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
1,2,4-Trichlorobenzene	U		0.00533	0.0125	0.0138	1	11/26/2019 05:25	WG1386768
1,1,1-Trichloroethane	U		0.000304	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
1,1,2-Trichloroethane	U		0.000976	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
Trichloroethene	U		0.000442	0.00100	0.00110	1	11/26/2019 05:25	WG1386768
Trichlorofluoromethane	U		0.000552	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
1,2,3-Trichloropropane	U		0.00564	0.0125	0.0138	1	11/26/2019 05:25	WG1386768
1,2,4-Trimethylbenzene	U		0.00128	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
1,2,3-Trimethylbenzene	U		0.00127	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
1,3,5-Trimethylbenzene	U		0.00119	0.00500	0.00552	1	11/26/2019 05:25	WG1386768
Vinyl chloride	U	J4	0.000755	0.00250	0.00276	1	11/26/2019 05:25	WG1386768
Xylenes, Total	U		0.00528	0.00650	0.00718	1	11/26/2019 05:25	WG1386768
(S) Toluene-d8	*101*				*75.0-131*		*11/26/2019 05:25*	WG1386768
(S) 4-Bromofluorobenzene	*86.9*				*67.0-138*		*11/26/2019 05:25*	WG1386768
(S) 1,2-Dichloroethane-d4	*90.8*				*70.0-130*		*11/26/2019 05:25*	WG1386768

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	137		29.4	4.00	88.4	20	11/21/2019 12:19	WG1382641
Residual Range Organics (RRO)	1060		73.6	10.0	221	20	11/21/2019 12:19	WG1382641
(S) o-Terphenyl	*90.6*	J7			*18.0-148*		*11/21/2019 12:19*	WG1382641

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.9		1	11/22/2019 15:46	WG1384986

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0242	J	0.00305	0.0300	0.0326	1	11/21/2019 18:55	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.80		0.500	2.00	2.18	1	11/20/2019 15:20	WG1382679
Barium	67.0		0.185	0.500	0.544	1	11/20/2019 15:20	WG1382679
Cadmium	0.141	J	0.0761	0.500	0.544	1	11/20/2019 15:20	WG1382679
Chromium	24.0		0.152	1.00	1.09	1	11/20/2019 15:20	WG1382679
Lead	6.73		0.207	0.500	0.544	1	11/20/2019 15:20	WG1382679
Selenium	U		0.674	2.00	2.18	1	11/20/2019 15:20	WG1382679
Silver	U		0.131	1.00	1.09	1	11/20/2019 15:20	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2.49	B J	0.922	0.100	2.72	25	11/22/2019 08:27	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*98.8*				*77.0-120*		*11/22/2019 08:27*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0149	0.0250	0.0272	1	11/26/2019 11:45	WG1387176
Acrylonitrile	U		0.00207	0.0125	0.0136	1	11/26/2019 11:45	WG1387176
Benzene	0.000457	J	0.000435	0.00100	0.00109	1	11/26/2019 11:45	WG1387176
Bromobenzene	U		0.00114	0.0125	0.0136	1	11/26/2019 11:45	WG1387176
Bromodichloromethane	U		0.000857	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
Bromoform	U		0.00650	0.0250	0.0272	1	11/26/2019 11:45	WG1387176
Bromomethane	U		0.00402	0.0125	0.0136	1	11/26/2019 11:45	WG1387176
n-Butylbenzene	U		0.00418	0.0125	0.0136	1	11/26/2019 11:45	WG1387176
sec-Butylbenzene	U		0.00275	0.0125	0.0136	1	11/26/2019 11:45	WG1387176
tert-Butylbenzene	U		0.00169	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
Carbon tetrachloride	U		0.00117	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
Chlorobenzene	U		0.000623	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
Chlorodibromomethane	U		0.000489	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
Chloroethane	U	J4	0.00117	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
Chloroform	U		0.000451	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
Chloromethane	U		0.00151	0.0125	0.0136	1	11/26/2019 11:45	WG1387176
2-Chlorotoluene	U		0.00100	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
4-Chlorotoluene	U		0.00123	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
1,2-Dibromo-3-Chloropropane	U		0.00555	0.0250	0.0272	1	11/26/2019 11:45	WG1387176
1,2-Dibromoethane	U		0.000571	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
Dibromomethane	U		0.00109	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
1,2-Dichlorobenzene	U		0.00158	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
1,3-Dichlorobenzene	U		0.00185	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
1,4-Dichlorobenzene	U		0.00214	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
Dichlorodifluoromethane	U		0.000890	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
1,1-Dichloroethane	U		0.000625	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
1,2-Dichloroethane	U		0.000517	0.00250	0.00272	1	11/26/2019 11:45	WG1387176

SB-25(3-4)

Collected date/time: 11/14/19 09:55

SAMPLE RESULTS - 31

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000544	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
cis-1,2-Dichloroethene	U		0.000750	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
trans-1,2-Dichloroethene	U		0.00156	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
1,2-Dichloropropane	U		0.00138	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
1,1-Dichloropropene	U		0.000761	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
1,3-Dichloropropane	U		0.00190	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
cis-1,3-Dichloropropene	U		0.000737	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
trans-1,3-Dichloropropene	U		0.00166	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
2,2-Dichloropropane	U		0.000863	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
Di-isopropyl ether	U		0.000381	0.00100	0.00109	1	11/26/2019 11:45	WG1387176
Ethylbenzene	U		0.000576	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
Hexachloro-1,3-butadiene	U		0.0138	0.0250	0.0272	1	11/26/2019 11:45	WG1387176
Isopropylbenzene	U		0.000939	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
p-Isopropyltoluene	U		0.00253	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
2-Butanone (MEK)	U		0.0136	0.0250	0.0272	1	11/26/2019 11:45	WG1387176
Methylene Chloride	U		0.00722	0.0250	0.0272	1	11/26/2019 11:45	WG1387176
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0272	1	11/26/2019 11:45	WG1387176
Methyl tert-butyl ether	U		0.000321	0.00100	0.00109	1	11/26/2019 11:45	WG1387176
Naphthalene	0.00782	J	0.00339	0.0125	0.0136	1	11/26/2019 11:45	WG1387176
n-Propylbenzene	U		0.00128	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
Styrene	U	J4	0.00297	0.0125	0.0136	1	11/26/2019 11:45	WG1387176
1,1,1,2-Tetrachloroethane	U		0.000544	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
1,1,2,2-Tetrachloroethane	U	J4	0.000424	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
1,1,2-Trichlorotrifluoroethane	U		0.000734	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
Tetrachloroethene	U		0.000761	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
Toluene	0.00295	J	0.00136	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
1,2,3-Trichlorobenzene	U		0.000680	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
1,2,4-Trichlorobenzene	U		0.00524	0.0125	0.0136	1	11/26/2019 11:45	WG1387176
1,1,1-Trichloroethane	U		0.000299	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
1,1,2-Trichloroethane	U		0.000960	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
Trichloroethene	U		0.000435	0.00100	0.00109	1	11/26/2019 11:45	WG1387176
Trichlorofluoromethane	U	J4	0.000544	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
1,2,3-Trichloropropane	U		0.00555	0.0125	0.0136	1	11/26/2019 11:45	WG1387176
1,2,4-Trimethylbenzene	0.00460	J	0.00126	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
1,2,3-Trimethylbenzene	0.00203	J	0.00125	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
1,3,5-Trimethylbenzene	0.00140	J	0.00117	0.00500	0.00544	1	11/26/2019 11:45	WG1387176
Vinyl chloride	U		0.000743	0.00250	0.00272	1	11/26/2019 11:45	WG1387176
Xylenes, Total	U		0.00520	0.00650	0.00707	1	11/26/2019 11:45	WG1387176
(S) Toluene-d8	*100*				*75.0-131*		*11/26/2019 11:45*	WG1387176
(S) 4-Bromofluorobenzene	*94.7*				*67.0-138*		*11/26/2019 11:45*	WG1387176
(S) 1,2-Dichloroethane-d4	*107*				*70.0-130*		*11/26/2019 11:45*	WG1387176

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	141		28.9	4.00	87.0	20	11/21/2019 12:45	WG1382641
Residual Range Organics (RRO)	952		72.4	10.0	218	20	11/21/2019 12:45	WG1382641
(S) o-Terphenyl	*111*	J7			*18.0-148*		*11/21/2019 12:45*	WG1382641

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	80.2		1	11/22/2019 15:46	WG1384986

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0643		0.00349	0.0300	0.0374	1	11/21/2019 18:57	WG1382811

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	6.85		0.574	2.00	2.49	1	11/20/2019 15:22	WG1382679
Barium	93.9		0.212	0.500	0.624	1	11/20/2019 15:22	WG1382679
Cadmium	0.279	J	0.0873	0.500	0.624	1	11/20/2019 15:22	WG1382679
Chromium	22.6		0.175	1.00	1.25	1	11/20/2019 15:22	WG1382679
Lead	13.7		0.237	0.500	0.624	1	11/20/2019 15:22	WG1382679
Selenium	U		0.773	2.00	2.49	1	11/20/2019 15:22	WG1382679
Silver	U		0.150	1.00	1.25	1	11/20/2019 15:22	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	3.09	B J	1.06	0.100	3.12	25	11/22/2019 08:47	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*99.3*				*77.0-120*		*11/22/2019 08:47*	WG1385097

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	0.0469		0.0171	0.0250	0.0312	1	11/26/2019 12:04	WG1387176
Acrylonitrile	U		0.00237	0.0125	0.0156	1	11/26/2019 12:04	WG1387176
Benzene	0.000715	J	0.000499	0.00100	0.00125	1	11/26/2019 12:04	WG1387176
Bromobenzene	U		0.00131	0.0125	0.0156	1	11/26/2019 12:04	WG1387176
Bromodichloromethane	U		0.000983	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
Bromoform	U		0.00746	0.0250	0.0312	1	11/26/2019 12:04	WG1387176
Bromomethane	U		0.00461	0.0125	0.0156	1	11/26/2019 12:04	WG1387176
n-Butylbenzene	0.00569	J	0.00479	0.0125	0.0156	1	11/26/2019 12:04	WG1387176
sec-Butylbenzene	0.00431	J	0.00316	0.0125	0.0156	1	11/26/2019 12:04	WG1387176
tert-Butylbenzene	U		0.00193	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
Carbon tetrachloride	U		0.00135	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
Chlorobenzene	U		0.000715	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
Chlorodibromomethane	U		0.000561	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
Chloroethane	U	J4	0.00135	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
Chloroform	U		0.000518	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
Chloromethane	U		0.00173	0.0125	0.0156	1	11/26/2019 12:04	WG1387176
2-Chlorotoluene	U		0.00115	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
4-Chlorotoluene	U		0.00141	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
1,2-Dibromo-3-Chloropropane	U		0.00636	0.0250	0.0312	1	11/26/2019 12:04	WG1387176
1,2-Dibromoethane	U		0.000655	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
Dibromomethane	U		0.00125	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
1,2-Dichlorobenzene	U		0.00181	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
1,3-Dichlorobenzene	U		0.00212	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
1,4-Dichlorobenzene	U		0.00246	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
Dichlorodifluoromethane	U		0.00102	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
1,1-Dichloroethane	U		0.000717	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
1,2-Dichloroethane	U		0.000592	0.00250	0.00312	1	11/26/2019 12:04	WG1387176

SB-25(6-8)
Collected date/time: 11/14/19 09:57

SAMPLE RESULTS - 32

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000624	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
cis-1,2-Dichloroethene	U		0.000860	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
trans-1,2-Dichloroethene	U		0.00178	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
1,2-Dichloropropane	U		0.00158	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
1,1-Dichloropropene	U		0.000873	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
1,3-Dichloropropane	U		0.00218	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
cis-1,3-Dichloropropene	U		0.000845	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
trans-1,3-Dichloropropene	U		0.00191	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
2,2-Dichloropropane	U		0.000989	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
Di-isopropyl ether	U		0.000436	0.00100	0.00125	1	11/26/2019 12:04	WG1387176
Ethylbenzene	0.00103	J	0.000661	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
Hexachloro-1,3-butadiene	U		0.0158	0.0250	0.0312	1	11/26/2019 12:04	WG1387176
Isopropylbenzene	0.00306	J	0.00108	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
p-Isopropyltoluene	0.00340	J	0.00291	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
2-Butanone (MEK)	0.0385	B	0.0156	0.0250	0.0312	1	11/26/2019 12:04	WG1387176
Methylene Chloride	U		0.00828	0.0250	0.0312	1	11/26/2019 12:04	WG1387176
4-Methyl-2-pentanone (MIBK)	U		0.0125	0.0250	0.0312	1	11/26/2019 12:04	WG1387176
Methyl tert-butyl ether	U		0.000368	0.00100	0.00125	1	11/26/2019 12:04	WG1387176
Naphthalene	0.00429	J	0.00389	0.0125	0.0156	1	11/26/2019 12:04	WG1387176
n-Propylbenzene	0.0163		0.00147	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
Styrene	U	J4	0.00340	0.0125	0.0156	1	11/26/2019 12:04	WG1387176
1,1,1,2-Tetrachloroethane	U		0.000624	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
1,1,2,2-Tetrachloroethane	U	J4	0.000486	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
1,1,2-Trichlorotrifluoroethane	U		0.000842	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
Tetrachloroethene	U		0.000873	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
Toluene	0.00214	J	0.00156	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
1,2,3-Trichlorobenzene	U		0.000779	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
1,2,4-Trichlorobenzene	U		0.00601	0.0125	0.0156	1	11/26/2019 12:04	WG1387176
1,1,1-Trichloroethane	U		0.000343	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
1,1,2-Trichloroethane	U		0.00110	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
Trichloroethene	U		0.000499	0.00100	0.00125	1	11/26/2019 12:04	WG1387176
Trichlorofluoromethane	U	J4	0.000624	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
1,2,3-Trichloropropane	U		0.00636	0.0125	0.0156	1	11/26/2019 12:04	WG1387176
1,2,4-Trimethylbenzene	0.0340		0.00145	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
1,2,3-Trimethylbenzene	0.0121		0.00143	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
1,3,5-Trimethylbenzene	0.00852		0.00135	0.00500	0.00624	1	11/26/2019 12:04	WG1387176
Vinyl chloride	U		0.000852	0.00250	0.00312	1	11/26/2019 12:04	WG1387176
Xylenes, Total	0.0138		0.00596	0.00650	0.00811	1	11/26/2019 12:04	WG1387176
(S) Toluene-d8	*104*				*75.0-131*		*11/26/2019 12:04*	WG1387176
(S) 4-Bromofluorobenzene	*90.7*				*67.0-138*		*11/26/2019 12:04*	WG1387176
(S) 1,2-Dichloroethane-d4	*96.2*				*70.0-130*		*11/26/2019 12:04*	WG1387176

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	58.9		1.66	4.00	4.99	1	11/21/2019 11:26	WG1382641
Residual Range Organics (RRO)	163		4.15	10.0	12.5	1	11/21/2019 11:26	WG1382641
(S) o-Terphenyl	*86.8*				*18.0-148*		*11/21/2019 11:26*	WG1382641

SB-25(8-9)

Collected date/time: 11/14/19 09:58

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.1		1	11/22/2019 15:46	WG1384986

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0645		0.00354	0.0300	0.0379	1	11/21/2019 19:00	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.45		0.582	2.00	2.53	1	11/20/2019 15:25	WG1382679
Barium	104		0.215	0.500	0.632	1	11/20/2019 15:25	WG1382679
Cadmium	0.291	J	0.0885	0.500	0.632	1	11/20/2019 15:25	WG1382679
Chromium	24.4		0.177	1.00	1.26	1	11/20/2019 15:25	WG1382679
Lead	16.7		0.240	0.500	0.632	1	11/20/2019 15:25	WG1382679
Selenium	U		0.784	2.00	2.53	1	11/20/2019 15:25	WG1382679
Silver	U		0.152	1.00	1.26	1	11/20/2019 15:25	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2.24	B J	1.07	0.100	3.16	25	11/22/2019 09:08	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*11/22/2019 09:08*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0950		0.0173	0.0250	0.0316	1	11/26/2019 12:23	WG1387176
Acrylonitrile	U		0.00240	0.0125	0.0158	1	11/26/2019 12:23	WG1387176
Benzene	0.00139		0.000506	0.00100	0.00126	1	11/26/2019 12:23	WG1387176
Bromobenzene	U		0.00133	0.0125	0.0158	1	11/26/2019 12:23	WG1387176
Bromodichloromethane	U		0.000997	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
Bromoform	U		0.00756	0.0250	0.0316	1	11/26/2019 12:23	WG1387176
Bromomethane	U		0.00468	0.0125	0.0158	1	11/26/2019 12:23	WG1387176
n-Butylbenzene	0.0103	J	0.00486	0.0125	0.0158	1	11/26/2019 12:23	WG1387176
sec-Butylbenzene	0.00727	J	0.00320	0.0125	0.0158	1	11/26/2019 12:23	WG1387176
tert-Butylbenzene	U		0.00196	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
Carbon tetrachloride	U		0.00137	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
Chlorobenzene	U		0.000725	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
Chlorodibromomethane	U		0.000569	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
Chloroethane	U	J4	0.00137	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
Chloroform	U		0.000525	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
Chloromethane	U		0.00176	0.0125	0.0158	1	11/26/2019 12:23	WG1387176
2-Chlorotoluene	U		0.00116	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
4-Chlorotoluene	U		0.00143	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
1,2-Dibromo-3-Chloropropane	U		0.00645	0.0250	0.0316	1	11/26/2019 12:23	WG1387176
1,2-Dibromoethane	U		0.000664	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
Dibromomethane	U		0.00126	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
1,2-Dichlorobenzene	U		0.00183	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
1,3-Dichlorobenzene	U		0.00215	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
1,4-Dichlorobenzene	U		0.00249	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
Dichlorodifluoromethane	U		0.00103	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
1,1-Dichloroethane	U		0.000727	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
1,2-Dichloroethane	U		0.000601	0.00250	0.00316	1	11/26/2019 12:23	WG1387176

SB-25(8-9)

Collected date/time: 11/14/19 09:58

SAMPLE RESULTS - 33

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000632	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
cis-1,2-Dichloroethene	U		0.000873	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
trans-1,2-Dichloroethene	U		0.00181	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
1,2-Dichloropropane	U		0.00161	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
1,1-Dichloropropene	U		0.000885	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
1,3-Dichloropropane	U		0.00221	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
cis-1,3-Dichloropropene	U		0.000858	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
trans-1,3-Dichloropropene	U		0.00194	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
2,2-Dichloropropane	U		0.00100	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
Di-isopropyl ether	U		0.000443	0.00100	0.00126	1	11/26/2019 12:23	WG1387176
Ethylbenzene	0.00195	J	0.000670	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
Hexachloro-1,3-butadiene	U		0.0161	0.0250	0.0316	1	11/26/2019 12:23	WG1387176
Isopropylbenzene	0.00477		0.00109	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
p-Isopropyltoluene	0.00640		0.00295	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
2-Butanone (MEK)	0.0262	B J	0.0158	0.0250	0.0316	1	11/26/2019 12:23	WG1387176
Methylene Chloride	U		0.00840	0.0250	0.0316	1	11/26/2019 12:23	WG1387176
4-Methyl-2-pentanone (MIBK)	U		0.0126	0.0250	0.0316	1	11/26/2019 12:23	WG1387176
Methyl tert-butyl ether	U		0.000373	0.00100	0.00126	1	11/26/2019 12:23	WG1387176
Naphthalene	0.00448	J	0.00395	0.0125	0.0158	1	11/26/2019 12:23	WG1387176
n-Propylbenzene	0.0223		0.00149	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
Styrene	U	J4	0.00345	0.0125	0.0158	1	11/26/2019 12:23	WG1387176
1,1,1,2-Tetrachloroethane	U		0.000632	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
1,1,2,2-Tetrachloroethane	U	J4	0.000493	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
1,1,2-Trichlorotrifluoroethane	U		0.000854	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
Tetrachloroethene	U		0.000885	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
Toluene	0.00855		0.00158	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
1,2,3-Trichlorobenzene	U		0.000791	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
1,2,4-Trichlorobenzene	U		0.00610	0.0125	0.0158	1	11/26/2019 12:23	WG1387176
1,1,1-Trichloroethane	U		0.000348	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
1,1,2-Trichloroethane	U		0.00112	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
Trichloroethene	U		0.000506	0.00100	0.00126	1	11/26/2019 12:23	WG1387176
Trichlorofluoromethane	U	J4	0.000632	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
1,2,3-Trichloropropane	U		0.00645	0.0125	0.0158	1	11/26/2019 12:23	WG1387176
1,2,4-Trimethylbenzene	0.0707		0.00147	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
1,2,3-Trimethylbenzene	0.0225		0.00145	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
1,3,5-Trimethylbenzene	0.0137		0.00137	0.00500	0.00632	1	11/26/2019 12:23	WG1387176
Vinyl chloride	U		0.000864	0.00250	0.00316	1	11/26/2019 12:23	WG1387176
Xylenes, Total	0.0309		0.00605	0.00650	0.00822	1	11/26/2019 12:23	WG1387176
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 12:23*	WG1387176
(S) 4-Bromofluorobenzene	*90.6*				*67.0-138*		*11/26/2019 12:23*	WG1387176
(S) 1,2-Dichloroethane-d4	*96.5*				*70.0-130*		*11/26/2019 12:23*	WG1387176

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	23.0		1.68	4.00	5.06	1	11/21/2019 10:19	WG1382641
Residual Range Organics (RRO)	106		4.21	10.0	12.6	1	11/21/2019 10:19	WG1382641
(S) o-Terphenyl	*65.1*				*18.0-148*		*11/21/2019 10:19*	WG1382641

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	76.2		1	11/22/2019 15:46	WG1384986

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0701		0.00368	0.0300	0.0394	1	11/21/2019 19:02	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.99		0.604	2.00	2.63	1	11/20/2019 15:53	WG1382681
Barium	118		0.223	0.500	0.657	1	11/20/2019 15:53	WG1382681
Cadmium	0.330	J	0.0919	0.500	0.657	1	11/20/2019 15:53	WG1382681
Chromium	23.8		0.184	1.00	1.31	1	11/20/2019 15:53	WG1382681
Lead	18.7		0.249	0.500	0.657	1	11/20/2019 15:53	WG1382681
Selenium	U		0.814	2.00	2.63	1	11/20/2019 15:53	WG1382681
Silver	U		0.158	1.00	1.31	1	11/20/2019 15:53	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	3.49	B	1.11	0.100	3.28	25	11/22/2019 09:28	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*98.2*				*77.0-120*		*11/22/2019 09:28*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0180	0.0250	0.0328	1	11/26/2019 12:42	WG1387176
Acrylonitrile	U		0.00249	0.0125	0.0164	1	11/26/2019 12:42	WG1387176
Benzene	0.000566	J	0.000525	0.00100	0.00131	1	11/26/2019 12:42	WG1387176
Bromobenzene	U		0.00138	0.0125	0.0164	1	11/26/2019 12:42	WG1387176
Bromodichloromethane	U		0.00103	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
Bromoform	U		0.00785	0.0250	0.0328	1	11/26/2019 12:42	WG1387176
Bromomethane	U		0.00486	0.0125	0.0164	1	11/26/2019 12:42	WG1387176
n-Butylbenzene	0.00646	J	0.00504	0.0125	0.0164	1	11/26/2019 12:42	WG1387176
sec-Butylbenzene	0.00462	J	0.00332	0.0125	0.0164	1	11/26/2019 12:42	WG1387176
tert-Butylbenzene	U		0.00204	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
Carbon tetrachloride	U		0.00142	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
Chlorobenzene	U		0.000752	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
Chlorodibromomethane	U		0.000591	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
Chloroethane	U	J4	0.00142	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
Chloroform	U		0.000545	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
Chloromethane	U		0.00183	0.0125	0.0164	1	11/26/2019 12:42	WG1387176
2-Chlorotoluene	U		0.00121	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
4-Chlorotoluene	U		0.00148	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
1,2-Dibromo-3-Chloropropane	U		0.00670	0.0250	0.0328	1	11/26/2019 12:42	WG1387176
1,2-Dibromoethane	U		0.000689	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
Dibromomethane	U		0.00131	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
1,2-Dichlorobenzene	U		0.00190	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
1,3-Dichlorobenzene	U		0.00223	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
1,4-Dichlorobenzene	U		0.00259	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
Dichlorodifluoromethane	U		0.00107	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
1,1-Dichloroethane	U		0.000755	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
1,2-Dichloroethane	U		0.000624	0.00250	0.00328	1	11/26/2019 12:42	WG1387176

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000657	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
cis-1,2-Dichloroethene	U		0.000906	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
trans-1,2-Dichloroethene	U		0.00188	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
1,2-Dichloropropane	U		0.00167	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
1,1-Dichloropropene	U		0.000919	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
1,3-Dichloropropane	U		0.00230	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
cis-1,3-Dichloropropene	U		0.000890	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
trans-1,3-Dichloropropene	U		0.00201	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
2,2-Dichloropropane	U		0.00104	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
Di-isopropyl ether	U		0.000460	0.00100	0.00131	1	11/26/2019 12:42	WG1387176
Ethylbenzene	0.000771	J	0.000696	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
Hexachloro-1,3-butadiene	U		0.0167	0.0250	0.0328	1	11/26/2019 12:42	WG1387176
Isopropylbenzene	0.00374		0.00113	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
p-Isopropyltoluene	0.00449	J	0.00306	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
2-Butanone (MEK)	U		0.0164	0.0250	0.0328	1	11/26/2019 12:42	WG1387176
Methylene Chloride	U		0.00872	0.0250	0.0328	1	11/26/2019 12:42	WG1387176
4-Methyl-2-pentanone (MIBK)	U		0.0131	0.0250	0.0328	1	11/26/2019 12:42	WG1387176
Methyl tert-butyl ether	U		0.000387	0.00100	0.00131	1	11/26/2019 12:42	WG1387176
Naphthalene	U		0.00410	0.0125	0.0164	1	11/26/2019 12:42	WG1387176
n-Propylbenzene	0.0152		0.00155	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
Styrene	U	J4	0.00358	0.0125	0.0164	1	11/26/2019 12:42	WG1387176
1,1,1,2-Tetrachloroethane	U		0.000657	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
1,1,2,2-Tetrachloroethane	U	J4	0.000512	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
1,1,2-Trichlorotrifluoroethane	U		0.000886	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
Tetrachloroethene	U		0.000919	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
Toluene	0.00441	J	0.00164	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
1,2,3-Trichlorobenzene	U		0.000821	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
1,2,4-Trichlorobenzene	U		0.00633	0.0125	0.0164	1	11/26/2019 12:42	WG1387176
1,1,1-Trichloroethane	U		0.000361	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
1,1,2-Trichloroethane	U		0.00116	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
Trichloroethene	U		0.000525	0.00100	0.00131	1	11/26/2019 12:42	WG1387176
Trichlorofluoromethane	U	J4	0.000657	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
1,2,3-Trichloropropane	U		0.00670	0.0125	0.0164	1	11/26/2019 12:42	WG1387176
1,2,4-Trimethylbenzene	0.0587		0.00152	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
1,2,3-Trimethylbenzene	0.0198		0.00151	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
1,3,5-Trimethylbenzene	0.0128		0.00142	0.00500	0.00657	1	11/26/2019 12:42	WG1387176
Vinyl chloride	U		0.000897	0.00250	0.00328	1	11/26/2019 12:42	WG1387176
Xylenes, Total	0.0223		0.00628	0.00650	0.00853	1	11/26/2019 12:42	WG1387176
(S) Toluene-d8	*101*				*75.0-131*		*11/26/2019 12:42*	WG1387176
(S) 4-Bromofluorobenzene	*88.9*				*67.0-138*		*11/26/2019 12:42*	WG1387176
(S) 1,2-Dichloroethane-d4	*91.9*				*70.0-130*		*11/26/2019 12:42*	WG1387176

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	33.0		1.75	4.00	5.25	1	11/21/2019 10:46	WG1382641
Residual Range Organics (RRO)	142		4.37	10.0	13.1	1	11/21/2019 10:46	WG1382641
(S) o-Terphenyl	*67.7*				*18.0-148*		*11/21/2019 10:46*	WG1382641

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

SB-25(16-17)

Collected date/time: 11/14/19 10:03

SAMPLE RESULTS - 35

L1161924

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.4		1	11/22/2019 15:46	WG1384986

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0763		0.00352	0.0300	0.0378	1	11/21/2019 19:05	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.17		0.579	2.00	2.52	1	11/20/2019 15:55	WG1382681
Barium	111		0.214	0.500	0.629	1	11/20/2019 15:55	WG1382681
Cadmium	0.499	J	0.0881	0.500	0.629	1	11/20/2019 15:55	WG1382681
Chromium	31.7		0.176	1.00	1.26	1	11/20/2019 15:55	WG1382681
Lead	28.0		0.239	0.500	0.629	1	11/20/2019 15:55	WG1382681
Selenium	U		0.781	2.00	2.52	1	11/20/2019 15:55	WG1382681
Silver	U		0.151	1.00	1.26	1	11/20/2019 15:55	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2.25	B J	1.07	0.100	3.15	25	11/22/2019 09:49	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*97.6*				*77.0-120*		*11/22/2019 09:49*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0622		0.0172	0.0250	0.0315	1	11/26/2019 13:01	WG1387176
Acrylonitrile	U		0.00239	0.0125	0.0157	1	11/26/2019 13:01	WG1387176
Benzene	0.000696	J	0.000504	0.00100	0.00126	1	11/26/2019 13:01	WG1387176
Bromobenzene	U		0.00132	0.0125	0.0157	1	11/26/2019 13:01	WG1387176
Bromodichloromethane	U		0.000992	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
Bromoform	U		0.00753	0.0250	0.0315	1	11/26/2019 13:01	WG1387176
Bromomethane	U		0.00466	0.0125	0.0157	1	11/26/2019 13:01	WG1387176
n-Butylbenzene	U		0.00483	0.0125	0.0157	1	11/26/2019 13:01	WG1387176
sec-Butylbenzene	U		0.00319	0.0125	0.0157	1	11/26/2019 13:01	WG1387176
tert-Butylbenzene	U		0.00195	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
Carbon tetrachloride	U		0.00136	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
Chlorobenzene	U		0.000721	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
Chlorodibromomethane	U		0.000567	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
Chloroethane	U	J4	0.00136	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
Chloroform	U		0.000522	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
Chloromethane	U		0.00175	0.0125	0.0157	1	11/26/2019 13:01	WG1387176
2-Chlorotoluene	U		0.00116	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
4-Chlorotoluene	U		0.00142	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
1,2-Dibromo-3-Chloropropane	U		0.00642	0.0250	0.0315	1	11/26/2019 13:01	WG1387176
1,2-Dibromoethane	U		0.000661	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
Dibromomethane	U		0.00126	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
1,2-Dichlorobenzene	U		0.00183	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
1,3-Dichlorobenzene	U		0.00214	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
1,4-Dichlorobenzene	U		0.00248	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
Dichlorodifluoromethane	U		0.00103	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
1,1-Dichloroethane	U		0.000724	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
1,2-Dichloroethane	U		0.000598	0.00250	0.00315	1	11/26/2019 13:01	WG1387176

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000629	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
cis-1,2-Dichloroethene	U		0.000869	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
trans-1,2-Dichloroethene	U		0.00180	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
1,2-Dichloropropane	U		0.00160	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
1,1-Dichloropropene	U		0.000881	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
1,3-Dichloropropane	U		0.00220	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
cis-1,3-Dichloropropene	U		0.000854	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
trans-1,3-Dichloropropene	U		0.00193	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
2,2-Dichloropropane	U		0.000998	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
Di-isopropyl ether	U		0.000441	0.00100	0.00126	1	11/26/2019 13:01	WG1387176
Ethylbenzene	U		0.000667	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
Hexachloro-1,3-butadiene	U		0.0160	0.0250	0.0315	1	11/26/2019 13:01	WG1387176
Isopropylbenzene	0.00112	J	0.00109	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
p-Isopropyltoluene	0.00297	J	0.00293	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
2-Butanone (MEK)	0.0189	B J	0.0157	0.0250	0.0315	1	11/26/2019 13:01	WG1387176
Methylene Chloride	U		0.00836	0.0250	0.0315	1	11/26/2019 13:01	WG1387176
4-Methyl-2-pentanone (MIBK)	U		0.0126	0.0250	0.0315	1	11/26/2019 13:01	WG1387176
Methyl tert-butyl ether	U		0.000371	0.00100	0.00126	1	11/26/2019 13:01	WG1387176
Naphthalene	U		0.00393	0.0125	0.0157	1	11/26/2019 13:01	WG1387176
n-Propylbenzene	0.00497	J	0.00149	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
Styrene	U	J4	0.00344	0.0125	0.0157	1	11/26/2019 13:01	WG1387176
1,1,1,2-Tetrachloroethane	U		0.000629	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
1,1,2,2-Tetrachloroethane	U	J4	0.000491	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
1,1,2-Trichlorotrifluoroethane	U		0.000850	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
Tetrachloroethene	U		0.000881	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
Toluene	0.0101		0.00157	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
1,2,3-Trichlorobenzene	U		0.000787	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
1,2,4-Trichlorobenzene	U		0.00607	0.0125	0.0157	1	11/26/2019 13:01	WG1387176
1,1,1-Trichloroethane	U		0.000346	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
1,1,2-Trichloroethane	U		0.00111	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
Trichloroethene	U		0.000504	0.00100	0.00126	1	11/26/2019 13:01	WG1387176
Trichlorofluoromethane	U	J4	0.000629	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
1,2,3-Trichloropropane	U		0.00642	0.0125	0.0157	1	11/26/2019 13:01	WG1387176
1,2,4-Trimethylbenzene	0.0204		0.00146	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
1,2,3-Trimethylbenzene	0.00768		0.00145	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
1,3,5-Trimethylbenzene	0.00431	J	0.00136	0.00500	0.00629	1	11/26/2019 13:01	WG1387176
Vinyl chloride	U		0.000860	0.00250	0.00315	1	11/26/2019 13:01	WG1387176
Xylenes, Total	0.0105		0.00602	0.00650	0.00818	1	11/26/2019 13:01	WG1387176
(S) Toluene-d8	*103*				*75.0-131*		*11/26/2019 13:01*	WG1387176
(S) 4-Bromofluorobenzene	*88.1*				*67.0-138*		*11/26/2019 13:01*	WG1387176
(S) 1,2-Dichloroethane-d4	*95.3*				*70.0-130*		*11/26/2019 13:01*	WG1387176

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	18.9		1.67	4.00	5.04	1	11/21/2019 10:59	WG1382641
Residual Range Organics (RRO)	81.6		4.19	10.0	12.6	1	11/21/2019 10:59	WG1382641
(S) o-Terphenyl	*84.8*				*18.0-148*		*11/21/2019 10:59*	WG1382641

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.9		1	11/22/2019 15:46	WG1384986

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0541		0.00350	0.0300	0.0375	1	11/21/2019 19:08	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.71		0.575	2.00	2.50	1	11/20/2019 16:03	WG1382681
Barium	98.3		0.213	0.500	0.625	1	11/20/2019 16:03	WG1382681
Cadmium	0.375	J	0.0876	0.500	0.625	1	11/20/2019 16:03	WG1382681
Chromium	32.4		0.175	1.00	1.25	1	11/20/2019 16:03	WG1382681
Lead	27.9		0.238	0.500	0.625	1	11/20/2019 16:03	WG1382681
Selenium	U		0.776	2.00	2.50	1	11/20/2019 16:03	WG1382681
Silver	U		0.150	1.00	1.25	1	11/20/2019 16:03	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2.63	B J	1.35	0.100	3.98	31.8	11/22/2019 10:09	WG1385097
(S) a,a,a-Trifluorotoluene(FID)	*98.0*				*77.0-120*		*11/22/2019 10:09*	WG1385097

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0834		0.0171	0.0250	0.0313	1	11/26/2019 13:19	WG1387176
Acrylonitrile	U		0.00238	0.0125	0.0156	1	11/26/2019 13:19	WG1387176
Benzene	0.000693	J	0.000500	0.00100	0.00125	1	11/26/2019 13:19	WG1387176
Bromobenzene	U		0.00131	0.0125	0.0156	1	11/26/2019 13:19	WG1387176
Bromodichloromethane	U		0.000986	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
Bromoform	U		0.00748	0.0250	0.0313	1	11/26/2019 13:19	WG1387176
Bromomethane	U		0.00463	0.0125	0.0156	1	11/26/2019 13:19	WG1387176
n-Butylbenzene	U		0.00480	0.0125	0.0156	1	11/26/2019 13:19	WG1387176
sec-Butylbenzene	U		0.00316	0.0125	0.0156	1	11/26/2019 13:19	WG1387176
tert-Butylbenzene	U		0.00194	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
Carbon tetrachloride	U		0.00135	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
Chlorobenzene	U		0.000717	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
Chlorodibromomethane	U		0.000563	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
Chloroethane	U	J4	0.00135	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
Chloroform	U		0.000519	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
Chloromethane	U		0.00174	0.0125	0.0156	1	11/26/2019 13:19	WG1387176
2-Chlorotoluene	U		0.00115	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
4-Chlorotoluene	U		0.00141	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
1,2-Dibromo-3-Chloropropane	U		0.00638	0.0250	0.0313	1	11/26/2019 13:19	WG1387176
1,2-Dibromoethane	U		0.000657	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
Dibromomethane	U		0.00125	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
1,2-Dichlorobenzene	U		0.00181	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
1,3-Dichlorobenzene	U		0.00213	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
1,4-Dichlorobenzene	U		0.00246	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
Dichlorodifluoromethane	U		0.00102	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
1,1-Dichloroethane	U		0.000719	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
1,2-Dichloroethane	U		0.000594	0.00250	0.00313	1	11/26/2019 13:19	WG1387176

SB-25(19-20)

Collected date/time: 11/14/19 10:05

SAMPLE RESULTS - 36

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000625	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
cis-1,2-Dichloroethene	U		0.000863	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
trans-1,2-Dichloroethene	U		0.00179	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
1,2-Dichloropropane	U		0.00159	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
1,1-Dichloropropene	U		0.000876	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
1,3-Dichloropropane	U		0.00219	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
cis-1,3-Dichloropropene	U		0.000848	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
trans-1,3-Dichloropropene	U		0.00191	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
2,2-Dichloropropane	U		0.000992	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
Di-isopropyl ether	U		0.000438	0.00100	0.00125	1	11/26/2019 13:19	WG1387176
Ethylbenzene	0.00166	J	0.000663	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
Hexachloro-1,3-butadiene	U		0.0159	0.0250	0.0313	1	11/26/2019 13:19	WG1387176
Isopropylbenzene	U		0.00108	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
p-Isopropyltoluene	0.00390	J	0.00291	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
2-Butanone (MEK)	0.0186	B J	0.0156	0.0250	0.0313	1	11/26/2019 13:19	WG1387176
Methylene Chloride	U		0.00831	0.0250	0.0313	1	11/26/2019 13:19	WG1387176
4-Methyl-2-pentanone (MIBK)	U		0.0125	0.0250	0.0313	1	11/26/2019 13:19	WG1387176
Methyl tert-butyl ether	U		0.000369	0.00100	0.00125	1	11/26/2019 13:19	WG1387176
Naphthalene	U		0.00390	0.0125	0.0156	1	11/26/2019 13:19	WG1387176
n-Propylbenzene	0.00288	J	0.00148	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
Styrene	U	J4	0.00341	0.0125	0.0156	1	11/26/2019 13:19	WG1387176
1,1,1,2-Tetrachloroethane	U		0.000625	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
1,1,2,2-Tetrachloroethane	U	J4	0.000488	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
1,1,2-Trichlorotrifluoroethane	U		0.000844	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
Tetrachloroethene	U		0.000876	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
Toluene	0.0113		0.00156	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
1,2,3-Trichlorobenzene	U		0.000782	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
1,2,4-Trichlorobenzene	U		0.00603	0.0125	0.0156	1	11/26/2019 13:19	WG1387176
1,1,1-Trichloroethane	U		0.000344	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
1,1,2-Trichloroethane	U		0.00110	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
Trichloroethene	U		0.000500	0.00100	0.00125	1	11/26/2019 13:19	WG1387176
Trichlorofluoromethane	U	J4	0.000625	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
1,2,3-Trichloropropane	U		0.00638	0.0125	0.0156	1	11/26/2019 13:19	WG1387176
1,2,4-Trimethylbenzene	0.00864		0.00145	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
1,2,3-Trimethylbenzene	0.00379	J	0.00144	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
1,3,5-Trimethylbenzene	0.00208	J	0.00135	0.00500	0.00625	1	11/26/2019 13:19	WG1387176
Vinyl chloride	U		0.000854	0.00250	0.00313	1	11/26/2019 13:19	WG1387176
Xylenes, Total	U		0.00598	0.00650	0.00813	1	11/26/2019 13:19	WG1387176
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 13:19*	WG1387176
(S) 4-Bromofluorobenzene	*86.6*				*67.0-138*		*11/26/2019 13:19*	WG1387176
(S) 1,2-Dichloroethane-d4	*96.3*				*70.0-130*		*11/26/2019 13:19*	WG1387176

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	21.3		1.66	4.00	5.00	1	11/21/2019 11:13	WG1382641
Residual Range Organics (RRO)	89.8		4.17	10.0	12.5	1	11/21/2019 11:13	WG1382641
(S) o-Terphenyl	*64.4*				*18.0-148*		*11/21/2019 11:13*	WG1382641

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	86.0		1	11/22/2019 15:46	WG1384986

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0586		0.00325	0.0300	0.0349	1	11/21/2019 19:10	WG1382811

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	5.85		0.535	2.00	2.32	1	11/20/2019 16:06	WG1382681
Barium	82.5		0.198	0.500	0.581	1	11/20/2019 16:06	WG1382681
Cadmium	0.500	J	0.0814	0.500	0.581	1	11/20/2019 16:06	WG1382681
Chromium	24.3		0.163	1.00	1.16	1	11/20/2019 16:06	WG1382681
Lead	137		0.221	0.500	0.581	1	11/20/2019 16:06	WG1382681
Selenium	U		0.721	2.00	2.32	1	11/20/2019 16:06	WG1382681
Silver	U		0.139	1.00	1.16	1	11/20/2019 16:06	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.985	0.100	2.91	25	11/23/2019 04:44	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*100*				*59.0-128*		*11/23/2019 04:44*	WG1385620

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0159	0.0250	0.0291	1	11/26/2019 13:38	WG1387176
Acrylonitrile	U		0.00221	0.0125	0.0145	1	11/26/2019 13:38	WG1387176
Benzene	U		0.000465	0.00100	0.00116	1	11/26/2019 13:38	WG1387176
Bromobenzene	U		0.00122	0.0125	0.0145	1	11/26/2019 13:38	WG1387176
Bromodichloromethane	U		0.000916	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
Bromoform	U		0.00695	0.0250	0.0291	1	11/26/2019 13:38	WG1387176
Bromomethane	U		0.00430	0.0125	0.0145	1	11/26/2019 13:38	WG1387176
n-Butylbenzene	U		0.00446	0.0125	0.0145	1	11/26/2019 13:38	WG1387176
sec-Butylbenzene	U		0.00294	0.0125	0.0145	1	11/26/2019 13:38	WG1387176
tert-Butylbenzene	U		0.00180	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
Carbon tetrachloride	U		0.00126	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
Chlorobenzene	U		0.000666	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
Chlorodibromomethane	U		0.000523	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
Chloroethane	U	J4	0.00126	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
Chloroform	U		0.000482	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
Chloromethane	U		0.00162	0.0125	0.0145	1	11/26/2019 13:38	WG1387176
2-Chlorotoluene	U		0.00107	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
4-Chlorotoluene	U		0.00131	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
1,2-Dibromo-3-Chloropropane	U		0.00593	0.0250	0.0291	1	11/26/2019 13:38	WG1387176
1,2-Dibromoethane	U		0.000610	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
Dibromomethane	U		0.00116	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
1,2-Dichlorobenzene	U		0.00169	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
1,3-Dichlorobenzene	U		0.00198	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
1,4-Dichlorobenzene	U		0.00229	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
Dichlorodifluoromethane	U		0.000951	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
1,1-Dichloroethane	U		0.000668	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
1,2-Dichloroethane	U		0.000552	0.00250	0.00291	1	11/26/2019 13:38	WG1387176

SB-26(0-1)

Collected date/time: 11/14/19 09:17

SAMPLE RESULTS - 37

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000581	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
cis-1,2-Dichloroethene	U		0.000802	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
trans-1,2-Dichloroethene	U		0.00166	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
1,2-Dichloropropane	U		0.00148	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
1,1-Dichloropropene	U		0.000814	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
1,3-Dichloropropane	U		0.00203	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
cis-1,3-Dichloropropene	U		0.000788	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
trans-1,3-Dichloropropene	U		0.00178	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
2,2-Dichloropropane	U		0.000922	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
Di-isopropyl ether	U		0.000407	0.00100	0.00116	1	11/26/2019 13:38	WG1387176
Ethylbenzene	U		0.000616	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
Hexachloro-1,3-butadiene	U		0.0148	0.0250	0.0291	1	11/26/2019 13:38	WG1387176
Isopropylbenzene	U		0.00100	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
p-Isopropyltoluene	U		0.00271	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
2-Butanone (MEK)	U		0.0145	0.0250	0.0291	1	11/26/2019 13:38	WG1387176
Methylene Chloride	U		0.00772	0.0250	0.0291	1	11/26/2019 13:38	WG1387176
4-Methyl-2-pentanone (MIBK)	U		0.0116	0.0250	0.0291	1	11/26/2019 13:38	WG1387176
Methyl tert-butyl ether	U		0.000343	0.00100	0.00116	1	11/26/2019 13:38	WG1387176
Naphthalene	U		0.00363	0.0125	0.0145	1	11/26/2019 13:38	WG1387176
n-Propylbenzene	U		0.00137	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
Styrene	U	J4	0.00317	0.0125	0.0145	1	11/26/2019 13:38	WG1387176
1,1,1,2-Tetrachloroethane	U		0.000581	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
1,1,2,2-Tetrachloroethane	U	J4	0.000453	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
1,1,2-Trichlorotrifluoroethane	U		0.000784	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
Tetrachloroethene	U		0.000814	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
Toluene	0.00304	J	0.00145	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
1,2,3-Trichlorobenzene	U		0.000726	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
1,2,4-Trichlorobenzene	U		0.00560	0.0125	0.0145	1	11/26/2019 13:38	WG1387176
1,1,1-Trichloroethane	U		0.000320	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
1,1,2-Trichloroethane	U		0.00103	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
Trichloroethene	U		0.000465	0.00100	0.00116	1	11/26/2019 13:38	WG1387176
Trichlorofluoromethane	U	J4	0.000581	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
1,2,3-Trichloropropane	U		0.00593	0.0125	0.0145	1	11/26/2019 13:38	WG1387176
1,2,4-Trimethylbenzene	U		0.00135	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
1,2,3-Trimethylbenzene	U		0.00134	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
1,3,5-Trimethylbenzene	U		0.00126	0.00500	0.00581	1	11/26/2019 13:38	WG1387176
Vinyl chloride	U		0.000794	0.00250	0.00291	1	11/26/2019 13:38	WG1387176
Xylenes, Total	U		0.00556	0.00650	0.00755	1	11/26/2019 13:38	WG1387176
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 13:38*	WG1387176
(S) 4-Bromofluorobenzene	*86.3*				*67.0-138*		*11/26/2019 13:38*	WG1387176
(S) 1,2-Dichloroethane-d4	*95.4*				*70.0-130*		*11/26/2019 13:38*	WG1387176

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	121		30.9	4.00	93.0	20	11/21/2019 13:25	WG1382641
Residual Range Organics (RRO)	747		77.4	10.0	232	20	11/21/2019 13:25	WG1382641
(S) o-Terphenyl	*91.1*	J7			*18.0-148*		*11/21/2019 13:25*	WG1382641

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	87.1		1	11/22/2019 15:19	WG1384988

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0797		0.00321	0.0300	0.0344	1	11/21/2019 19:13	WG1382811

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	7.68		0.528	2.00	2.30	1	11/20/2019 16:08	WG1382681
Barium	113		0.195	0.500	0.574	1	11/20/2019 16:08	WG1382681
Cadmium	0.848		0.0804	0.500	0.574	1	11/20/2019 16:08	WG1382681
Chromium	31.6		0.161	1.00	1.15	1	11/20/2019 16:08	WG1382681
Lead	251		0.218	0.500	0.574	1	11/20/2019 16:08	WG1382681
Selenium	U		0.712	2.00	2.30	1	11/20/2019 16:08	WG1382681
Silver	U		0.138	1.00	1.15	1	11/20/2019 16:08	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.973	0.100	2.87	25	11/23/2019 05:08	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*100*				*59.0-128*		*11/23/2019 05:08*	WG1385620

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0157	0.0250	0.0287	1	11/26/2019 13:57	WG1387176
Acrylonitrile	U		0.00218	0.0125	0.0144	1	11/26/2019 13:57	WG1387176
Benzene	U		0.000459	0.00100	0.00115	1	11/26/2019 13:57	WG1387176
Bromobenzene	U		0.00121	0.0125	0.0144	1	11/26/2019 13:57	WG1387176
Bromodichloromethane	U		0.000905	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
Bromoform	U		0.00687	0.0250	0.0287	1	11/26/2019 13:57	WG1387176
Bromomethane	U		0.00425	0.0125	0.0144	1	11/26/2019 13:57	WG1387176
n-Butylbenzene	U		0.00441	0.0125	0.0144	1	11/26/2019 13:57	WG1387176
sec-Butylbenzene	U		0.00290	0.0125	0.0144	1	11/26/2019 13:57	WG1387176
tert-Butylbenzene	U		0.00178	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
Carbon tetrachloride	U		0.00124	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
Chlorobenzene	U		0.000658	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
Chlorodibromomethane	U		0.000517	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
Chloroethane	U	J4	0.00124	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
Chloroform	U		0.000476	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
Chloromethane	U		0.00160	0.0125	0.0144	1	11/26/2019 13:57	WG1387176
2-Chlorotoluene	U		0.00106	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
4-Chlorotoluene	U		0.00130	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
1,2-Dibromo-3-Chloropropane	U		0.00586	0.0250	0.0287	1	11/26/2019 13:57	WG1387176
1,2-Dibromoethane	U		0.000603	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
Dibromomethane	U		0.00115	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
1,2-Dichlorobenzene	U		0.00166	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
1,3-Dichlorobenzene	U		0.00195	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
1,4-Dichlorobenzene	U		0.00226	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
Dichlorodifluoromethane	U		0.000939	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
1,1-Dichloroethane	U		0.000660	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
1,2-Dichloroethane	U		0.000545	0.00250	0.00287	1	11/26/2019 13:57	WG1387176

SB-26(2-3)

Collected date/time: 11/14/19 09:19

SAMPLE RESULTS - 38

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000574	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
cis-1,2-Dichloroethene	U		0.000792	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
trans-1,2-Dichloroethene	U		0.00164	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
1,2-Dichloropropane	U		0.00146	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
1,1-Dichloropropene	U		0.000804	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
1,3-Dichloropropane	U		0.00201	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
cis-1,3-Dichloropropene	U		0.000778	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
trans-1,3-Dichloropropene	U		0.00176	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
2,2-Dichloropropane	U		0.000910	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
Di-isopropyl ether	U		0.000402	0.00100	0.00115	1	11/26/2019 13:57	WG1387176
Ethylbenzene	0.000941	J	0.000608	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
Hexachloro-1,3-butadiene	U		0.0146	0.0250	0.0287	1	11/26/2019 13:57	WG1387176
Isopropylbenzene	U		0.000991	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
p-Isopropyltoluene	U		0.00268	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
2-Butanone (MEK)	U		0.0144	0.0250	0.0287	1	11/26/2019 13:57	WG1387176
Methylene Chloride	U		0.00762	0.0250	0.0287	1	11/26/2019 13:57	WG1387176
4-Methyl-2-pentanone (MIBK)	U		0.0115	0.0250	0.0287	1	11/26/2019 13:57	WG1387176
Methyl tert-butyl ether	U		0.000339	0.00100	0.00115	1	11/26/2019 13:57	WG1387176
Naphthalene	U		0.00358	0.0125	0.0144	1	11/26/2019 13:57	WG1387176
n-Propylbenzene	U		0.00135	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
Styrene	U	J4	0.00313	0.0125	0.0144	1	11/26/2019 13:57	WG1387176
1,1,1,2-Tetrachloroethane	U		0.000574	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
1,1,2,2-Tetrachloroethane	U	J4	0.000448	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
1,1,2-Trichlorotrifluoroethane	U		0.000775	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
Tetrachloroethene	U		0.000804	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
Toluene	0.00633		0.00144	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
1,2,3-Trichlorobenzene	U		0.000718	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
1,2,4-Trichlorobenzene	U		0.00553	0.0125	0.0144	1	11/26/2019 13:57	WG1387176
1,1,1-Trichloroethane	U		0.000316	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
1,1,2-Trichloroethane	U		0.00101	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
Trichloroethene	U		0.000459	0.00100	0.00115	1	11/26/2019 13:57	WG1387176
Trichlorofluoromethane	U	J4	0.000574	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
1,2,3-Trichloropropane	U		0.00586	0.0125	0.0144	1	11/26/2019 13:57	WG1387176
1,2,4-Trimethylbenzene	U		0.00133	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
1,2,3-Trimethylbenzene	0.00153	J	0.00132	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
1,3,5-Trimethylbenzene	U		0.00124	0.00500	0.00574	1	11/26/2019 13:57	WG1387176
Vinyl chloride	U		0.000784	0.00250	0.00287	1	11/26/2019 13:57	WG1387176
Xylenes, Total	U		0.00549	0.00650	0.00746	1	11/26/2019 13:57	WG1387176
(S) Toluene-d8	*104*				*75.0-131*		*11/26/2019 13:57*	WG1387176
(S) 4-Bromofluorobenzene	*84.3*				*67.0-138*		*11/26/2019 13:57*	WG1387176
(S) 1,2-Dichloroethane-d4	*95.4*				*70.0-130*		*11/26/2019 13:57*	WG1387176

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	70.1		15.3	4.00	45.9	10	11/21/2019 14:39	WG1382641
Residual Range Organics (RRO)	465		38.2	10.0	115	10	11/21/2019 14:39	WG1382641
(S) o-Terphenyl	*80.7*				*18.0-148*		*11/21/2019 14:39*	WG1382641

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.7		1	11/22/2019 15:19	WG1384988

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0634		0.00312	0.0300	0.0334	1	11/21/2019 19:15	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.94		0.513	2.00	2.23	1	11/20/2019 16:11	WG1382681
Barium	97.8		0.189	0.500	0.557	1	11/20/2019 16:11	WG1382681
Cadmium	0.712		0.0780	0.500	0.557	1	11/20/2019 16:11	WG1382681
Chromium	27.9		0.156	1.00	1.11	1	11/20/2019 16:11	WG1382681
Lead	185		0.212	0.500	0.557	1	11/20/2019 16:11	WG1382681
Selenium	U		0.691	2.00	2.23	1	11/20/2019 16:11	WG1382681
Silver	U		0.134	1.00	1.11	1	11/20/2019 16:11	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.945	0.100	2.79	25	11/23/2019 05:32	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*100*				*59.0-128*		*11/23/2019 05:32*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0153	0.0250	0.0279	1	11/26/2019 14:16	WG1387176
Acrylonitrile	U		0.00212	0.0125	0.0139	1	11/26/2019 14:16	WG1387176
Benzene	0.000565	J	0.000446	0.00100	0.00111	1	11/26/2019 14:16	WG1387176
Bromobenzene	U		0.00117	0.0125	0.0139	1	11/26/2019 14:16	WG1387176
Bromodichloromethane	U		0.000878	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
Bromoform	U		0.00667	0.0250	0.0279	1	11/26/2019 14:16	WG1387176
Bromomethane	U		0.00412	0.0125	0.0139	1	11/26/2019 14:16	WG1387176
n-Butylbenzene	U		0.00428	0.0125	0.0139	1	11/26/2019 14:16	WG1387176
sec-Butylbenzene	U		0.00282	0.0125	0.0139	1	11/26/2019 14:16	WG1387176
tert-Butylbenzene	U		0.00173	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
Carbon tetrachloride	U		0.00120	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
Chlorobenzene	U		0.000639	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
Chlorodibromomethane	U		0.000502	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
Chloroethane	U	J4	0.00120	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
Chloroform	U		0.000463	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
Chloromethane	U		0.00155	0.0125	0.0139	1	11/26/2019 14:16	WG1387176
2-Chlorotoluene	U		0.00103	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
4-Chlorotoluene	U		0.00126	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
1,2-Dibromo-3-Chloropropane	U		0.00568	0.0250	0.0279	1	11/26/2019 14:16	WG1387176
1,2-Dibromoethane	U		0.000585	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
Dibromomethane	U		0.00111	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
1,2-Dichlorobenzene	U		0.00162	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
1,3-Dichlorobenzene	U		0.00189	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
1,4-Dichlorobenzene	U		0.00220	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
Dichlorodifluoromethane	U		0.000912	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
1,1-Dichloroethane	U		0.000641	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
1,2-Dichloroethane	U		0.000529	0.00250	0.00279	1	11/26/2019 14:16	WG1387176

SB-26(4-6)

Collected date/time: 11/14/19 09:21

SAMPLE RESULTS - 39

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000557	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
cis-1,2-Dichloroethene	U		0.000769	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
trans-1,2-Dichloroethene	U		0.00159	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
1,2-Dichloropropane	U		0.00142	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
1,1-Dichloropropene	U		0.000780	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
1,3-Dichloropropane	U		0.00195	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
cis-1,3-Dichloropropene	U		0.000756	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
trans-1,3-Dichloropropene	U		0.00171	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
2,2-Dichloropropane	U		0.000884	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
Di-isopropyl ether	U		0.000390	0.00100	0.00111	1	11/26/2019 14:16	WG1387176
Ethylbenzene	0.000643	J	0.000591	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
Hexachloro-1,3-butadiene	U		0.0142	0.0250	0.0279	1	11/26/2019 14:16	WG1387176
Isopropylbenzene	U		0.000962	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
p-Isopropyltoluene	U		0.00260	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
2-Butanone (MEK)	U		0.0139	0.0250	0.0279	1	11/26/2019 14:16	WG1387176
Methylene Chloride	U		0.00740	0.0250	0.0279	1	11/26/2019 14:16	WG1387176
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0250	0.0279	1	11/26/2019 14:16	WG1387176
Methyl tert-butyl ether	U		0.000329	0.00100	0.00111	1	11/26/2019 14:16	WG1387176
Naphthalene	U		0.00348	0.0125	0.0139	1	11/26/2019 14:16	WG1387176
n-Propylbenzene	U		0.00132	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
Styrene	U	J4	0.00304	0.0125	0.0139	1	11/26/2019 14:16	WG1387176
1,1,1,2-Tetrachloroethane	U		0.000557	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
1,1,2,2-Tetrachloroethane	U	J4	0.000435	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
1,1,2-Trichlorotrifluoroethane	U		0.000752	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
Tetrachloroethene	U		0.000780	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
Toluene	0.00632		0.00139	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
1,2,3-Trichlorobenzene	U		0.000697	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
1,2,4-Trichlorobenzene	U		0.00537	0.0125	0.0139	1	11/26/2019 14:16	WG1387176
1,1,1-Trichloroethane	U		0.000307	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
1,1,2-Trichloroethane	U		0.000984	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
Trichloroethene	U		0.000446	0.00100	0.00111	1	11/26/2019 14:16	WG1387176
Trichlorofluoromethane	U	J4	0.000557	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
1,2,3-Trichloropropane	U		0.00568	0.0125	0.0139	1	11/26/2019 14:16	WG1387176
1,2,4-Trimethylbenzene	U		0.00129	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
1,2,3-Trimethylbenzene	U		0.00128	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
1,3,5-Trimethylbenzene	U		0.00120	0.00500	0.00557	1	11/26/2019 14:16	WG1387176
Vinyl chloride	U		0.000761	0.00250	0.00279	1	11/26/2019 14:16	WG1387176
Xylenes, Total	0.00757		0.00533	0.00650	0.00725	1	11/26/2019 14:16	WG1387176
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 14:16*	WG1387176
(S) 4-Bromofluorobenzene	*86.7*				*67.0-138*		*11/26/2019 14:16*	WG1387176
(S) 1,2-Dichloroethane-d4	*94.4*				*70.0-130*		*11/26/2019 14:16*	WG1387176

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	210		29.7	4.00	89.2	20	11/21/2019 12:06	WG1382641
Residual Range Organics (RRO)	1420		74.2	10.0	223	20	11/21/2019 12:06	WG1382641
(S) o-Terphenyl	*106*	J7			*18.0-148*		*11/21/2019 12:06*	WG1382641

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.4		1	11/22/2019 15:19	WG1384988

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0900		0.00320	0.0300	0.0343	1	11/21/2019 19:18	WG1382811

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.47		0.526	2.00	2.29	1	11/20/2019 16:13	WG1382681
Barium	114		0.195	0.500	0.572	1	11/20/2019 16:13	WG1382681
Cadmium	0.756		0.0801	0.500	0.572	1	11/20/2019 16:13	WG1382681
Chromium	40.2		0.160	1.00	1.14	1	11/20/2019 16:13	WG1382681
Lead	261		0.217	0.500	0.572	1	11/20/2019 16:13	WG1382681
Selenium	U		0.709	2.00	2.29	1	11/20/2019 16:13	WG1382681
Silver	U		0.137	1.00	1.14	1	11/20/2019 16:13	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.970	0.100	2.86	25	11/23/2019 05:56	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*99.9*				*59.0-128*		*11/23/2019 05:56*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0157	0.0250	0.0286	1	11/26/2019 14:35	WG1387176
Acrylonitrile	U		0.00217	0.0125	0.0143	1	11/26/2019 14:35	WG1387176
Benzene	0.000747	J	0.000458	0.00100	0.00114	1	11/26/2019 14:35	WG1387176
Bromobenzene	U		0.00120	0.0125	0.0143	1	11/26/2019 14:35	WG1387176
Bromodichloromethane	U		0.000902	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
Bromoform	U		0.00684	0.0250	0.0286	1	11/26/2019 14:35	WG1387176
Bromomethane	U		0.00423	0.0125	0.0143	1	11/26/2019 14:35	WG1387176
n-Butylbenzene	U		0.00439	0.0125	0.0143	1	11/26/2019 14:35	WG1387176
sec-Butylbenzene	U		0.00289	0.0125	0.0143	1	11/26/2019 14:35	WG1387176
tert-Butylbenzene	U		0.00177	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
Carbon tetrachloride	U		0.00124	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
Chlorobenzene	U		0.000656	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
Chlorodibromomethane	U		0.000515	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
Chloroethane	U	J4	0.00124	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
Chloroform	U		0.000475	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
Chloromethane	U		0.00159	0.0125	0.0143	1	11/26/2019 14:35	WG1387176
2-Chlorotoluene	U		0.00105	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
4-Chlorotoluene	U		0.00129	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
1,2-Dibromo-3-Chloropropane	U		0.00584	0.0250	0.0286	1	11/26/2019 14:35	WG1387176
1,2-Dibromoethane	U		0.000601	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
Dibromomethane	U		0.00114	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
1,2-Dichlorobenzene	U		0.00166	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
1,3-Dichlorobenzene	U		0.00195	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
1,4-Dichlorobenzene	U		0.00225	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
Dichlorodifluoromethane	U		0.000936	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
1,1-Dichloroethane	U		0.000658	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
1,2-Dichloroethane	U		0.000543	0.00250	0.00286	1	11/26/2019 14:35	WG1387176

SB-26(8-9)
Collected date/time: 11/14/19 09:23

SAMPLE RESULTS - 40

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000572	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
cis-1,2-Dichloroethene	U		0.000789	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
trans-1,2-Dichloroethene	U		0.00164	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
1,2-Dichloropropane	U		0.00145	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
1,1-Dichloropropene	U		0.000801	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
1,3-Dichloropropane	U		0.00200	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
cis-1,3-Dichloropropene	U		0.000776	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
trans-1,3-Dichloropropene	U		0.00175	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
2,2-Dichloropropane	U		0.000907	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
Di-isopropyl ether	U		0.000400	0.00100	0.00114	1	11/26/2019 14:35	WG1387176
Ethylbenzene	U		0.000606	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
Hexachloro-1,3-butadiene	U		0.0145	0.0250	0.0286	1	11/26/2019 14:35	WG1387176
Isopropylbenzene	U		0.000987	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
p-Isopropyltoluene	U		0.00267	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
2-Butanone (MEK)	U		0.0143	0.0250	0.0286	1	11/26/2019 14:35	WG1387176
Methylene Chloride	U		0.00760	0.0250	0.0286	1	11/26/2019 14:35	WG1387176
4-Methyl-2-pentanone (MIBK)	U		0.0114	0.0250	0.0286	1	11/26/2019 14:35	WG1387176
Methyl tert-butyl ether	U		0.000338	0.00100	0.00114	1	11/26/2019 14:35	WG1387176
Naphthalene	0.0107	J	0.00357	0.0125	0.0143	1	11/26/2019 14:35	WG1387176
n-Propylbenzene	U		0.00135	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
Styrene	U	J4	0.00312	0.0125	0.0143	1	11/26/2019 14:35	WG1387176
1,1,1,2-Tetrachloroethane	U		0.000572	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
1,1,2,2-Tetrachloroethane	U	J4	0.000446	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
1,1,2-Trichlorotrifluoroethane	U		0.000772	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
Tetrachloroethene	U		0.000801	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
Toluene	0.00632		0.00143	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
1,2,3-Trichlorobenzene	U		0.000715	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
1,2,4-Trichlorobenzene	U		0.00551	0.0125	0.0143	1	11/26/2019 14:35	WG1387176
1,1,1-Trichloroethane	U		0.000315	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
1,1,2-Trichloroethane	U		0.00101	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
Trichloroethene	U		0.000458	0.00100	0.00114	1	11/26/2019 14:35	WG1387176
Trichlorofluoromethane	U	J4	0.000572	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
1,2,3-Trichloropropane	U		0.00584	0.0125	0.0143	1	11/26/2019 14:35	WG1387176
1,2,4-Trimethylbenzene	0.00567	J	0.00133	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
1,2,3-Trimethylbenzene	0.00741		0.00132	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
1,3,5-Trimethylbenzene	0.00252	J	0.00124	0.00500	0.00572	1	11/26/2019 14:35	WG1387176
Vinyl chloride	U		0.000781	0.00250	0.00286	1	11/26/2019 14:35	WG1387176
Xylenes, Total	U		0.00547	0.00650	0.00744	1	11/26/2019 14:35	WG1387176
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 14:35*	WG1387176
(S) 4-Bromofluorobenzene	*87.9*				*67.0-138*		*11/26/2019 14:35*	WG1387176
(S) 1,2-Dichloroethane-d4	*97.6*				*70.0-130*		*11/26/2019 14:35*	WG1387176

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	117		30.4	4.00	91.5	20	11/21/2019 12:32	WG1382641
Residual Range Organics (RRO)	780		76.2	10.0	229	20	11/21/2019 12:32	WG1382641
(S) o-Terphenyl	*91.1*	J7			*18.0-148*		*11/21/2019 12:32*	WG1382641

SB-26(10-11)
Collected date/time: 11/14/19 09:25

SAMPLE RESULTS - 41

L1161924

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.3		1	11/22/2019 15:19	WG1384988

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0732		0.00328	0.0300	0.0352	1	11/21/2019 19:41	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.71		0.539	2.00	2.35	1	11/20/2019 16:16	WG1382681
Barium	143		0.199	0.500	0.586	1	11/20/2019 16:16	WG1382681
Cadmium	0.662		0.0821	0.500	0.586	1	11/20/2019 16:16	WG1382681
Chromium	32.3		0.164	1.00	1.17	1	11/20/2019 16:16	WG1382681
Lead	320		0.223	0.500	0.586	1	11/20/2019 16:16	WG1382681
Selenium	U		0.727	2.00	2.35	1	11/20/2019 16:16	WG1382681
Silver	U		0.141	1.00	1.17	1	11/20/2019 16:16	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.994	0.100	2.93	25	11/23/2019 06:21	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*100*				*59.0-128*		*11/23/2019 06:21*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0161	0.0250	0.0293	1	11/26/2019 14:54	WG1387176
Acrylonitrile	U		0.00223	0.0125	0.0147	1	11/26/2019 14:54	WG1387176
Benzene	0.000678	J	0.000469	0.00100	0.00117	1	11/26/2019 14:54	WG1387176
Bromobenzene	U		0.00123	0.0125	0.0147	1	11/26/2019 14:54	WG1387176
Bromodichloromethane	U		0.000924	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
Bromoform	U		0.00701	0.0250	0.0293	1	11/26/2019 14:54	WG1387176
Bromomethane	U		0.00434	0.0125	0.0147	1	11/26/2019 14:54	WG1387176
n-Butylbenzene	U		0.00450	0.0125	0.0147	1	11/26/2019 14:54	WG1387176
sec-Butylbenzene	U		0.00297	0.0125	0.0147	1	11/26/2019 14:54	WG1387176
tert-Butylbenzene	U		0.00182	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
Carbon tetrachloride	U		0.00127	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
Chlorobenzene	U		0.000672	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
Chlorodibromomethane	U		0.000528	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
Chloroethane	U	J4	0.00127	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
Chloroform	U		0.000487	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
Chloromethane	U		0.00163	0.0125	0.0147	1	11/26/2019 14:54	WG1387176
2-Chlorotoluene	U		0.00108	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
4-Chlorotoluene	U		0.00133	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
1,2-Dibromo-3-Chloropropane	U		0.00598	0.0250	0.0293	1	11/26/2019 14:54	WG1387176
1,2-Dibromoethane	U		0.000616	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
Dibromomethane	U		0.00117	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
1,2-Dichlorobenzene	U		0.00170	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
1,3-Dichlorobenzene	U		0.00199	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
1,4-Dichlorobenzene	U		0.00231	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
Dichlorodifluoromethane	U		0.000959	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
1,1-Dichloroethane	U		0.000674	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
1,2-Dichloroethane	U		0.000557	0.00250	0.00293	1	11/26/2019 14:54	WG1387176

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000586	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
cis-1,2-Dichloroethene	U		0.000809	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
trans-1,2-Dichloroethene	U		0.00168	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
1,2-Dichloropropane	U		0.00149	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
1,1-Dichloropropene	U		0.000821	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
1,3-Dichloropropane	U		0.00205	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
cis-1,3-Dichloropropene	U		0.000795	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
trans-1,3-Dichloropropene	U		0.00179	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
2,2-Dichloropropane	U		0.000930	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
Di-isopropyl ether	U		0.000410	0.00100	0.00117	1	11/26/2019 14:54	WG1387176
Ethylbenzene	U		0.000622	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
Hexachloro-1,3-butadiene	U		0.0149	0.0250	0.0293	1	11/26/2019 14:54	WG1387176
Isopropylbenzene	U		0.00101	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
p-Isopropyltoluene	U		0.00273	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
2-Butanone (MEK)	U		0.0147	0.0250	0.0293	1	11/26/2019 14:54	WG1387176
Methylene Chloride	U		0.00779	0.0250	0.0293	1	11/26/2019 14:54	WG1387176
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0250	0.0293	1	11/26/2019 14:54	WG1387176
Methyl tert-butyl ether	U		0.000346	0.00100	0.00117	1	11/26/2019 14:54	WG1387176
Naphthalene	0.00522	J	0.00366	0.0125	0.0147	1	11/26/2019 14:54	WG1387176
n-Propylbenzene	U		0.00138	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
Styrene	U	J4	0.00320	0.0125	0.0147	1	11/26/2019 14:54	WG1387176
1,1,1,2-Tetrachloroethane	U		0.000586	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
1,1,2,2-Tetrachloroethane	U	J4	0.000457	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
1,1,2-Trichlorotrifluoroethane	U		0.000792	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
Tetrachloroethene	U		0.000821	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
Toluene	0.00476	J	0.00147	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
1,2,3-Trichlorobenzene	U		0.000733	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
1,2,4-Trichlorobenzene	U		0.00565	0.0125	0.0147	1	11/26/2019 14:54	WG1387176
1,1,1-Trichloroethane	U		0.000322	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
1,1,2-Trichloroethane	U		0.00104	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
Trichloroethene	U		0.000469	0.00100	0.00117	1	11/26/2019 14:54	WG1387176
Trichlorofluoromethane	U	J4	0.000586	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
1,2,3-Trichloropropane	U		0.00598	0.0125	0.0147	1	11/26/2019 14:54	WG1387176
1,2,4-Trimethylbenzene	0.00236	J	0.00136	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
1,2,3-Trimethylbenzene	0.00322	J	0.00135	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
1,3,5-Trimethylbenzene	U		0.00127	0.00500	0.00586	1	11/26/2019 14:54	WG1387176
Vinyl chloride	U		0.000801	0.00250	0.00293	1	11/26/2019 14:54	WG1387176
Xylenes, Total	U		0.00561	0.00650	0.00762	1	11/26/2019 14:54	WG1387176
(S) Toluene-d8	*99.6*				*75.0-131*		*11/26/2019 14:54*	WG1387176
(S) 4-Bromofluorobenzene	*86.0*				*67.0-138*		*11/26/2019 14:54*	WG1387176
(S) 1,2-Dichloroethane-d4	*97.4*				*70.0-130*		*11/26/2019 14:54*	WG1387176

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	U		78.0	4.00	235	50	11/20/2019 07:22	WG1382642
Residual Range Organics (RRO)	383	J	195	10.0	586	50	11/20/2019 07:22	WG1382642
(S) o-Terphenyl	*73.7*	J7			*18.0-148*		*11/20/2019 07:22*	WG1382642

Sample Narrative:

L1161924-41 WG1382642: Cannot run at lower dilution due to viscosity of extract

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.2		1	11/22/2019 15:19	WG1384988

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0461		0.00328	0.0300	0.0352	1	11/21/2019 19:43	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.28		0.540	2.00	2.35	1	11/20/2019 16:18	WG1382681
Barium	105		0.199	0.500	0.587	1	11/20/2019 16:18	WG1382681
Cadmium	0.469	J	0.0821	0.500	0.587	1	11/20/2019 16:18	WG1382681
Chromium	32.9		0.164	1.00	1.17	1	11/20/2019 16:18	WG1382681
Lead	77.1		0.223	0.500	0.587	1	11/20/2019 16:18	WG1382681
Selenium	U		0.727	2.00	2.35	1	11/20/2019 16:18	WG1382681
Silver	U		0.141	1.00	1.17	1	11/20/2019 16:18	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.994	0.100	2.93	25	11/23/2019 06:45	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*100*				*59.0-128*		*11/23/2019 06:45*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0164	J	0.0161	0.0250	0.0293	1	11/26/2019 17:04	WG1387386
Acrylonitrile	U		0.00223	0.0125	0.0147	1	11/26/2019 17:04	WG1387386
Benzene	0.000781	J	0.000469	0.00100	0.00117	1	11/26/2019 17:04	WG1387386
Bromobenzene	U		0.00123	0.0125	0.0147	1	11/26/2019 17:04	WG1387386
Bromodichloromethane	U		0.000924	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
Bromoform	U		0.00702	0.0250	0.0293	1	11/26/2019 17:04	WG1387386
Bromomethane	U		0.00434	0.0125	0.0147	1	11/26/2019 17:04	WG1387386
n-Butylbenzene	U		0.00451	0.0125	0.0147	1	11/26/2019 17:04	WG1387386
sec-Butylbenzene	U		0.00297	0.0125	0.0147	1	11/26/2019 17:04	WG1387386
tert-Butylbenzene	U		0.00182	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
Carbon tetrachloride	U		0.00127	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
Chlorobenzene	U		0.000672	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
Chlorodibromomethane	U		0.000528	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
Chloroethane	U		0.00127	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
Chloroform	U		0.000487	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
Chloromethane	U		0.00163	0.0125	0.0147	1	11/26/2019 17:04	WG1387386
2-Chlorotoluene	U		0.00108	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
4-Chlorotoluene	U		0.00133	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00598	0.0250	0.0293	1	11/26/2019 17:04	WG1387386
1,2-Dibromoethane	U		0.000616	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
Dibromomethane	U		0.00117	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
1,2-Dichlorobenzene	U		0.00170	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
1,3-Dichlorobenzene	U		0.00199	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
1,4-Dichlorobenzene	U		0.00231	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
Dichlorodifluoromethane	U		0.000960	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
1,1-Dichloroethane	U		0.000675	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
1,2-Dichloroethane	0.00113	J	0.000557	0.00250	0.00293	1	11/26/2019 17:04	WG1387386

SB-26(16-17)
Collected date/time: 11/14/19 09:28

SAMPLE RESULTS - 42

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000587	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
cis-1,2-Dichloroethene	U		0.000809	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
trans-1,2-Dichloroethene	U		0.00168	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
1,2-Dichloropropane	U		0.00149	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
1,1-Dichloropropene	U		0.000821	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
1,3-Dichloropropane	U		0.00205	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
cis-1,3-Dichloropropene	U		0.000795	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
trans-1,3-Dichloropropene	U		0.00179	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
2,2-Dichloropropane	U		0.000930	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
Di-isopropyl ether	U		0.000411	0.00100	0.00117	1	11/26/2019 17:04	WG1387386
Ethylbenzene	U		0.000622	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
Hexachloro-1,3-butadiene	U		0.0149	0.0250	0.0293	1	11/26/2019 17:04	WG1387386
Isopropylbenzene	U		0.00101	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
p-Isopropyltoluene	U		0.00273	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
2-Butanone (MEK)	0.0153	B J	0.0147	0.0250	0.0293	1	11/26/2019 17:04	WG1387386
Methylene Chloride	U		0.00779	0.0250	0.0293	1	11/26/2019 17:04	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0250	0.0293	1	11/26/2019 17:04	WG1387386
Methyl tert-butyl ether	U		0.000346	0.00100	0.00117	1	11/26/2019 17:04	WG1387386
Naphthalene	U		0.00366	0.0125	0.0147	1	11/26/2019 17:04	WG1387386
n-Propylbenzene	U		0.00138	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
Styrene	U		0.00320	0.0125	0.0147	1	11/26/2019 17:04	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000587	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000458	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000792	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
Tetrachloroethene	U		0.000821	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
Toluene	0.00435	J	0.00147	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
1,2,3-Trichlorobenzene	U		0.000733	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
1,2,4-Trichlorobenzene	U		0.00565	0.0125	0.0147	1	11/26/2019 17:04	WG1387386
1,1,1-Trichloroethane	U		0.000323	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
1,1,2-Trichloroethane	U		0.00104	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
Trichloroethene	U		0.000469	0.00100	0.00117	1	11/26/2019 17:04	WG1387386
Trichlorofluoromethane	U		0.000587	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
1,2,3-Trichloropropane	U		0.00598	0.0125	0.0147	1	11/26/2019 17:04	WG1387386
1,2,4-Trimethylbenzene	0.00242	B J	0.00136	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
1,2,3-Trimethylbenzene	0.00275	B J	0.00135	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
1,3,5-Trimethylbenzene	U		0.00127	0.00500	0.00587	1	11/26/2019 17:04	WG1387386
Vinyl chloride	U		0.000801	0.00250	0.00293	1	11/26/2019 17:04	WG1387386
Xylenes, Total	U		0.00561	0.00650	0.00763	1	11/26/2019 17:04	WG1387386
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 17:04*	WG1387386
(S) 4-Bromofluorobenzene	*99.8*				*67.0-138*		*11/26/2019 17:04*	WG1387386
(S) 1,2-Dichloroethane-d4	*95.4*				*70.0-130*		*11/26/2019 17:04*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		15.6	4.00	46.9	10	11/20/2019 06:33	WG1382642
Residual Range Organics (RRO)	110	J	39.1	10.0	117	10	11/20/2019 06:33	WG1382642
(S) o-Terphenyl	*63.3*				*18.0-148*		*11/20/2019 06:33*	WG1382642

Sample Narrative:

L1161924-42 WG1382642: Cannot run at lower dilution due to viscosity of extract

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	84.4		1	11/22/2019 15:19	WG1384988

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0464		0.00332	0.0300	0.0355	1	11/21/2019 19:46	WG1382812

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	6.09		0.545	2.00	2.37	1	11/20/2019 16:21	WG1382681
Barium	99.5		0.201	0.500	0.592	1	11/20/2019 16:21	WG1382681
Cadmium	0.425	J	0.0829	0.500	0.592	1	11/20/2019 16:21	WG1382681
Chromium	36.3		0.166	1.00	1.18	1	11/20/2019 16:21	WG1382681
Lead	80.3		0.225	0.500	0.592	1	11/20/2019 16:21	WG1382681
Selenium	U		0.735	2.00	2.37	1	11/20/2019 16:21	WG1382681
Silver	U		0.142	1.00	1.18	1	11/20/2019 16:21	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.00	0.100	2.96	25	11/23/2019 07:09	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*99.9*				*59.0-128*		*11/23/2019 07:09*	WG1385620

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	0.0249	J	0.0162	0.0250	0.0296	1	11/26/2019 17:24	WG1387386
Acrylonitrile	U		0.00225	0.0125	0.0148	1	11/26/2019 17:24	WG1387386
Benzene	0.000602	J	0.000474	0.00100	0.00118	1	11/26/2019 17:24	WG1387386
Bromobenzene	U		0.00124	0.0125	0.0148	1	11/26/2019 17:24	WG1387386
Bromodichloromethane	U		0.000934	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
Bromoform	U		0.00708	0.0250	0.0296	1	11/26/2019 17:24	WG1387386
Bromomethane	U		0.00438	0.0125	0.0148	1	11/26/2019 17:24	WG1387386
n-Butylbenzene	U		0.00455	0.0125	0.0148	1	11/26/2019 17:24	WG1387386
sec-Butylbenzene	U		0.00300	0.0125	0.0148	1	11/26/2019 17:24	WG1387386
tert-Butylbenzene	U		0.00184	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
Carbon tetrachloride	U		0.00128	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
Chlorobenzene	U		0.000679	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
Chlorodibromomethane	U		0.000533	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
Chloroethane	U		0.00128	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
Chloroform	U		0.000492	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
Chloromethane	U		0.00165	0.0125	0.0148	1	11/26/2019 17:24	WG1387386
2-Chlorotoluene	U		0.00109	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
4-Chlorotoluene	U		0.00134	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00604	0.0250	0.0296	1	11/26/2019 17:24	WG1387386
1,2-Dibromoethane	U		0.000622	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
Dibromomethane	U		0.00118	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
1,2-Dichlorobenzene	U		0.00172	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
1,3-Dichlorobenzene	U		0.00201	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
1,4-Dichlorobenzene	U		0.00233	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
Dichlorodifluoromethane	U		0.000969	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
1,1-Dichloroethane	U		0.000681	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
1,2-Dichloroethane	U		0.000563	0.00250	0.00296	1	11/26/2019 17:24	WG1387386

SB-26(19-20)

Collected date/time: 11/14/19 09:30

SAMPLE RESULTS - 43

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000592	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
cis-1,2-Dichloroethene	U		0.000817	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
trans-1,2-Dichloroethene	U		0.00169	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
1,2-Dichloropropane	U		0.00150	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
1,1-Dichloropropene	U		0.000829	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
1,3-Dichloropropane	U		0.00207	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
cis-1,3-Dichloropropene	U		0.000803	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
trans-1,3-Dichloropropene	U		0.00181	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
2,2-Dichloropropane	U		0.000939	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
Di-isopropyl ether	U		0.000415	0.00100	0.00118	1	11/26/2019 17:24	WG1387386
Ethylbenzene	U		0.000628	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
Hexachloro-1,3-butadiene	U		0.0150	0.0250	0.0296	1	11/26/2019 17:24	WG1387386
Isopropylbenzene	U		0.00102	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
p-Isopropyltoluene	0.00357	J	0.00276	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
2-Butanone (MEK)	0.0168	B J	0.0148	0.0250	0.0296	1	11/26/2019 17:24	WG1387386
Methylene Chloride	U		0.00787	0.0250	0.0296	1	11/26/2019 17:24	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0118	0.0250	0.0296	1	11/26/2019 17:24	WG1387386
Methyl tert-butyl ether	U		0.000349	0.00100	0.00118	1	11/26/2019 17:24	WG1387386
Naphthalene	U		0.00370	0.0125	0.0148	1	11/26/2019 17:24	WG1387386
n-Propylbenzene	U		0.00140	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
Styrene	U		0.00323	0.0125	0.0148	1	11/26/2019 17:24	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000592	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000462	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000800	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
Tetrachloroethene	U		0.000829	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
Toluene	0.00378	J	0.00148	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
1,2,3-Trichlorobenzene	U		0.000740	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
1,2,4-Trichlorobenzene	U		0.00571	0.0125	0.0148	1	11/26/2019 17:24	WG1387386
1,1,1-Trichloroethane	U		0.000326	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
1,1,2-Trichloroethane	U		0.00105	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
Trichloroethene	U		0.000474	0.00100	0.00118	1	11/26/2019 17:24	WG1387386
Trichlorofluoromethane	U		0.000592	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
1,2,3-Trichloropropane	U		0.00604	0.0125	0.0148	1	11/26/2019 17:24	WG1387386
1,2,4-Trimethylbenzene	0.00205	B J	0.00137	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
1,2,3-Trimethylbenzene	0.00261	B J	0.00136	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
1,3,5-Trimethylbenzene	U		0.00128	0.00500	0.00592	1	11/26/2019 17:24	WG1387386
Vinyl chloride	U		0.000809	0.00250	0.00296	1	11/26/2019 17:24	WG1387386
Xylenes, Total	U		0.00566	0.00650	0.00770	1	11/26/2019 17:24	WG1387386
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 17:24*	WG1387386
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*11/26/2019 17:24*	WG1387386
(S) 1,2-Dichloroethane-d4	*93.0*				*70.0-130*		*11/26/2019 17:24*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		15.8	4.00	47.4	10	11/21/2019 07:16	WG1382642
Residual Range Organics (RRO)	163		39.5	10.0	118	10	11/21/2019 07:16	WG1382642
(S) o-Terphenyl	*64.5*				*18.0-148*		*11/21/2019 07:16*	WG1382642

Sample Narrative:

L1161924-43 WG1382642: Dilution due to matrix impact during extract concentration procedure

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	92.4		1	11/22/2019 15:19	WG1384988

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0133	J	0.00303	0.0300	0.0325	1	11/21/2019 19:48	WG1382812

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	3.78		0.498	2.00	2.16	1	11/21/2019 16:28	WG1382684
Barium	79.3		0.184	0.500	0.541	1	11/21/2019 16:28	WG1382684
Cadmium	0.171	J	0.0757	0.500	0.541	1	11/21/2019 16:28	WG1382684
Chromium	24.5		0.151	1.00	1.08	1	11/21/2019 16:28	WG1382684
Lead	3.60		0.206	0.500	0.541	1	11/21/2019 16:28	WG1382684
Selenium	U		0.671	2.00	2.16	1	11/21/2019 16:28	WG1382684
Silver	U		0.130	1.00	1.08	1	11/21/2019 16:28	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.917	0.100	2.71	25	11/23/2019 07:33	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*100*				*59.0-128*		*11/23/2019 07:33*	WG1385620

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0148	0.0250	0.0271	1	11/26/2019 17:45	WG1387386
Acrylonitrile	U		0.00206	0.0125	0.0135	1	11/26/2019 17:45	WG1387386
Benzene	U		0.000433	0.00100	0.00108	1	11/26/2019 17:45	WG1387386
Bromobenzene	U		0.00114	0.0125	0.0135	1	11/26/2019 17:45	WG1387386
Bromodichloromethane	U		0.000853	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
Bromoform	U		0.00647	0.0250	0.0271	1	11/26/2019 17:45	WG1387386
Bromomethane	U		0.00400	0.0125	0.0135	1	11/26/2019 17:45	WG1387386
n-Butylbenzene	U		0.00416	0.0125	0.0135	1	11/26/2019 17:45	WG1387386
sec-Butylbenzene	U		0.00274	0.0125	0.0135	1	11/26/2019 17:45	WG1387386
tert-Butylbenzene	U		0.00168	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
Carbon tetrachloride	U		0.00117	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
Chlorobenzene	U		0.000620	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
Chlorodibromomethane	U		0.000487	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
Chloroethane	U		0.00117	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
Chloroform	U		0.000449	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
Chloromethane	U		0.00150	0.0125	0.0135	1	11/26/2019 17:45	WG1387386
2-Chlorotoluene	U		0.000996	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
4-Chlorotoluene	U		0.00122	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00552	0.0250	0.0271	1	11/26/2019 17:45	WG1387386
1,2-Dibromoethane	U		0.000568	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
Dibromomethane	U		0.00108	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
1,2-Dichlorobenzene	U		0.00157	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
1,3-Dichlorobenzene	U		0.00184	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
1,4-Dichlorobenzene	U		0.00213	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
Dichlorodifluoromethane	U		0.000885	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
1,1-Dichloroethane	U		0.000622	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
1,2-Dichloroethane	U		0.000514	0.00250	0.00271	1	11/26/2019 17:45	WG1387386

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000541	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
cis-1,2-Dichloroethene	U		0.000747	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
trans-1,2-Dichloroethene	U		0.00155	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
1,2-Dichloropropane	U		0.00137	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
1,1-Dichloropropene	U		0.000757	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
1,3-Dichloropropane	U		0.00189	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
cis-1,3-Dichloropropene	U		0.000734	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
trans-1,3-Dichloropropene	U		0.00166	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
2,2-Dichloropropane	U		0.000858	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
Di-isopropyl ether	U		0.000379	0.00100	0.00108	1	11/26/2019 17:45	WG1387386
Ethylbenzene	U		0.000574	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
Hexachloro-1,3-butadiene	U		0.0137	0.0250	0.0271	1	11/26/2019 17:45	WG1387386
Isopropylbenzene	U		0.000934	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
p-Isopropyltoluene	U		0.00252	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
2-Butanone (MEK)	0.0197	B J	0.0135	0.0250	0.0271	1	11/26/2019 17:45	WG1387386
Methylene Chloride	U		0.00719	0.0250	0.0271	1	11/26/2019 17:45	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0108	0.0250	0.0271	1	11/26/2019 17:45	WG1387386
Methyl tert-butyl ether	U		0.000319	0.00100	0.00108	1	11/26/2019 17:45	WG1387386
Naphthalene	U		0.00338	0.0125	0.0135	1	11/26/2019 17:45	WG1387386
n-Propylbenzene	U		0.00128	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
Styrene	U		0.00295	0.0125	0.0135	1	11/26/2019 17:45	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000541	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000422	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000730	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
Tetrachloroethene	U		0.000757	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
Toluene	0.00372	J	0.00135	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
1,2,3-Trichlorobenzene	U		0.000676	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
1,2,4-Trichlorobenzene	U		0.00522	0.0125	0.0135	1	11/26/2019 17:45	WG1387386
1,1,1-Trichloroethane	U		0.000298	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
1,1,2-Trichloroethane	U		0.000956	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
Trichloroethene	U		0.000433	0.00100	0.00108	1	11/26/2019 17:45	WG1387386
Trichlorofluoromethane	U		0.000541	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
1,2,3-Trichloropropane	U		0.00552	0.0125	0.0135	1	11/26/2019 17:45	WG1387386
1,2,4-Trimethylbenzene	U		0.00126	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
1,2,3-Trimethylbenzene	U		0.00124	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
1,3,5-Trimethylbenzene	U		0.00117	0.00500	0.00541	1	11/26/2019 17:45	WG1387386
Vinyl chloride	U		0.000739	0.00250	0.00271	1	11/26/2019 17:45	WG1387386
Xylenes, Total	U		0.00517	0.00650	0.00703	1	11/26/2019 17:45	WG1387386
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 17:45*	WG1387386
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*11/26/2019 17:45*	WG1387386
(S) 1,2-Dichloroethane-d4	*94.2*				*70.0-130*		*11/26/2019 17:45*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		14.4	4.00	43.3	10	11/21/2019 07:03	WG1382642
Residual Range Organics (RRO)	122		36.0	10.0	108	10	11/21/2019 07:03	WG1382642
(S) o-Terphenyl	*77.9*				*18.0-148*		*11/21/2019 07:03*	WG1382642

Sample Narrative:

L1161924-44 WG1382642: Dilution due to matrix impact during extract concentration procedure

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.6		1	11/22/2019 15:19	WG1384988

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0153	J	0.00306	0.0300	0.0328	1	11/21/2019 19:56	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.22		0.502	2.00	2.18	1	11/20/2019 16:23	WG1382681
Barium	67.3		0.186	0.500	0.546	1	11/20/2019 16:23	WG1382681
Cadmium	0.140	J	0.0765	0.500	0.546	1	11/20/2019 16:23	WG1382681
Chromium	27.9		0.153	1.00	1.09	1	11/20/2019 16:23	WG1382681
Lead	4.22		0.208	0.500	0.546	1	11/20/2019 16:23	WG1382681
Selenium	U		0.677	2.00	2.18	1	11/20/2019 16:23	WG1382681
Silver	U		0.131	1.00	1.09	1	11/20/2019 16:23	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.955	0.100	2.82	25.8	11/23/2019 07:57	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*100*				*59.0-128*		*11/23/2019 07:57*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0150	0.0250	0.0273	1	11/26/2019 18:06	WG1387386
Acrylonitrile	U		0.00208	0.0125	0.0137	1	11/26/2019 18:06	WG1387386
Benzene	U		0.000437	0.00100	0.00109	1	11/26/2019 18:06	WG1387386
Bromobenzene	U		0.00115	0.0125	0.0137	1	11/26/2019 18:06	WG1387386
Bromodichloromethane	U		0.000861	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
Bromoform	U		0.00653	0.0250	0.0273	1	11/26/2019 18:06	WG1387386
Bromomethane	U		0.00404	0.0125	0.0137	1	11/26/2019 18:06	WG1387386
n-Butylbenzene	U		0.00419	0.0125	0.0137	1	11/26/2019 18:06	WG1387386
sec-Butylbenzene	U		0.00276	0.0125	0.0137	1	11/26/2019 18:06	WG1387386
tert-Butylbenzene	U		0.00169	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
Carbon tetrachloride	U		0.00118	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
Chlorobenzene	U		0.000626	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
Chlorodibromomethane	U		0.000492	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
Chloroethane	U		0.00118	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
Chloroform	U		0.000453	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
Chloromethane	U		0.00152	0.0125	0.0137	1	11/26/2019 18:06	WG1387386
2-Chlorotoluene	U		0.00100	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
4-Chlorotoluene	U		0.00123	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00557	0.0250	0.0273	1	11/26/2019 18:06	WG1387386
1,2-Dibromoethane	U		0.000573	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
Dibromomethane	U		0.00109	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
1,2-Dichlorobenzene	U		0.00158	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
1,3-Dichlorobenzene	U		0.00186	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
1,4-Dichlorobenzene	U		0.00215	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
Dichlorodifluoromethane	U		0.000893	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
1,1-Dichloroethane	U		0.000628	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
1,2-Dichloroethane	U		0.000519	0.00250	0.00273	1	11/26/2019 18:06	WG1387386

SB-27(3-4)
Collected date/time: 11/14/19 08:43

SAMPLE RESULTS - 45

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000546	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
cis-1,2-Dichloroethene	U		0.000754	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
trans-1,2-Dichloroethene	U		0.00156	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
1,2-Dichloropropane	U		0.00139	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
1,1-Dichloropropene	U		0.000765	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
1,3-Dichloropropane	U		0.00191	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
cis-1,3-Dichloropropene	U		0.000741	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
trans-1,3-Dichloropropene	U		0.00167	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
2,2-Dichloropropane	U		0.000866	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
Di-isopropyl ether	U		0.000382	0.00100	0.00109	1	11/26/2019 18:06	WG1387386
Ethylbenzene	U		0.000579	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0273	1	11/26/2019 18:06	WG1387386
Isopropylbenzene	U		0.000943	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
p-Isopropyltoluene	U		0.00254	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
2-Butanone (MEK)	0.0210	B J	0.0137	0.0250	0.0273	1	11/26/2019 18:06	WG1387386
Methylene Chloride	U		0.00725	0.0250	0.0273	1	11/26/2019 18:06	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0273	1	11/26/2019 18:06	WG1387386
Methyl tert-butyl ether	U		0.000322	0.00100	0.00109	1	11/26/2019 18:06	WG1387386
Naphthalene	U		0.00341	0.0125	0.0137	1	11/26/2019 18:06	WG1387386
n-Propylbenzene	U		0.00129	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
Styrene	U		0.00298	0.0125	0.0137	1	11/26/2019 18:06	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000546	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000426	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000737	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
Tetrachloroethene	U		0.000765	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
Toluene	0.00391	J	0.00137	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
1,2,3-Trichlorobenzene	U		0.000683	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
1,2,4-Trichlorobenzene	U		0.00526	0.0125	0.0137	1	11/26/2019 18:06	WG1387386
1,1,1-Trichloroethane	U		0.000300	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
1,1,2-Trichloroethane	U		0.000964	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
Trichloroethene	U		0.000437	0.00100	0.00109	1	11/26/2019 18:06	WG1387386
Trichlorofluoromethane	U		0.000546	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
1,2,3-Trichloropropane	U		0.00557	0.0125	0.0137	1	11/26/2019 18:06	WG1387386
1,2,4-Trimethylbenzene	0.00157	B J	0.00127	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
1,2,3-Trimethylbenzene	0.00142	B J	0.00126	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
1,3,5-Trimethylbenzene	U		0.00118	0.00500	0.00546	1	11/26/2019 18:06	WG1387386
Vinyl chloride	U		0.000746	0.00250	0.00273	1	11/26/2019 18:06	WG1387386
Xylenes, Total	U		0.00522	0.00650	0.00710	1	11/26/2019 18:06	WG1387386
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 18:06*	WG1387386
(S) 4-Bromofluorobenzene	*98.4*				*67.0-138*		*11/26/2019 18:06*	WG1387386
(S) 1,2-Dichloroethane-d4	*93.4*				*70.0-130*		*11/26/2019 18:06*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		14.5	4.00	43.7	10	11/21/2019 08:22	WG1382642
Residual Range Organics (RRO)	88.5	J	36.4	10.0	109	10	11/21/2019 08:22	WG1382642
(S) o-Terphenyl	*73.3*				*18.0-148*		*11/21/2019 08:22*	WG1382642

Sample Narrative:

L1161924-45 WG1382642: Cannot run at lower dilution due to viscosity of extract

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.7		1	11/22/2019 15:19	WG1384988

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0343		0.00305	0.0300	0.0327	1	11/21/2019 19:33	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.09		0.502	2.00	2.18	1	11/20/2019 16:26	WG1382681
Barium	82.0		0.185	0.500	0.545	1	11/20/2019 16:26	WG1382681
Cadmium	0.204	J	0.0763	0.500	0.545	1	11/20/2019 16:26	WG1382681
Chromium	29.6		0.153	1.00	1.09	1	11/20/2019 16:26	WG1382681
Lead	22.1		0.207	0.500	0.545	1	11/20/2019 16:26	WG1382681
Selenium	U		0.676	2.00	2.18	1	11/20/2019 16:26	WG1382681
Silver	U		0.131	1.00	1.09	1	11/20/2019 16:26	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.924	0.100	2.73	25	11/23/2019 08:22	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*100*				*59.0-128*		*11/23/2019 08:22*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0202	J	0.0149	0.0250	0.0273	1	11/26/2019 18:27	WG1387386
Acrylonitrile	U		0.00207	0.0125	0.0136	1	11/26/2019 18:27	WG1387386
Benzene	U		0.000436	0.00100	0.00109	1	11/26/2019 18:27	WG1387386
Bromobenzene	U		0.00115	0.0125	0.0136	1	11/26/2019 18:27	WG1387386
Bromodichloromethane	U		0.000859	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
Bromoform	U		0.00652	0.0250	0.0273	1	11/26/2019 18:27	WG1387386
Bromomethane	U		0.00404	0.0125	0.0136	1	11/26/2019 18:27	WG1387386
n-Butylbenzene	U		0.00419	0.0125	0.0136	1	11/26/2019 18:27	WG1387386
sec-Butylbenzene	U		0.00276	0.0125	0.0136	1	11/26/2019 18:27	WG1387386
tert-Butylbenzene	U		0.00169	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
Carbon tetrachloride	U		0.00118	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
Chlorobenzene	U		0.000625	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
Chlorodibromomethane	U		0.000491	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
Chloroethane	U		0.00118	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
Chloroform	U		0.000453	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
Chloromethane	U		0.00152	0.0125	0.0136	1	11/26/2019 18:27	WG1387386
2-Chlorotoluene	U		0.00100	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
4-Chlorotoluene	U		0.00123	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00556	0.0250	0.0273	1	11/26/2019 18:27	WG1387386
1,2-Dibromoethane	U		0.000573	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
Dibromomethane	U		0.00109	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
1,2-Dichlorobenzene	U		0.00158	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
1,3-Dichlorobenzene	U		0.00185	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
1,4-Dichlorobenzene	U		0.00215	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
Dichlorodifluoromethane	U		0.000892	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
1,1-Dichloroethane	U		0.000627	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
1,2-Dichloroethane	U		0.000518	0.00250	0.00273	1	11/26/2019 18:27	WG1387386

SB-27(6-8)
Collected date/time: 11/14/19 08:45

SAMPLE RESULTS - 46

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000545	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
cis-1,2-Dichloroethene	U		0.000753	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
trans-1,2-Dichloroethene	U		0.00156	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
1,2-Dichloropropane	U		0.00139	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
1,1-Dichloropropene	U		0.000763	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
1,3-Dichloropropane	U		0.00191	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
cis-1,3-Dichloropropene	U		0.000739	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
trans-1,3-Dichloropropene	U		0.00167	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
2,2-Dichloropropane	U		0.000865	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
Di-isopropyl ether	U		0.000382	0.00100	0.00109	1	11/26/2019 18:27	WG1387386
Ethylbenzene	U		0.000578	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0273	1	11/26/2019 18:27	WG1387386
Isopropylbenzene	U		0.000941	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
p-Isopropyltoluene	0.146		0.00254	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
2-Butanone (MEK)	0.0233	B J	0.0136	0.0250	0.0273	1	11/26/2019 18:27	WG1387386
Methylene Chloride	U		0.00724	0.0250	0.0273	1	11/26/2019 18:27	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0273	1	11/26/2019 18:27	WG1387386
Methyl tert-butyl ether	U		0.000322	0.00100	0.00109	1	11/26/2019 18:27	WG1387386
Naphthalene	U		0.00340	0.0125	0.0136	1	11/26/2019 18:27	WG1387386
n-Propylbenzene	U		0.00129	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
Styrene	U		0.00298	0.0125	0.0136	1	11/26/2019 18:27	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000545	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000425	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000736	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
Tetrachloroethene	U		0.000763	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
Toluene	0.00246	J	0.00136	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
1,2,3-Trichlorobenzene	U		0.000682	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
1,2,4-Trichlorobenzene	U		0.00526	0.0125	0.0136	1	11/26/2019 18:27	WG1387386
1,1,1-Trichloroethane	U		0.000300	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
1,1,2-Trichloroethane	U		0.000963	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
Trichloroethene	U		0.000436	0.00100	0.00109	1	11/26/2019 18:27	WG1387386
Trichlorofluoromethane	U		0.000545	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
1,2,3-Trichloropropane	U		0.00556	0.0125	0.0136	1	11/26/2019 18:27	WG1387386
1,2,4-Trimethylbenzene	0.00176	B J	0.00127	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
1,2,3-Trimethylbenzene	0.00149	B J	0.00125	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
1,3,5-Trimethylbenzene	U		0.00118	0.00500	0.00545	1	11/26/2019 18:27	WG1387386
Vinyl chloride	U		0.000745	0.00250	0.00273	1	11/26/2019 18:27	WG1387386
Xylenes, Total	U		0.00521	0.00650	0.00709	1	11/26/2019 18:27	WG1387386
(S) Toluene-d8	*103*				*75.0-131*		*11/26/2019 18:27*	WG1387386
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*11/26/2019 18:27*	WG1387386
(S) 1,2-Dichloroethane-d4	*95.1*				*70.0-130*		*11/26/2019 18:27*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	35.9	J	14.5	4.00	43.6	10	11/21/2019 07:55	WG1382642
Residual Range Organics (RRO)	428		36.3	10.0	109	10	11/21/2019 07:55	WG1382642
(S) o-Terphenyl	*72.2*				*18.0-148*		*11/21/2019 07:55*	WG1382642

Sample Narrative:

L1161924-46 WG1382642: Dilution due to matrix impact during extract concentration procedure

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.5		1	11/22/2019 15:19	WG1384988

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0383		0.00306	0.0300	0.0328	1	11/21/2019 19:59	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.02		0.503	2.00	2.19	1	11/20/2019 16:34	WG1382681
Barium	79.9		0.186	0.500	0.547	1	11/20/2019 16:34	WG1382681
Cadmium	0.279	J	0.0765	0.500	0.547	1	11/20/2019 16:34	WG1382681
Chromium	33.2		0.153	1.00	1.09	1	11/20/2019 16:34	WG1382681
Lead	38.1		0.208	0.500	0.547	1	11/20/2019 16:34	WG1382681
Selenium	U		0.678	2.00	2.19	1	11/20/2019 16:34	WG1382681
Silver	U		0.131	1.00	1.09	1	11/20/2019 16:34	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.926	0.100	2.73	25	11/23/2019 08:46	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*100*				*59.0-128*		*11/23/2019 08:46*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0179	J	0.0150	0.0250	0.0273	1	11/26/2019 18:47	WG1387386
Acrylonitrile	U		0.00208	0.0125	0.0137	1	11/26/2019 18:47	WG1387386
Benzene	U		0.000437	0.00100	0.00109	1	11/26/2019 18:47	WG1387386
Bromobenzene	U		0.00115	0.0125	0.0137	1	11/26/2019 18:47	WG1387386
Bromodichloromethane	U		0.000861	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
Bromoform	U		0.00654	0.0250	0.0273	1	11/26/2019 18:47	WG1387386
Bromomethane	U		0.00404	0.0125	0.0137	1	11/26/2019 18:47	WG1387386
n-Butylbenzene	U		0.00420	0.0125	0.0137	1	11/26/2019 18:47	WG1387386
sec-Butylbenzene	U		0.00277	0.0125	0.0137	1	11/26/2019 18:47	WG1387386
tert-Butylbenzene	U		0.00169	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
Carbon tetrachloride	U		0.00118	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
Chlorobenzene	U		0.000626	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
Chlorodibromomethane	U		0.000492	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
Chloroethane	U		0.00118	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
Chloroform	U		0.000454	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
Chloromethane	U		0.00152	0.0125	0.0137	1	11/26/2019 18:47	WG1387386
2-Chlorotoluene	U		0.00101	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
4-Chlorotoluene	U		0.00124	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00557	0.0250	0.0273	1	11/26/2019 18:47	WG1387386
1,2-Dibromoethane	U		0.000574	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
Dibromomethane	U		0.00109	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
1,2-Dichlorobenzene	U		0.00158	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
1,3-Dichlorobenzene	U		0.00186	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
1,4-Dichlorobenzene	U		0.00215	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
Dichlorodifluoromethane	U		0.000894	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
1,1-Dichloroethane	U		0.000628	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
1,2-Dichloroethane	U		0.000519	0.00250	0.00273	1	11/26/2019 18:47	WG1387386

SB-27(8-9)

Collected date/time: 11/14/19 08:46

SAMPLE RESULTS - 47

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000547	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
cis-1,2-Dichloroethene	U		0.000754	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
trans-1,2-Dichloroethene	U		0.00156	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
1,2-Dichloropropane	U		0.00139	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
1,1-Dichloropropene	U		0.000765	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
1,3-Dichloropropane	U		0.00191	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
cis-1,3-Dichloropropene	U		0.000741	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
trans-1,3-Dichloropropene	U		0.00167	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
2,2-Dichloropropane	U		0.000867	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
Di-isopropyl ether	U		0.000383	0.00100	0.00109	1	11/26/2019 18:47	WG1387386
Ethylbenzene	0.000774	J	0.000579	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0273	1	11/26/2019 18:47	WG1387386
Isopropylbenzene	U		0.000943	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
p-Isopropyltoluene	0.0502		0.00255	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
2-Butanone (MEK)	0.0191	B J	0.0137	0.0250	0.0273	1	11/26/2019 18:47	WG1387386
Methylene Chloride	U		0.00726	0.0250	0.0273	1	11/26/2019 18:47	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0273	1	11/26/2019 18:47	WG1387386
Methyl tert-butyl ether	U		0.000322	0.00100	0.00109	1	11/26/2019 18:47	WG1387386
Naphthalene	0.00591	J	0.00341	0.0125	0.0137	1	11/26/2019 18:47	WG1387386
n-Propylbenzene	U		0.00129	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
Styrene	U		0.00298	0.0125	0.0137	1	11/26/2019 18:47	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000547	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000426	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000738	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
Tetrachloroethene	U		0.000765	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
Toluene	0.00426	J	0.00137	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
1,2,3-Trichlorobenzene	U		0.000683	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
1,2,4-Trichlorobenzene	U		0.00527	0.0125	0.0137	1	11/26/2019 18:47	WG1387386
1,1,1-Trichloroethane	U		0.000301	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
1,1,2-Trichloroethane	U		0.000965	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
Trichloroethene	U		0.000437	0.00100	0.00109	1	11/26/2019 18:47	WG1387386
Trichlorofluoromethane	U		0.000547	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
1,2,3-Trichloropropane	U		0.00557	0.0125	0.0137	1	11/26/2019 18:47	WG1387386
1,2,4-Trimethylbenzene	0.0111	B	0.00127	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
1,2,3-Trimethylbenzene	0.00538	B J	0.00126	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
1,3,5-Trimethylbenzene	0.00389	B J	0.00118	0.00500	0.00547	1	11/26/2019 18:47	WG1387386
Vinyl chloride	U		0.000747	0.00250	0.00273	1	11/26/2019 18:47	WG1387386
Xylenes, Total	0.00874		0.00522	0.00650	0.00710	1	11/26/2019 18:47	WG1387386
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 18:47*	WG1387386
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*11/26/2019 18:47*	WG1387386
(S) 1,2-Dichloroethane-d4	*94.7*				*70.0-130*		*11/26/2019 18:47*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		72.7	4.00	219	50	11/20/2019 01:58	WG1382642
Residual Range Organics (RRO)	551		182	10.0	547	50	11/20/2019 01:58	WG1382642
(S) o-Terphenyl	*79.9*	J7			*18.0-148*		*11/20/2019 01:58*	WG1382642

Sample Narrative:

L1161924-47 WG1382642: Cannot run at lower dilution due to viscosity of extract

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.8		1	11/22/2019 15:04	WG1384990

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0454		0.00308	0.0300	0.0330	1	11/21/2019 20:01	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.96		0.506	2.00	2.20	1	11/20/2019 16:36	WG1382681
Barium	80.1		0.187	0.500	0.550	1	11/20/2019 16:36	WG1382681
Cadmium	0.288	J	0.0771	0.500	0.550	1	11/20/2019 16:36	WG1382681
Chromium	27.5		0.154	1.00	1.10	1	11/20/2019 16:36	WG1382681
Lead	33.7		0.209	0.500	0.550	1	11/20/2019 16:36	WG1382681
Selenium	U		0.683	2.00	2.20	1	11/20/2019 16:36	WG1382681
Silver	U		0.132	1.00	1.10	1	11/20/2019 16:36	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.933	0.100	2.75	25	11/23/2019 09:10	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*101*				*59.0-128*		*11/23/2019 09:10*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0183	J	0.0151	0.0250	0.0275	1	11/26/2019 19:08	WG1387386
Acrylonitrile	U		0.00209	0.0125	0.0138	1	11/26/2019 19:08	WG1387386
Benzene	0.000598	J	0.000440	0.00100	0.00110	1	11/26/2019 19:08	WG1387386
Bromobenzene	U		0.00116	0.0125	0.0138	1	11/26/2019 19:08	WG1387386
Bromodichloromethane	U		0.000868	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
Bromoform	U		0.00658	0.0250	0.0275	1	11/26/2019 19:08	WG1387386
Bromomethane	U		0.00407	0.0125	0.0138	1	11/26/2019 19:08	WG1387386
n-Butylbenzene	U		0.00423	0.0125	0.0138	1	11/26/2019 19:08	WG1387386
sec-Butylbenzene	U		0.00279	0.0125	0.0138	1	11/26/2019 19:08	WG1387386
tert-Butylbenzene	U		0.00171	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
Carbon tetrachloride	U		0.00119	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
Chlorobenzene	U		0.000631	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
Chlorodibromomethane	U		0.000495	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
Chloroethane	U		0.00119	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
Chloroform	U		0.000457	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
Chloromethane	U		0.00153	0.0125	0.0138	1	11/26/2019 19:08	WG1387386
2-Chlorotoluene	U		0.00101	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
4-Chlorotoluene	U		0.00124	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00561	0.0250	0.0275	1	11/26/2019 19:08	WG1387386
1,2-Dibromoethane	U		0.000578	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
Dibromomethane	U		0.00110	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
1,2-Dichlorobenzene	U		0.00160	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
1,3-Dichlorobenzene	U		0.00187	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
1,4-Dichlorobenzene	U		0.00217	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
Dichlorodifluoromethane	U		0.000901	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
1,1-Dichloroethane	U		0.000633	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
1,2-Dichloroethane	U		0.000523	0.00250	0.00275	1	11/26/2019 19:08	WG1387386

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000550	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
cis-1,2-Dichloroethene	U		0.000760	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
trans-1,2-Dichloroethene	U		0.00157	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
1,2-Dichloropropane	U		0.00140	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
1,1-Dichloropropene	U		0.000771	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
1,3-Dichloropropane	U		0.00193	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
cis-1,3-Dichloropropene	U		0.000746	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
trans-1,3-Dichloropropene	U		0.00168	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
2,2-Dichloropropane	U		0.000873	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
Di-isopropyl ether	U		0.000385	0.00100	0.00110	1	11/26/2019 19:08	WG1387386
Ethylbenzene	0.000986	J	0.000583	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
Hexachloro-1,3-butadiene	U		0.0140	0.0250	0.0275	1	11/26/2019 19:08	WG1387386
Isopropylbenzene	U		0.000950	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
p-Isopropyltoluene	0.0683		0.00257	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
2-Butanone (MEK)	0.0220	B J	0.0138	0.0250	0.0275	1	11/26/2019 19:08	WG1387386
Methylene Chloride	U		0.00731	0.0250	0.0275	1	11/26/2019 19:08	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0250	0.0275	1	11/26/2019 19:08	WG1387386
Methyl tert-butyl ether	U		0.000325	0.00100	0.00110	1	11/26/2019 19:08	WG1387386
Naphthalene	U		0.00343	0.0125	0.0138	1	11/26/2019 19:08	WG1387386
n-Propylbenzene	U		0.00130	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
Styrene	U		0.00301	0.0125	0.0138	1	11/26/2019 19:08	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000550	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000429	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000743	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
Tetrachloroethene	U		0.000771	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
Toluene	0.00651		0.00138	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
1,2,3-Trichlorobenzene	U		0.000688	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
1,2,4-Trichlorobenzene	U		0.00531	0.0125	0.0138	1	11/26/2019 19:08	WG1387386
1,1,1-Trichloroethane	U		0.000303	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
1,1,2-Trichloroethane	U		0.000972	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
Trichloroethene	U		0.000440	0.00100	0.00110	1	11/26/2019 19:08	WG1387386
Trichlorofluoromethane	U		0.000550	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
1,2,3-Trichloropropane	U		0.00561	0.0125	0.0138	1	11/26/2019 19:08	WG1387386
1,2,4-Trimethylbenzene	0.00597	B	0.00128	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
1,2,3-Trimethylbenzene	0.00266	B J	0.00127	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
1,3,5-Trimethylbenzene	0.00154	B J	0.00119	0.00500	0.00550	1	11/26/2019 19:08	WG1387386
Vinyl chloride	U		0.000752	0.00250	0.00275	1	11/26/2019 19:08	WG1387386
Xylenes, Total	0.00809		0.00526	0.00650	0.00716	1	11/26/2019 19:08	WG1387386
(S) Toluene-d8	*103*				*75.0-131*		*11/26/2019 19:08*	WG1387386
(S) 4-Bromofluorobenzene	*99.4*				*67.0-138*		*11/26/2019 19:08*	WG1387386
(S) 1,2-Dichloroethane-d4	*97.4*				*70.0-130*		*11/26/2019 19:08*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	36.9	J	14.6	4.00	44.0	10	11/21/2019 07:42	WG1382642
Residual Range Organics (RRO)	469		36.7	10.0	110	10	11/21/2019 07:42	WG1382642
(S) o-Terphenyl	*82.4*				*18.0-148*		*11/21/2019 07:42*	WG1382642

Sample Narrative:

L1161924-48 WG1382642: Dilution due to matrix impact during extract concentration procedure

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.6		1	11/22/2019 15:04	WG1384990

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0332	J	0.00323	0.0300	0.0346	1	11/21/2019 20:04	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.92		0.531	2.00	2.31	1	11/20/2019 16:39	WG1382681
Barium	76.7		0.196	0.500	0.577	1	11/20/2019 16:39	WG1382681
Cadmium	0.225	J	0.0808	0.500	0.577	1	11/20/2019 16:39	WG1382681
Chromium	33.7		0.162	1.00	1.15	1	11/20/2019 16:39	WG1382681
Lead	26.7		0.219	0.500	0.577	1	11/20/2019 16:39	WG1382681
Selenium	U		0.716	2.00	2.31	1	11/20/2019 16:39	WG1382681
Silver	U		0.139	1.00	1.15	1	11/20/2019 16:39	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.978	0.100	2.89	25	11/23/2019 09:34	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*99.8*				*59.0-128*		*11/23/2019 09:34*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0173	J	0.0158	0.0250	0.0289	1	11/26/2019 19:28	WG1387386
Acrylonitrile	U		0.00219	0.0125	0.0144	1	11/26/2019 19:28	WG1387386
Benzene	0.000595	J	0.000462	0.00100	0.00115	1	11/26/2019 19:28	WG1387386
Bromobenzene	U		0.00121	0.0125	0.0144	1	11/26/2019 19:28	WG1387386
Bromodichloromethane	U		0.000910	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
Bromoform	U		0.00690	0.0250	0.0289	1	11/26/2019 19:28	WG1387386
Bromomethane	U		0.00427	0.0125	0.0144	1	11/26/2019 19:28	WG1387386
n-Butylbenzene	U		0.00443	0.0125	0.0144	1	11/26/2019 19:28	WG1387386
sec-Butylbenzene	U		0.00292	0.0125	0.0144	1	11/26/2019 19:28	WG1387386
tert-Butylbenzene	U		0.00179	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
Carbon tetrachloride	U		0.00125	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
Chlorobenzene	U		0.000661	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
Chlorodibromomethane	U		0.000519	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
Chloroethane	U		0.00125	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
Chloroform	U		0.000479	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
Chloromethane	U		0.00160	0.0125	0.0144	1	11/26/2019 19:28	WG1387386
2-Chlorotoluene	U		0.00106	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
4-Chlorotoluene	U		0.00130	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00589	0.0250	0.0289	1	11/26/2019 19:28	WG1387386
1,2-Dibromoethane	U		0.000606	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
Dibromomethane	U		0.00115	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
1,2-Dichlorobenzene	U		0.00167	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
1,3-Dichlorobenzene	U		0.00196	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
1,4-Dichlorobenzene	U		0.00227	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
Dichlorodifluoromethane	U		0.000944	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
1,1-Dichloroethane	U		0.000664	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
1,2-Dichloroethane	U		0.000548	0.00250	0.00289	1	11/26/2019 19:28	WG1387386

SB-27(16-17)

SAMPLE RESULTS - 49

Collected date/time: 11/14/19 08:51

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000577	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
cis-1,2-Dichloroethene	U		0.000797	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
trans-1,2-Dichloroethene	U		0.00165	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
1,2-Dichloropropane	U		0.00147	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
1,1-Dichloropropene	U		0.000808	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
1,3-Dichloropropane	U		0.00202	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
cis-1,3-Dichloropropene	U		0.000783	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
trans-1,3-Dichloropropene	U		0.00177	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
2,2-Dichloropropane	U		0.000915	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
Di-isopropyl ether	U		0.000404	0.00100	0.00115	1	11/26/2019 19:28	WG1387386
Ethylbenzene	U		0.000612	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
Hexachloro-1,3-butadiene	U		0.0147	0.0250	0.0289	1	11/26/2019 19:28	WG1387386
Isopropylbenzene	U		0.000996	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
p-Isopropyltoluene	0.0435		0.00269	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
2-Butanone (MEK)	0.0249	B J	0.0144	0.0250	0.0289	1	11/26/2019 19:28	WG1387386
Methylene Chloride	U		0.00767	0.0250	0.0289	1	11/26/2019 19:28	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0115	0.0250	0.0289	1	11/26/2019 19:28	WG1387386
Methyl tert-butyl ether	U		0.000341	0.00100	0.00115	1	11/26/2019 19:28	WG1387386
Naphthalene	U		0.00360	0.0125	0.0144	1	11/26/2019 19:28	WG1387386
n-Propylbenzene	U		0.00136	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
Styrene	U		0.00315	0.0125	0.0144	1	11/26/2019 19:28	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000577	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000450	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000779	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
Tetrachloroethene	U		0.000808	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
Toluene	0.00558	J	0.00144	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
1,2,3-Trichlorobenzene	U		0.000721	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
1,2,4-Trichlorobenzene	U		0.00556	0.0125	0.0144	1	11/26/2019 19:28	WG1387386
1,1,1-Trichloroethane	U		0.000317	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
1,1,2-Trichloroethane	U		0.00102	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
Trichloroethene	U		0.000462	0.00100	0.00115	1	11/26/2019 19:28	WG1387386
Trichlorofluoromethane	U		0.000577	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
1,2,3-Trichloropropane	U		0.00589	0.0125	0.0144	1	11/26/2019 19:28	WG1387386
1,2,4-Trimethylbenzene	0.00388	B J	0.00134	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
1,2,3-Trimethylbenzene	0.00215	B J	0.00133	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
1,3,5-Trimethylbenzene	0.00136	B J	0.00125	0.00500	0.00577	1	11/26/2019 19:28	WG1387386
Vinyl chloride	U		0.000788	0.00250	0.00289	1	11/26/2019 19:28	WG1387386
Xylenes, Total	U		0.00552	0.00650	0.00750	1	11/26/2019 19:28	WG1387386
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 19:28*	WG1387386
(S) 4-Bromofluorobenzene	*98.2*				*67.0-138*		*11/26/2019 19:28*	WG1387386
(S) 1,2-Dichloroethane-d4	*95.0*				*70.0-130*		*11/26/2019 19:28*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		15.4	4.00	46.2	10	11/20/2019 02:38	WG1382642
Residual Range Organics (RRO)	132		38.4	10.0	115	10	11/20/2019 02:38	WG1382642
(S) o-Terphenyl	*63.0*				*18.0-148*		*11/20/2019 02:38*	WG1382642

Sample Narrative:

L1161924-49 WG1382642: Cannot run at lower dilution due to viscosity of extract

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	83.2		1	11/22/2019 15:04	WG1384990

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0807		0.00337	0.0300	0.0361	1	11/21/2019 20:06	WG1382812

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	6.05		0.553	2.00	2.41	1	11/20/2019 16:41	WG1382681
Barium	92.8		0.204	0.500	0.601	1	11/20/2019 16:41	WG1382681
Cadmium	0.239	J	0.0842	0.500	0.601	1	11/20/2019 16:41	WG1382681
Chromium	35.6		0.168	1.00	1.20	1	11/20/2019 16:41	WG1382681
Lead	29.4		0.228	0.500	0.601	1	11/20/2019 16:41	WG1382681
Selenium	U		0.746	2.00	2.41	1	11/20/2019 16:41	WG1382681
Silver	U		0.144	1.00	1.20	1	11/20/2019 16:41	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	5.20		1.02	0.100	3.01	25	11/23/2019 09:59	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*99.7*				*59.0-128*		*11/23/2019 09:59*	WG1385620

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0165	0.0250	0.0301	1	11/26/2019 19:49	WG1387386
Acrylonitrile	U		0.00228	0.0125	0.0150	1	11/26/2019 19:49	WG1387386
Benzene	U		0.000481	0.00100	0.00120	1	11/26/2019 19:49	WG1387386
Bromobenzene	U		0.00126	0.0125	0.0150	1	11/26/2019 19:49	WG1387386
Bromodichloromethane	U		0.000948	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
Bromoform	U		0.00719	0.0250	0.0301	1	11/26/2019 19:49	WG1387386
Bromomethane	U		0.00445	0.0125	0.0150	1	11/26/2019 19:49	WG1387386
n-Butylbenzene	U		0.00462	0.0125	0.0150	1	11/26/2019 19:49	WG1387386
sec-Butylbenzene	U		0.00304	0.0125	0.0150	1	11/26/2019 19:49	WG1387386
tert-Butylbenzene	U		0.00186	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
Carbon tetrachloride	U		0.00130	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
Chlorobenzene	U		0.000689	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
Chlorodibromomethane	U		0.000541	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
Chloroethane	U		0.00130	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
Chloroform	U		0.000499	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
Chloromethane	U		0.00167	0.0125	0.0150	1	11/26/2019 19:49	WG1387386
2-Chlorotoluene	U		0.00111	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
4-Chlorotoluene	U		0.00136	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00613	0.0250	0.0301	1	11/26/2019 19:49	WG1387386
1,2-Dibromoethane	U		0.000631	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
Dibromomethane	U		0.00120	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
1,2-Dichlorobenzene	U		0.00174	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
1,3-Dichlorobenzene	U		0.00204	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
1,4-Dichlorobenzene	U		0.00237	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
Dichlorodifluoromethane	U		0.000984	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
1,1-Dichloroethane	U		0.000691	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
1,2-Dichloroethane	U		0.000571	0.00250	0.00301	1	11/26/2019 19:49	WG1387386

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000601	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
cis-1,2-Dichloroethene	U		0.000830	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
trans-1,2-Dichloroethene	U		0.00172	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
1,2-Dichloropropane	U		0.00153	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
1,1-Dichloropropene	U		0.000842	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
1,3-Dichloropropane	U		0.00210	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
cis-1,3-Dichloropropene	U		0.000815	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
trans-1,3-Dichloropropene	U		0.00184	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
2,2-Dichloropropane	U		0.000954	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
Di-isopropyl ether	U		0.000421	0.00100	0.00120	1	11/26/2019 19:49	WG1387386
Ethylbenzene	U		0.000637	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
Hexachloro-1,3-butadiene	U		0.0153	0.0250	0.0301	1	11/26/2019 19:49	WG1387386
Isopropylbenzene	U		0.00104	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
p-Isopropyltoluene	U		0.00280	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
2-Butanone (MEK)	U		0.0150	0.0250	0.0301	1	11/26/2019 19:49	WG1387386
Methylene Chloride	U		0.00798	0.0250	0.0301	1	11/26/2019 19:49	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0120	0.0250	0.0301	1	11/26/2019 19:49	WG1387386
Methyl tert-butyl ether	U		0.000355	0.00100	0.00120	1	11/26/2019 19:49	WG1387386
Naphthalene	U		0.00375	0.0125	0.0150	1	11/26/2019 19:49	WG1387386
n-Propylbenzene	U		0.00142	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
Styrene	U		0.00328	0.0125	0.0150	1	11/26/2019 19:49	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000601	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000469	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000812	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
Tetrachloroethene	U		0.000842	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
Toluene	U		0.00150	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
1,2,3-Trichlorobenzene	U		0.000752	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
1,2,4-Trichlorobenzene	U		0.00580	0.0125	0.0150	1	11/26/2019 19:49	WG1387386
1,1,1-Trichloroethane	U		0.000331	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
1,1,2-Trichloroethane	U		0.00106	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
Trichloroethene	U		0.000481	0.00100	0.00120	1	11/26/2019 19:49	WG1387386
Trichlorofluoromethane	U		0.000601	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
1,2,3-Trichloropropane	U		0.00613	0.0125	0.0150	1	11/26/2019 19:49	WG1387386
1,2,4-Trimethylbenzene	U		0.00139	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
1,2,3-Trimethylbenzene	U		0.00138	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
1,3,5-Trimethylbenzene	U		0.00130	0.00500	0.00601	1	11/26/2019 19:49	WG1387386
Vinyl chloride	U		0.000821	0.00250	0.00301	1	11/26/2019 19:49	WG1387386
Xylenes, Total	U		0.00575	0.00650	0.00782	1	11/26/2019 19:49	WG1387386
(S) Toluene-d8	*101*				*75.0-131*		*11/26/2019 19:49*	WG1387386
(S) 4-Bromofluorobenzene	*102*				*67.0-138*		*11/26/2019 19:49*	WG1387386
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*11/26/2019 19:49*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	90.3		1.60	4.00	4.81	1	11/20/2019 00:06	WG1382642
Residual Range Organics (RRO)	67.6		4.00	10.0	12.0	1	11/20/2019 00:06	WG1382642
(S) o-Terphenyl	*66.4*				*18.0-148*		*11/20/2019 00:06*	WG1382642

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.1		1	11/22/2019 15:04	WG1384990

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0328		0.00301	0.0300	0.0322	1	11/21/2019 20:09	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.91		0.494	2.00	2.15	1	11/20/2019 16:44	WG1382681
Barium	62.8		0.183	0.500	0.537	1	11/20/2019 16:44	WG1382681
Cadmium	0.211	J	0.0752	0.500	0.537	1	11/20/2019 16:44	WG1382681
Chromium	29.9		0.150	1.00	1.07	1	11/20/2019 16:44	WG1382681
Lead	32.2		0.204	0.500	0.537	1	11/20/2019 16:44	WG1382681
Selenium	U		0.666	2.00	2.15	1	11/20/2019 16:44	WG1382681
Silver	U		0.129	1.00	1.07	1	11/20/2019 16:44	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.910	0.100	2.68	25	11/23/2019 10:23	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*99.9*				*59.0-128*		*11/23/2019 10:23*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0147	0.0250	0.0268	1	11/26/2019 20:10	WG1387386
Acrylonitrile	U		0.00204	0.0125	0.0134	1	11/26/2019 20:10	WG1387386
Benzene	0.000430	J	0.000430	0.00100	0.00107	1	11/26/2019 20:10	WG1387386
Bromobenzene	U		0.00113	0.0125	0.0134	1	11/26/2019 20:10	WG1387386
Bromodichloromethane	U		0.000846	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
Bromoform	U		0.00642	0.0250	0.0268	1	11/26/2019 20:10	WG1387386
Bromomethane	U		0.00397	0.0125	0.0134	1	11/26/2019 20:10	WG1387386
n-Butylbenzene	U		0.00412	0.0125	0.0134	1	11/26/2019 20:10	WG1387386
sec-Butylbenzene	U		0.00272	0.0125	0.0134	1	11/26/2019 20:10	WG1387386
tert-Butylbenzene	U		0.00166	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
Carbon tetrachloride	U		0.00116	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
Chlorobenzene	U		0.000615	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
Chlorodibromomethane	U		0.000483	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
Chloroethane	U		0.00116	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
Chloroform	U		0.000446	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
Chloromethane	U		0.00149	0.0125	0.0134	1	11/26/2019 20:10	WG1387386
2-Chlorotoluene	U		0.000988	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
4-Chlorotoluene	U		0.00121	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00548	0.0250	0.0268	1	11/26/2019 20:10	WG1387386
1,2-Dibromoethane	U		0.000564	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
Dibromomethane	U		0.00107	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
1,2-Dichlorobenzene	U		0.00156	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
1,3-Dichlorobenzene	U		0.00183	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
1,4-Dichlorobenzene	U		0.00212	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
Dichlorodifluoromethane	U		0.000878	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
1,1-Dichloroethane	U		0.000617	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
1,2-Dichloroethane	U		0.000510	0.00250	0.00268	1	11/26/2019 20:10	WG1387386

SB-28(0-1)

Collected date/time: 11/14/19 07:46

SAMPLE RESULTS - 51

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000537	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
cis-1,2-Dichloroethene	U		0.000741	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
trans-1,2-Dichloroethene	U		0.00154	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
1,2-Dichloropropane	U		0.00136	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
1,1-Dichloropropene	U		0.000752	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
1,3-Dichloropropane	U		0.00188	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
cis-1,3-Dichloropropene	U		0.000728	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
trans-1,3-Dichloropropene	U		0.00164	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
2,2-Dichloropropane	U		0.000852	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
Di-isopropyl ether	U		0.000376	0.00100	0.00107	1	11/26/2019 20:10	WG1387386
Ethylbenzene	0.000865	J	0.000569	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
Hexachloro-1,3-butadiene	U		0.0136	0.0250	0.0268	1	11/26/2019 20:10	WG1387386
Isopropylbenzene	U		0.000927	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
p-Isopropyltoluene	U		0.00250	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
2-Butanone (MEK)	0.0212	B J	0.0134	0.0250	0.0268	1	11/26/2019 20:10	WG1387386
Methylene Chloride	U		0.00713	0.0250	0.0268	1	11/26/2019 20:10	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0250	0.0268	1	11/26/2019 20:10	WG1387386
Methyl tert-butyl ether	U		0.000317	0.00100	0.00107	1	11/26/2019 20:10	WG1387386
Naphthalene	0.0165		0.00335	0.0125	0.0134	1	11/26/2019 20:10	WG1387386
n-Propylbenzene	U		0.00127	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
Styrene	U		0.00293	0.0125	0.0134	1	11/26/2019 20:10	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000537	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000419	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000725	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
Tetrachloroethene	U		0.000752	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
Toluene	0.00461	J	0.00134	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
1,2,3-Trichlorobenzene	U		0.000671	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
1,2,4-Trichlorobenzene	U		0.00518	0.0125	0.0134	1	11/26/2019 20:10	WG1387386
1,1,1-Trichloroethane	U		0.000295	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
1,1,2-Trichloroethane	U		0.000948	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
Trichloroethene	U		0.000430	0.00100	0.00107	1	11/26/2019 20:10	WG1387386
Trichlorofluoromethane	U		0.000537	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
1,2,3-Trichloropropane	U		0.00548	0.0125	0.0134	1	11/26/2019 20:10	WG1387386
1,2,4-Trimethylbenzene	0.00191	B J	0.00125	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
1,2,3-Trimethylbenzene	0.00191	B J	0.00123	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
1,3,5-Trimethylbenzene	U		0.00116	0.00500	0.00537	1	11/26/2019 20:10	WG1387386
Vinyl chloride	U		0.000733	0.00250	0.00268	1	11/26/2019 20:10	WG1387386
Xylenes, Total	U		0.00513	0.00650	0.00698	1	11/26/2019 20:10	WG1387386
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 20:10*	WG1387386
(S) 4-Bromofluorobenzene	*98.3*				*67.0-138*		*11/26/2019 20:10*	WG1387386
(S) 1,2-Dichloroethane-d4	*94.9*				*70.0-130*		*11/26/2019 20:10*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		71.4	4.00	215	50	11/20/2019 06:52	WG1382642
Residual Range Organics (RRO)	220	J	179	10.0	537	50	11/20/2019 06:52	WG1382642
(S) o-Terphenyl	*75.2*	J7			*18.0-148*		*11/20/2019 06:52*	WG1382642

Sample Narrative:

L1161924-51 WG1382642: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.2		1	11/22/2019 15:04	WG1384990

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0195	J	0.00310	0.0300	0.0332	1	11/21/2019 20:11	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.42		0.510	2.00	2.22	1	11/20/2019 16:46	WG1382681
Barium	66.0		0.188	0.500	0.554	1	11/20/2019 16:46	WG1382681
Cadmium	0.213	J	0.0776	0.500	0.554	1	11/20/2019 16:46	WG1382681
Chromium	23.3		0.155	1.00	1.11	1	11/20/2019 16:46	WG1382681
Lead	46.8		0.211	0.500	0.554	1	11/20/2019 16:46	WG1382681
Selenium	U		0.687	2.00	2.22	1	11/20/2019 16:46	WG1382681
Silver	U		0.133	1.00	1.11	1	11/20/2019 16:46	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.939	0.100	2.77	25	11/23/2019 10:47	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*99.9*				*59.0-128*		*11/23/2019 10:47*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0152	0.0250	0.0277	1	11/26/2019 20:30	WG1387386
Acrylonitrile	U		0.00211	0.0125	0.0139	1	11/26/2019 20:30	WG1387386
Benzene	U		0.000443	0.00100	0.00111	1	11/26/2019 20:30	WG1387386
Bromobenzene	U		0.00116	0.0125	0.0139	1	11/26/2019 20:30	WG1387386
Bromodichloromethane	U		0.000873	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
Bromoform	U		0.00663	0.0250	0.0277	1	11/26/2019 20:30	WG1387386
Bromomethane	U		0.00410	0.0125	0.0139	1	11/26/2019 20:30	WG1387386
n-Butylbenzene	U		0.00426	0.0125	0.0139	1	11/26/2019 20:30	WG1387386
sec-Butylbenzene	U		0.00280	0.0125	0.0139	1	11/26/2019 20:30	WG1387386
tert-Butylbenzene	U		0.00172	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
Carbon tetrachloride	U		0.00120	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
Chlorobenzene	U		0.000635	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
Chlorodibromomethane	U		0.000499	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
Chloroethane	U		0.00120	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
Chloroform	U		0.000460	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
Chloromethane	U		0.00154	0.0125	0.0139	1	11/26/2019 20:30	WG1387386
2-Chlorotoluene	U		0.00102	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
4-Chlorotoluene	U		0.00125	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00565	0.0250	0.0277	1	11/26/2019 20:30	WG1387386
1,2-Dibromoethane	U		0.000582	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
Dibromomethane	U		0.00111	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
1,2-Dichlorobenzene	U		0.00161	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
1,3-Dichlorobenzene	U		0.00188	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
1,4-Dichlorobenzene	U		0.00218	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
Dichlorodifluoromethane	U		0.000907	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
1,1-Dichloroethane	U		0.000637	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
1,2-Dichloroethane	U		0.000526	0.00250	0.00277	1	11/26/2019 20:30	WG1387386

SB-28(2-3)

Collected date/time: 11/14/19 07:48

SAMPLE RESULTS - 52

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000554	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
cis-1,2-Dichloroethene	U		0.000765	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
trans-1,2-Dichloroethene	U		0.00158	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
1,2-Dichloropropane	U		0.00141	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
1,1-Dichloropropene	U		0.000776	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
1,3-Dichloropropane	U		0.00194	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
cis-1,3-Dichloropropene	U		0.000751	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
trans-1,3-Dichloropropene	U		0.00170	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
2,2-Dichloropropane	U		0.000879	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
Di-isopropyl ether	U		0.000388	0.00100	0.00111	1	11/26/2019 20:30	WG1387386
Ethylbenzene	U		0.000587	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
Hexachloro-1,3-butadiene	U		0.0141	0.0250	0.0277	1	11/26/2019 20:30	WG1387386
Isopropylbenzene	U		0.000956	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
p-Isopropyltoluene	U		0.00258	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
2-Butanone (MEK)	0.0235	B J	0.0139	0.0250	0.0277	1	11/26/2019 20:30	WG1387386
Methylene Chloride	U		0.00736	0.0250	0.0277	1	11/26/2019 20:30	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0250	0.0277	1	11/26/2019 20:30	WG1387386
Methyl tert-butyl ether	U		0.000327	0.00100	0.00111	1	11/26/2019 20:30	WG1387386
Naphthalene	0.00490	J	0.00346	0.0125	0.0139	1	11/26/2019 20:30	WG1387386
n-Propylbenzene	U		0.00131	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
Styrene	U		0.00303	0.0125	0.0139	1	11/26/2019 20:30	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000554	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000432	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000748	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
Tetrachloroethene	U		0.000776	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
Toluene	0.00332	J	0.00139	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
1,2,3-Trichlorobenzene	U		0.000693	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
1,2,4-Trichlorobenzene	U		0.00534	0.0125	0.0139	1	11/26/2019 20:30	WG1387386
1,1,1-Trichloroethane	U		0.000305	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
1,1,2-Trichloroethane	U		0.000979	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
Trichloroethene	U		0.000443	0.00100	0.00111	1	11/26/2019 20:30	WG1387386
Trichlorofluoromethane	U		0.000554	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
1,2,3-Trichloropropane	U		0.00565	0.0125	0.0139	1	11/26/2019 20:30	WG1387386
1,2,4-Trimethylbenzene	0.00173	B J	0.00129	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
1,2,3-Trimethylbenzene	0.00157	B J	0.00127	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
1,3,5-Trimethylbenzene	U		0.00120	0.00500	0.00554	1	11/26/2019 20:30	WG1387386
Vinyl chloride	U		0.000757	0.00250	0.00277	1	11/26/2019 20:30	WG1387386
Xylenes, Total	U		0.00530	0.00650	0.00720	1	11/26/2019 20:30	WG1387386
(S) Toluene-d8	*104*				*75.0-131*		*11/26/2019 20:30*	WG1387386
(S) 4-Bromofluorobenzene	*99.7*				*67.0-138*		*11/26/2019 20:30*	WG1387386
(S) 1,2-Dichloroethane-d4	*92.9*				*70.0-130*		*11/26/2019 20:30*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	77.0	J	73.7	4.00	222	50	11/20/2019 06:20	WG1382642
Residual Range Organics (RRO)	252	J	185	10.0	554	50	11/20/2019 06:20	WG1382642
(S) o-Terphenyl	*86.4*	J7			*18.0-148*		*11/20/2019 06:20*	WG1382642

Sample Narrative:

L1161924-52 WG1382642: Cannot run at lower dilution due to viscosity of extract

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.6		1	11/22/2019 15:04	WG1384990

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0204	J	0.00309	0.0300	0.0331	1	11/21/2019 20:14	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.39		0.508	2.00	2.21	1	11/20/2019 16:49	WG1382681
Barium	60.9		0.188	0.500	0.552	1	11/20/2019 16:49	WG1382681
Cadmium	0.162	J	0.0773	0.500	0.552	1	11/20/2019 16:49	WG1382681
Chromium	20.5		0.155	1.00	1.10	1	11/20/2019 16:49	WG1382681
Lead	31.0		0.210	0.500	0.552	1	11/20/2019 16:49	WG1382681
Selenium	U		0.685	2.00	2.21	1	11/20/2019 16:49	WG1382681
Silver	U		0.132	1.00	1.10	1	11/20/2019 16:49	WG1382681

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.936	0.100	2.76	25	11/23/2019 11:11	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*99.4*				*59.0-128*		*11/23/2019 11:11*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0151	0.0250	0.0276	1	11/26/2019 20:51	WG1387386
Acrylonitrile	U		0.00210	0.0125	0.0138	1	11/26/2019 20:51	WG1387386
Benzene	U		0.000442	0.00100	0.00110	1	11/26/2019 20:51	WG1387386
Bromobenzene	U		0.00116	0.0125	0.0138	1	11/26/2019 20:51	WG1387386
Bromodichloromethane	U		0.000870	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
Bromoform	U		0.00660	0.0250	0.0276	1	11/26/2019 20:51	WG1387386
Bromomethane	U		0.00409	0.0125	0.0138	1	11/26/2019 20:51	WG1387386
n-Butylbenzene	U		0.00424	0.0125	0.0138	1	11/26/2019 20:51	WG1387386
sec-Butylbenzene	U		0.00279	0.0125	0.0138	1	11/26/2019 20:51	WG1387386
tert-Butylbenzene	U		0.00171	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
Carbon tetrachloride	U		0.00119	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
Chlorobenzene	U		0.000633	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
Chlorodibromomethane	U		0.000497	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
Chloroethane	U		0.00119	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
Chloroform	U		0.000458	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
Chloromethane	U		0.00153	0.0125	0.0138	1	11/26/2019 20:51	WG1387386
2-Chlorotoluene	U		0.00102	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
4-Chlorotoluene	U		0.00125	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00563	0.0250	0.0276	1	11/26/2019 20:51	WG1387386
1,2-Dibromoethane	U		0.000580	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
Dibromomethane	U		0.00110	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
1,2-Dichlorobenzene	U		0.00160	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
1,3-Dichlorobenzene	U		0.00188	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
1,4-Dichlorobenzene	U		0.00218	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
Dichlorodifluoromethane	U		0.000903	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
1,1-Dichloroethane	U		0.000635	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
1,2-Dichloroethane	U		0.000524	0.00250	0.00276	1	11/26/2019 20:51	WG1387386

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000552	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
cis-1,2-Dichloroethene	U		0.000762	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
trans-1,2-Dichloroethene	U		0.00158	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
1,2-Dichloropropane	U		0.00140	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
1,1-Dichloropropene	U		0.000773	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
1,3-Dichloropropane	U		0.00193	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
cis-1,3-Dichloropropene	U		0.000749	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
trans-1,3-Dichloropropene	U		0.00169	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
2,2-Dichloropropane	U		0.000876	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
Di-isopropyl ether	U		0.000386	0.00100	0.00110	1	11/26/2019 20:51	WG1387386
Ethylbenzene	U		0.000585	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
Hexachloro-1,3-butadiene	U		0.0140	0.0250	0.0276	1	11/26/2019 20:51	WG1387386
Isopropylbenzene	U		0.000953	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
p-Isopropyltoluene	U		0.00257	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
2-Butanone (MEK)	0.0176	B J	0.0138	0.0250	0.0276	1	11/26/2019 20:51	WG1387386
Methylene Chloride	U		0.00733	0.0250	0.0276	1	11/26/2019 20:51	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0250	0.0276	1	11/26/2019 20:51	WG1387386
Methyl tert-butyl ether	U		0.000326	0.00100	0.00110	1	11/26/2019 20:51	WG1387386
Naphthalene	0.00464	J	0.00344	0.0125	0.0138	1	11/26/2019 20:51	WG1387386
n-Propylbenzene	U		0.00130	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
Styrene	U		0.00301	0.0125	0.0138	1	11/26/2019 20:51	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000552	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000431	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000745	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
Tetrachloroethene	U		0.000773	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
Toluene	0.00321	J	0.00138	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
1,2,3-Trichlorobenzene	U		0.000690	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
1,2,4-Trichlorobenzene	U		0.00532	0.0125	0.0138	1	11/26/2019 20:51	WG1387386
1,1,1-Trichloroethane	U		0.000304	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
1,1,2-Trichloroethane	U		0.000975	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
Trichloroethene	U		0.000442	0.00100	0.00110	1	11/26/2019 20:51	WG1387386
Trichlorofluoromethane	U		0.000552	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
1,2,3-Trichloropropane	U		0.00563	0.0125	0.0138	1	11/26/2019 20:51	WG1387386
1,2,4-Trimethylbenzene	U		0.00128	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
1,2,3-Trimethylbenzene	U		0.00127	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
1,3,5-Trimethylbenzene	U		0.00119	0.00500	0.00552	1	11/26/2019 20:51	WG1387386
Vinyl chloride	U		0.000754	0.00250	0.00276	1	11/26/2019 20:51	WG1387386
Xylenes, Total	U		0.00528	0.00650	0.00718	1	11/26/2019 20:51	WG1387386
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 20:51*	WG1387386
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*11/26/2019 20:51*	WG1387386
(S) 1,2-Dichloroethane-d4	*94.8*				*70.0-130*		*11/26/2019 20:51*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		73.4	4.00	221	50	11/20/2019 02:11	WG1382642
Residual Range Organics (RRO)	U		184	10.0	552	50	11/20/2019 02:11	WG1382642
(S) o-Terphenyl	*79.8*	J7			*18.0-148*		*11/20/2019 02:11*	WG1382642

Sample Narrative:

L1161924-53 WG1382642: Cannot run at lower dilution due to viscosity of extract

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.1		1	11/22/2019 15:04	WG1384990

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0222	J	0.00311	0.0300	0.0333	1	11/21/2019 20:17	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.64		0.511	2.00	2.22	1	11/21/2019 16:40	WG1382684
Barium	67.7		0.189	0.500	0.555	1	11/21/2019 16:40	WG1382684
Cadmium	0.229	J	0.0777	0.500	0.555	1	11/21/2019 16:40	WG1382684
Chromium	22.3		0.155	1.00	1.11	1	11/21/2019 16:40	WG1382684
Lead	33.6		0.211	0.500	0.555	1	11/21/2019 16:40	WG1382684
Selenium	U		0.688	2.00	2.22	1	11/21/2019 16:40	WG1382684
Silver	U		0.133	1.00	1.11	1	11/21/2019 16:40	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.941	0.100	2.78	25	11/23/2019 11:36	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*99.3*				*59.0-128*		*11/23/2019 11:36*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0152	0.0250	0.0278	1	11/26/2019 21:11	WG1387386
Acrylonitrile	U		0.00211	0.0125	0.0139	1	11/26/2019 21:11	WG1387386
Benzene	0.000575	J	0.000444	0.00100	0.00111	1	11/26/2019 21:11	WG1387386
Bromobenzene	U		0.00117	0.0125	0.0139	1	11/26/2019 21:11	WG1387386
Bromodichloromethane	U		0.000875	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
Bromoform	U		0.00664	0.0250	0.0278	1	11/26/2019 21:11	WG1387386
Bromomethane	U		0.00411	0.0125	0.0139	1	11/26/2019 21:11	WG1387386
n-Butylbenzene	U		0.00426	0.0125	0.0139	1	11/26/2019 21:11	WG1387386
sec-Butylbenzene	U		0.00281	0.0125	0.0139	1	11/26/2019 21:11	WG1387386
tert-Butylbenzene	U		0.00172	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
Carbon tetrachloride	U		0.00120	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
Chlorobenzene	U		0.000636	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
Chlorodibromomethane	U		0.000500	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
Chloroethane	U		0.00120	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
Chloroform	U		0.000461	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
Chloromethane	U		0.00154	0.0125	0.0139	1	11/26/2019 21:11	WG1387386
2-Chlorotoluene	U		0.00102	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
4-Chlorotoluene	U		0.00125	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00566	0.0250	0.0278	1	11/26/2019 21:11	WG1387386
1,2-Dibromoethane	U		0.000583	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
Dibromomethane	U		0.00111	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
1,2-Dichlorobenzene	U		0.00161	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
1,3-Dichlorobenzene	U		0.00189	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
1,4-Dichlorobenzene	U		0.00219	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
Dichlorodifluoromethane	U		0.000908	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
1,1-Dichloroethane	U		0.000638	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
1,2-Dichloroethane	U		0.000527	0.00250	0.00278	1	11/26/2019 21:11	WG1387386

SB-28(8-9)

Collected date/time: 11/14/19 07:52

SAMPLE RESULTS - 54

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000555	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
cis-1,2-Dichloroethene	U		0.000766	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
trans-1,2-Dichloroethene	U		0.00159	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
1,2-Dichloropropane	U		0.00141	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
1,1-Dichloropropene	U		0.000777	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
1,3-Dichloropropane	U		0.00194	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
cis-1,3-Dichloropropene	U		0.000753	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
trans-1,3-Dichloropropene	U		0.00170	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
2,2-Dichloropropane	U		0.000880	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
Di-isopropyl ether	U		0.000389	0.00100	0.00111	1	11/26/2019 21:11	WG1387386
Ethylbenzene	U		0.000588	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
Hexachloro-1,3-butadiene	U		0.0141	0.0250	0.0278	1	11/26/2019 21:11	WG1387386
Isopropylbenzene	U		0.000958	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
p-Isopropyltoluene	U		0.00259	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
2-Butanone (MEK)	0.0379	B	0.0139	0.0250	0.0278	1	11/26/2019 21:11	WG1387386
Methylene Chloride	U		0.00737	0.0250	0.0278	1	11/26/2019 21:11	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0250	0.0278	1	11/26/2019 21:11	WG1387386
Methyl tert-butyl ether	U		0.000328	0.00100	0.00111	1	11/26/2019 21:11	WG1387386
Naphthalene	0.0108	J	0.00346	0.0125	0.0139	1	11/26/2019 21:11	WG1387386
n-Propylbenzene	U		0.00131	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
Styrene	U		0.00303	0.0125	0.0139	1	11/26/2019 21:11	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000555	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000433	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000749	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
Tetrachloroethene	U		0.000777	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
Toluene	0.00775		0.00139	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
1,2,3-Trichlorobenzene	U		0.000694	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
1,2,4-Trichlorobenzene	U		0.00535	0.0125	0.0139	1	11/26/2019 21:11	WG1387386
1,1,1-Trichloroethane	U		0.000305	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
1,1,2-Trichloroethane	U		0.000980	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
Trichloroethene	U		0.000444	0.00100	0.00111	1	11/26/2019 21:11	WG1387386
Trichlorofluoromethane	U		0.000555	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
1,2,3-Trichloropropane	U		0.00566	0.0125	0.0139	1	11/26/2019 21:11	WG1387386
1,2,4-Trimethylbenzene	0.00202	B J	0.00129	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
1,2,3-Trimethylbenzene	0.00184	B J	0.00128	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
1,3,5-Trimethylbenzene	U		0.00120	0.00500	0.00555	1	11/26/2019 21:11	WG1387386
Vinyl chloride	U		0.000758	0.00250	0.00278	1	11/26/2019 21:11	WG1387386
Xylenes, Total	U		0.00531	0.00650	0.00722	1	11/26/2019 21:11	WG1387386
(S) Toluene-d8	*101*				*75.0-131*		*11/26/2019 21:11*	WG1387386
(S) 4-Bromofluorobenzene	*99.8*				*67.0-138*		*11/26/2019 21:11*	WG1387386
(S) 1,2-Dichloroethane-d4	*94.0*				*70.0-130*		*11/26/2019 21:11*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		14.8	4.00	44.4	10	11/21/2019 07:29	WG1382642
Residual Range Organics (RRO)	293		37.0	10.0	111	10	11/21/2019 07:29	WG1382642
(S) o-Terphenyl	*73.9*				*18.0-148*		*11/21/2019 07:29*	WG1382642

Sample Narrative:

L1161924-54 WG1382642: Dilution due to matrix impact during extract concentration procedure

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.9		1	11/22/2019 15:04	WG1384990

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0213	J	0.00319	0.0300	0.0341	1	11/21/2019 20:19	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.77		0.524	2.00	2.28	1	11/21/2019 16:43	WG1382684
Barium	57.9		0.194	0.500	0.569	1	11/21/2019 16:43	WG1382684
Cadmium	0.213	J	0.0797	0.500	0.569	1	11/21/2019 16:43	WG1382684
Chromium	23.5		0.159	1.00	1.14	1	11/21/2019 16:43	WG1382684
Lead	29.6		0.216	0.500	0.569	1	11/21/2019 16:43	WG1382684
Selenium	U		0.706	2.00	2.28	1	11/21/2019 16:43	WG1382684
Silver	U		0.137	1.00	1.14	1	11/21/2019 16:43	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.965	0.100	2.85	25	11/23/2019 12:00	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*99.4*				*59.0-128*		*11/23/2019 12:00*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0156	0.0250	0.0285	1	11/26/2019 21:32	WG1387386
Acrylonitrile	U		0.00216	0.0125	0.0142	1	11/26/2019 21:32	WG1387386
Benzene	U		0.000455	0.00100	0.00114	1	11/26/2019 21:32	WG1387386
Bromobenzene	U		0.00120	0.0125	0.0142	1	11/26/2019 21:32	WG1387386
Bromodichloromethane	U		0.000897	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
Bromoform	U		0.00681	0.0250	0.0285	1	11/26/2019 21:32	WG1387386
Bromomethane	U		0.00421	0.0125	0.0142	1	11/26/2019 21:32	WG1387386
n-Butylbenzene	U		0.00437	0.0125	0.0142	1	11/26/2019 21:32	WG1387386
sec-Butylbenzene	U		0.00288	0.0125	0.0142	1	11/26/2019 21:32	WG1387386
tert-Butylbenzene	U		0.00176	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
Carbon tetrachloride	U		0.00123	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
Chlorobenzene	U		0.000652	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
Chlorodibromomethane	U		0.000512	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
Chloroethane	U		0.00123	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
Chloroform	U		0.000472	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
Chloromethane	U		0.00158	0.0125	0.0142	1	11/26/2019 21:32	WG1387386
2-Chlorotoluene	U		0.00105	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
4-Chlorotoluene	U		0.00129	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00581	0.0250	0.0285	1	11/26/2019 21:32	WG1387386
1,2-Dibromoethane	U		0.000598	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
Dibromomethane	U		0.00114	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
1,2-Dichlorobenzene	U		0.00165	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
1,3-Dichlorobenzene	U		0.00194	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
1,4-Dichlorobenzene	U		0.00224	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
Dichlorodifluoromethane	U		0.000931	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
1,1-Dichloroethane	U		0.000654	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
1,2-Dichloroethane	U		0.000541	0.00250	0.00285	1	11/26/2019 21:32	WG1387386

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000569	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
cis-1,2-Dichloroethene	U		0.000785	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
trans-1,2-Dichloroethene	U		0.00163	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
1,2-Dichloropropane	U		0.00145	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
1,1-Dichloropropene	U		0.000797	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
1,3-Dichloropropane	U		0.00199	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
cis-1,3-Dichloropropene	U		0.000772	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
trans-1,3-Dichloropropene	U		0.00174	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
2,2-Dichloropropane	U		0.000903	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
Di-isopropyl ether	U		0.000398	0.00100	0.00114	1	11/26/2019 21:32	WG1387386
Ethylbenzene	U		0.000603	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
Hexachloro-1,3-butadiene	U		0.0145	0.0250	0.0285	1	11/26/2019 21:32	WG1387386
Isopropylbenzene	U		0.000982	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
p-Isopropyltoluene	U		0.00265	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
2-Butanone (MEK)	0.0254	B J	0.0142	0.0250	0.0285	1	11/26/2019 21:32	WG1387386
Methylene Chloride	U		0.00756	0.0250	0.0285	1	11/26/2019 21:32	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0114	0.0250	0.0285	1	11/26/2019 21:32	WG1387386
Methyl tert-butyl ether	U		0.000336	0.00100	0.00114	1	11/26/2019 21:32	WG1387386
Naphthalene	U		0.00355	0.0125	0.0142	1	11/26/2019 21:32	WG1387386
n-Propylbenzene	U		0.00134	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
Styrene	U		0.00311	0.0125	0.0142	1	11/26/2019 21:32	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000569	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000444	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000768	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
Tetrachloroethene	U		0.000797	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
Toluene	0.00258	J	0.00142	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
1,2,3-Trichlorobenzene	U		0.000711	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
1,2,4-Trichlorobenzene	U		0.00549	0.0125	0.0142	1	11/26/2019 21:32	WG1387386
1,1,1-Trichloroethane	U		0.000313	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
1,1,2-Trichloroethane	U		0.00101	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
Trichloroethene	U		0.000455	0.00100	0.00114	1	11/26/2019 21:32	WG1387386
Trichlorofluoromethane	U		0.000569	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
1,2,3-Trichloropropane	U		0.00581	0.0125	0.0142	1	11/26/2019 21:32	WG1387386
1,2,4-Trimethylbenzene	U		0.00132	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
1,2,3-Trimethylbenzene	U		0.00131	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
1,3,5-Trimethylbenzene	U		0.00123	0.00500	0.00569	1	11/26/2019 21:32	WG1387386
Vinyl chloride	U		0.000777	0.00250	0.00285	1	11/26/2019 21:32	WG1387386
Xylenes, Total	U		0.00544	0.00650	0.00740	1	11/26/2019 21:32	WG1387386
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 21:32*	WG1387386
(S) 4-Bromofluorobenzene	*97.8*				*67.0-138*		*11/26/2019 21:32*	WG1387386
(S) 1,2-Dichloroethane-d4	*94.4*				*70.0-130*		*11/26/2019 21:32*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		75.7	4.00	228	50	11/20/2019 07:05	WG1382642
Residual Range Organics (RRO)	299	J	190	10.0	569	50	11/20/2019 07:05	WG1382642
(S) o-Terphenyl	*76.9*	J7			*18.0-148*		*11/20/2019 07:05*	WG1382642

Sample Narrative:

L1161924-55 WG1382642: Cannot run at lower dilution due to viscosity of extract

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.5		1	11/22/2019 15:04	WG1384990

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0197	J	0.00306	0.0300	0.0328	1	11/21/2019 20:27	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.30		0.503	2.00	2.18	1	11/21/2019 16:51	WG1382684
Barium	62.4		0.186	0.500	0.546	1	11/21/2019 16:51	WG1382684
Cadmium	0.192	J	0.0765	0.500	0.546	1	11/21/2019 16:51	WG1382684
Chromium	34.8		0.153	1.00	1.09	1	11/21/2019 16:51	WG1382684
Lead	31.0		0.208	0.500	0.546	1	11/21/2019 16:51	WG1382684
Selenium	U		0.677	2.00	2.18	1	11/21/2019 16:51	WG1382684
Silver	U		0.131	1.00	1.09	1	11/21/2019 16:51	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.926	0.100	2.73	25	11/23/2019 12:24	WG1385620
(S) a,a,a-Trifluorotoluene(FID)	*99.6*				*59.0-128*		*11/23/2019 12:24*	WG1385620

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0150	0.0250	0.0273	1	11/26/2019 21:53	WG1387386
Acrylonitrile	U		0.00208	0.0125	0.0137	1	11/26/2019 21:53	WG1387386
Benzene	U		0.000437	0.00100	0.00109	1	11/26/2019 21:53	WG1387386
Bromobenzene	U		0.00115	0.0125	0.0137	1	11/26/2019 21:53	WG1387386
Bromodichloromethane	U		0.000861	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
Bromoform	U		0.00653	0.0250	0.0273	1	11/26/2019 21:53	WG1387386
Bromomethane	U		0.00404	0.0125	0.0137	1	11/26/2019 21:53	WG1387386
n-Butylbenzene	U		0.00420	0.0125	0.0137	1	11/26/2019 21:53	WG1387386
sec-Butylbenzene	U		0.00276	0.0125	0.0137	1	11/26/2019 21:53	WG1387386
tert-Butylbenzene	U		0.00169	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
Carbon tetrachloride	U		0.00118	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
Chlorobenzene	U		0.000626	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
Chlorodibromomethane	U		0.000492	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
Chloroethane	U		0.00118	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
Chloroform	U		0.000453	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
Chloromethane	U		0.00152	0.0125	0.0137	1	11/26/2019 21:53	WG1387386
2-Chlorotoluene	U		0.00101	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
4-Chlorotoluene	U		0.00123	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00557	0.0250	0.0273	1	11/26/2019 21:53	WG1387386
1,2-Dibromoethane	U		0.000574	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
Dibromomethane	U		0.00109	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
1,2-Dichlorobenzene	U		0.00158	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
1,3-Dichlorobenzene	U		0.00186	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
1,4-Dichlorobenzene	U		0.00215	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
Dichlorodifluoromethane	U		0.000894	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
1,1-Dichloroethane	U		0.000628	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
1,2-Dichloroethane	U		0.000519	0.00250	0.00273	1	11/26/2019 21:53	WG1387386

SB-28(16-17)

Collected date/time: 11/14/19 07:57

SAMPLE RESULTS - 56

L1161924

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000546	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
cis-1,2-Dichloroethene	U		0.000754	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
trans-1,2-Dichloroethene	U		0.00156	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
1,2-Dichloropropane	U		0.00139	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
1,1-Dichloropropene	U		0.000765	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
1,3-Dichloropropane	U		0.00191	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
cis-1,3-Dichloropropene	U		0.000741	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
trans-1,3-Dichloropropene	U		0.00167	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
2,2-Dichloropropane	U		0.000866	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
Di-isopropyl ether	U		0.000382	0.00100	0.00109	1	11/26/2019 21:53	WG1387386
Ethylbenzene	U		0.000579	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0273	1	11/26/2019 21:53	WG1387386
Isopropylbenzene	U		0.000943	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
p-Isopropyltoluene	U		0.00255	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
2-Butanone (MEK)	0.0232	B J	0.0137	0.0250	0.0273	1	11/26/2019 21:53	WG1387386
Methylene Chloride	U		0.00725	0.0250	0.0273	1	11/26/2019 21:53	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0273	1	11/26/2019 21:53	WG1387386
Methyl tert-butyl ether	U		0.000322	0.00100	0.00109	1	11/26/2019 21:53	WG1387386
Naphthalene	0.00361	J	0.00341	0.0125	0.0137	1	11/26/2019 21:53	WG1387386
n-Propylbenzene	U		0.00129	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
Styrene	U		0.00298	0.0125	0.0137	1	11/26/2019 21:53	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000546	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000426	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000737	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
Tetrachloroethene	U		0.000765	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
Toluene	0.00540	J	0.00137	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
1,2,3-Trichlorobenzene	U		0.000683	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
1,2,4-Trichlorobenzene	U		0.00527	0.0125	0.0137	1	11/26/2019 21:53	WG1387386
1,1,1-Trichloroethane	U		0.000300	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
1,1,2-Trichloroethane	U		0.000965	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
Trichloroethene	U		0.000437	0.00100	0.00109	1	11/26/2019 21:53	WG1387386
Trichlorofluoromethane	U		0.000546	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
1,2,3-Trichloropropane	U		0.00557	0.0125	0.0137	1	11/26/2019 21:53	WG1387386
1,2,4-Trimethylbenzene	0.00212	B J	0.00127	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
1,2,3-Trimethylbenzene	0.00182	B J	0.00126	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
1,3,5-Trimethylbenzene	0.00118	J	0.00118	0.00500	0.00546	1	11/26/2019 21:53	WG1387386
Vinyl chloride	U		0.000746	0.00250	0.00273	1	11/26/2019 21:53	WG1387386
Xylenes, Total	U		0.00522	0.00650	0.00710	1	11/26/2019 21:53	WG1387386
(S) Toluene-d8	*101*				*75.0-131*		*11/26/2019 21:53*	WG1387386
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*11/26/2019 21:53*	WG1387386
(S) 1,2-Dichloroethane-d4	*93.3*				*70.0-130*		*11/26/2019 21:53*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	U		14.5	4.00	43.7	10	11/21/2019 08:09	WG1382642
Residual Range Organics (RRO)	288		36.4	10.0	109	10	11/21/2019 08:09	WG1382642
(S) o-Terphenyl	*82.2*				*18.0-148*		*11/21/2019 08:09*	WG1382642

Sample Narrative:

L1161924-56 WG1382642: Dilution due to matrix impact during extract concentration procedure

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	85.7		1	11/22/2019 15:04	WG1384990

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0396		0.00327	0.0300	0.0350	1	11/21/2019 20:29	WG1382812

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	4.85		0.536	2.00	2.33	1	11/21/2019 16:53	WG1382684
Barium	86.4		0.198	0.500	0.583	1	11/21/2019 16:53	WG1382684
Cadmium	0.229	J	0.0816	0.500	0.583	1	11/21/2019 16:53	WG1382684
Chromium	33.9		0.163	1.00	1.17	1	11/21/2019 16:53	WG1382684
Lead	13.4		0.222	0.500	0.583	1	11/21/2019 16:53	WG1382684
Selenium	U		0.723	2.00	2.33	1	11/21/2019 16:53	WG1382684
Silver	U		0.140	1.00	1.17	1	11/21/2019 16:53	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.988	0.100	2.92	25	11/24/2019 06:21	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/24/2019 06:21*	WG1386130

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0160	0.0250	0.0292	1	11/26/2019 22:13	WG1387386
Acrylonitrile	U		0.00222	0.0125	0.0146	1	11/26/2019 22:13	WG1387386
Benzene	0.000556	J	0.000466	0.00100	0.00117	1	11/26/2019 22:13	WG1387386
Bromobenzene	U		0.00122	0.0125	0.0146	1	11/26/2019 22:13	WG1387386
Bromodichloromethane	U		0.000919	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
Bromoform	U		0.00697	0.0250	0.0292	1	11/26/2019 22:13	WG1387386
Bromomethane	U		0.00432	0.0125	0.0146	1	11/26/2019 22:13	WG1387386
n-Butylbenzene	U		0.00448	0.0125	0.0146	1	11/26/2019 22:13	WG1387386
sec-Butylbenzene	U		0.00295	0.0125	0.0146	1	11/26/2019 22:13	WG1387386
tert-Butylbenzene	U		0.00181	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
Carbon tetrachloride	U		0.00126	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
Chlorobenzene	U		0.000668	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
Chlorodibromomethane	U		0.000525	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
Chloroethane	U		0.00126	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
Chloroform	U		0.000484	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
Chloromethane	U		0.00162	0.0125	0.0146	1	11/26/2019 22:13	WG1387386
2-Chlorotoluene	U		0.00107	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
4-Chlorotoluene	U		0.00132	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00595	0.0250	0.0292	1	11/26/2019 22:13	WG1387386
1,2-Dibromoethane	U		0.000612	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
Dibromomethane	U		0.00117	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
1,2-Dichlorobenzene	U		0.00169	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
1,3-Dichlorobenzene	U		0.00198	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
1,4-Dichlorobenzene	U		0.00230	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
Dichlorodifluoromethane	U		0.000954	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
1,1-Dichloroethane	U		0.000671	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
1,2-Dichloroethane	U		0.000554	0.00250	0.00292	1	11/26/2019 22:13	WG1387386

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

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000583	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
cis-1,2-Dichloroethene	U		0.000805	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
trans-1,2-Dichloroethene	U		0.00167	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
1,2-Dichloropropane	U		0.00148	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
1,1-Dichloropropene	U		0.000816	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
1,3-Dichloropropane	U		0.00204	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
cis-1,3-Dichloropropene	U		0.000791	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
trans-1,3-Dichloropropene	U		0.00178	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
2,2-Dichloropropane	U		0.000925	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
Di-isopropyl ether	U		0.000408	0.00100	0.00117	1	11/26/2019 22:13	WG1387386
Ethylbenzene	U		0.000618	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
Hexachloro-1,3-butadiene	U		0.0148	0.0250	0.0292	1	11/26/2019 22:13	WG1387386
Isopropylbenzene	U		0.00101	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
p-Isopropyltoluene	U		0.00272	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
2-Butanone (MEK)	0.0187	B J	0.0146	0.0250	0.0292	1	11/26/2019 22:13	WG1387386
Methylene Chloride	U		0.00774	0.0250	0.0292	1	11/26/2019 22:13	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0250	0.0292	1	11/26/2019 22:13	WG1387386
Methyl tert-butyl ether	U		0.000344	0.00100	0.00117	1	11/26/2019 22:13	WG1387386
Naphthalene	U		0.00364	0.0125	0.0146	1	11/26/2019 22:13	WG1387386
n-Propylbenzene	U		0.00138	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
Styrene	U		0.00318	0.0125	0.0146	1	11/26/2019 22:13	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000583	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000455	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000787	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
Tetrachloroethene	U		0.000816	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
Toluene	0.00407	J	0.00146	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
1,2,3-Trichlorobenzene	U		0.000729	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
1,2,4-Trichlorobenzene	U		0.00562	0.0125	0.0146	1	11/26/2019 22:13	WG1387386
1,1,1-Trichloroethane	U		0.000321	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
1,1,2-Trichloroethane	U		0.00103	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
Trichloroethene	U		0.000466	0.00100	0.00117	1	11/26/2019 22:13	WG1387386
Trichlorofluoromethane	U		0.000583	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
1,2,3-Trichloropropane	U		0.00595	0.0125	0.0146	1	11/26/2019 22:13	WG1387386
1,2,4-Trimethylbenzene	U		0.00135	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
1,2,3-Trimethylbenzene	U		0.00134	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
1,3,5-Trimethylbenzene	U		0.00126	0.00500	0.00583	1	11/26/2019 22:13	WG1387386
Vinyl chloride	U		0.000797	0.00250	0.00292	1	11/26/2019 22:13	WG1387386
Xylenes, Total	U		0.00557	0.00650	0.00758	1	11/26/2019 22:13	WG1387386
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 22:13*	WG1387386
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*11/26/2019 22:13*	WG1387386
(S) 1,2-Dichloroethane-d4	*92.1*				*70.0-130*		*11/26/2019 22:13*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	2.85	J	1.55	4.00	4.66	1	11/20/2019 00:19	WG1382642
Residual Range Organics (RRO)	42.5		3.88	10.0	11.7	1	11/20/2019 00:19	WG1382642
(S) o-Terphenyl	*59.7*				*18.0-148*		*11/20/2019 00:19*	WG1382642

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.3		1	11/22/2019 19:33	WG1384993

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0223	J	0.00307	0.0300	0.0328	1	11/21/2019 20:32	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.74		0.504	2.00	2.19	1	11/21/2019 16:56	WG1382684
Barium	61.5		0.186	0.500	0.547	1	11/21/2019 16:56	WG1382684
Cadmium	0.148	J	0.0766	0.500	0.547	1	11/21/2019 16:56	WG1382684
Chromium	22.5		0.153	1.00	1.09	1	11/21/2019 16:56	WG1382684
Lead	4.53		0.208	0.500	0.547	1	11/21/2019 16:56	WG1382684
Selenium	U		0.679	2.00	2.19	1	11/21/2019 16:56	WG1382684
Silver	U		0.131	1.00	1.09	1	11/21/2019 16:56	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.928	0.100	2.74	25	11/24/2019 06:45	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/24/2019 06:45*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0150	0.0250	0.0274	1	11/26/2019 22:34	WG1387386
Acrylonitrile	U		0.00208	0.0125	0.0137	1	11/26/2019 22:34	WG1387386
Benzene	U		0.000438	0.00100	0.00109	1	11/26/2019 22:34	WG1387386
Bromobenzene	U		0.00115	0.0125	0.0137	1	11/26/2019 22:34	WG1387386
Bromodichloromethane	U		0.000863	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
Bromoform	U		0.00655	0.0250	0.0274	1	11/26/2019 22:34	WG1387386
Bromomethane	U		0.00405	0.0125	0.0137	1	11/26/2019 22:34	WG1387386
n-Butylbenzene	U		0.00420	0.0125	0.0137	1	11/26/2019 22:34	WG1387386
sec-Butylbenzene	U		0.00277	0.0125	0.0137	1	11/26/2019 22:34	WG1387386
tert-Butylbenzene	U		0.00170	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
Carbon tetrachloride	U		0.00118	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
Chlorobenzene	U		0.000627	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
Chlorodibromomethane	U		0.000493	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
Chloroethane	U		0.00118	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
Chloroform	U		0.000454	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
Chloromethane	U		0.00152	0.0125	0.0137	1	11/26/2019 22:34	WG1387386
2-Chlorotoluene	U		0.00101	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
4-Chlorotoluene	U		0.00124	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00558	0.0250	0.0274	1	11/26/2019 22:34	WG1387386
1,2-Dibromoethane	U		0.000575	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
Dibromomethane	U		0.00109	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
1,2-Dichlorobenzene	U		0.00159	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
1,3-Dichlorobenzene	U		0.00186	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
1,4-Dichlorobenzene	U		0.00216	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
Dichlorodifluoromethane	U		0.000895	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
1,1-Dichloroethane	U		0.000629	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
1,2-Dichloroethane	U		0.000520	0.00250	0.00274	1	11/26/2019 22:34	WG1387386

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000547	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
cis-1,2-Dichloroethene	U		0.000755	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
trans-1,2-Dichloroethene	U		0.00157	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
1,2-Dichloropropane	U		0.00139	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
1,1-Dichloropropene	U		0.000766	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
1,3-Dichloropropane	U		0.00192	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
cis-1,3-Dichloropropene	U		0.000742	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
trans-1,3-Dichloropropene	U		0.00167	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
2,2-Dichloropropane	U		0.000868	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
Di-isopropyl ether	U		0.000383	0.00100	0.00109	1	11/26/2019 22:34	WG1387386
Ethylbenzene	U		0.000580	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0274	1	11/26/2019 22:34	WG1387386
Isopropylbenzene	U		0.000945	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
p-Isopropyltoluene	U		0.00255	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
2-Butanone (MEK)	0.0186	B J	0.0137	0.0250	0.0274	1	11/26/2019 22:34	WG1387386
Methylene Chloride	U		0.00727	0.0250	0.0274	1	11/26/2019 22:34	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0274	1	11/26/2019 22:34	WG1387386
Methyl tert-butyl ether	U		0.000323	0.00100	0.00109	1	11/26/2019 22:34	WG1387386
Naphthalene	U		0.00342	0.0125	0.0137	1	11/26/2019 22:34	WG1387386
n-Propylbenzene	U		0.00129	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
Styrene	U		0.00299	0.0125	0.0137	1	11/26/2019 22:34	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000547	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000427	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000739	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
Tetrachloroethene	U		0.000766	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
Toluene	0.00560		0.00137	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
1,2,3-Trichlorobenzene	U		0.000684	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
1,2,4-Trichlorobenzene	U		0.00528	0.0125	0.0137	1	11/26/2019 22:34	WG1387386
1,1,1-Trichloroethane	U		0.000301	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
1,1,2-Trichloroethane	U		0.000967	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
Trichloroethene	U		0.000438	0.00100	0.00109	1	11/26/2019 22:34	WG1387386
Trichlorofluoromethane	U		0.000547	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
1,2,3-Trichloropropane	U		0.00558	0.0125	0.0137	1	11/26/2019 22:34	WG1387386
1,2,4-Trimethylbenzene	0.00131	B J	0.00127	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
1,2,3-Trimethylbenzene	U		0.00126	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
1,3,5-Trimethylbenzene	U		0.00118	0.00500	0.00547	1	11/26/2019 22:34	WG1387386
Vinyl chloride	U		0.000748	0.00250	0.00274	1	11/26/2019 22:34	WG1387386
Xylenes, Total	U		0.00523	0.00650	0.00712	1	11/26/2019 22:34	WG1387386
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 22:34*	WG1387386
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*11/26/2019 22:34*	WG1387386
(S) 1,2-Dichloroethane-d4	*92.9*				*70.0-130*		*11/26/2019 22:34*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	2.85	J	1.46	4.00	4.38	1	11/20/2019 00:32	WG1382642
Residual Range Organics (RRO)	45.3		3.65	10.0	10.9	1	11/20/2019 00:32	WG1382642
(S) o-Terphenyl	*64.0*				*18.0-148*		*11/20/2019 00:32*	WG1382642

SB-29(3-4)
Collected date/time: 11/14/19 10:43

SAMPLE RESULTS - 59

L1161924

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.6		1	11/22/2019 19:33	WG1384993

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0212	J	0.00306	0.0300	0.0327	1	11/21/2019 20:34	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.32		0.502	2.00	2.18	1	11/21/2019 16:58	WG1382684
Barium	49.1		0.186	0.500	0.546	1	11/21/2019 16:58	WG1382684
Cadmium	0.153	J	0.0764	0.500	0.546	1	11/21/2019 16:58	WG1382684
Chromium	18.3		0.153	1.00	1.09	1	11/21/2019 16:58	WG1382684
Lead	6.28		0.207	0.500	0.546	1	11/21/2019 16:58	WG1382684
Selenium	U		0.677	2.00	2.18	1	11/21/2019 16:58	WG1382684
Silver	U		0.131	1.00	1.09	1	11/21/2019 16:58	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.925	0.100	2.73	25	11/24/2019 07:09	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*99.7*				*77.0-120*		*11/24/2019 07:09*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0150	0.0250	0.0273	1	11/26/2019 22:55	WG1387386
Acrylonitrile	U		0.00207	0.0125	0.0136	1	11/26/2019 22:55	WG1387386
Benzene	U		0.000437	0.00100	0.00109	1	11/26/2019 22:55	WG1387386
Bromobenzene	U		0.00115	0.0125	0.0136	1	11/26/2019 22:55	WG1387386
Bromodichloromethane	U		0.000860	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
Bromoform	U		0.00653	0.0250	0.0273	1	11/26/2019 22:55	WG1387386
Bromomethane	U		0.00404	0.0125	0.0136	1	11/26/2019 22:55	WG1387386
n-Butylbenzene	U		0.00419	0.0125	0.0136	1	11/26/2019 22:55	WG1387386
sec-Butylbenzene	U		0.00276	0.0125	0.0136	1	11/26/2019 22:55	WG1387386
tert-Butylbenzene	U		0.00169	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
Carbon tetrachloride	U		0.00118	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
Chlorobenzene	U		0.000625	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
Chlorodibromomethane	U		0.000491	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
Chloroethane	U		0.00118	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
Chloroform	U		0.000453	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
Chloromethane	U		0.00152	0.0125	0.0136	1	11/26/2019 22:55	WG1387386
2-Chlorotoluene	U		0.00100	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
4-Chlorotoluene	U		0.00123	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00557	0.0250	0.0273	1	11/26/2019 22:55	WG1387386
1,2-Dibromoethane	U		0.000573	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
Dibromomethane	U		0.00109	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
1,2-Dichlorobenzene	U		0.00158	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
1,3-Dichlorobenzene	U		0.00186	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
1,4-Dichlorobenzene	U		0.00215	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
Dichlorodifluoromethane	U		0.000893	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
1,1-Dichloroethane	U		0.000628	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
1,2-Dichloroethane	U		0.000518	0.00250	0.00273	1	11/26/2019 22:55	WG1387386

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

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000546	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
cis-1,2-Dichloroethene	U		0.000753	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
trans-1,2-Dichloroethene	U		0.00156	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
1,2-Dichloropropane	U		0.00139	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
1,1-Dichloropropene	U		0.000764	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
1,3-Dichloropropane	U		0.00191	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
cis-1,3-Dichloropropene	U		0.000740	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
trans-1,3-Dichloropropene	U		0.00167	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
2,2-Dichloropropane	U		0.000866	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
Di-isopropyl ether	U		0.000382	0.00100	0.00109	1	11/26/2019 22:55	WG1387386
Ethylbenzene	U		0.000578	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0273	1	11/26/2019 22:55	WG1387386
Isopropylbenzene	U		0.000942	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
p-Isopropyltoluene	U		0.00254	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
2-Butanone (MEK)	0.0230	B J	0.0136	0.0250	0.0273	1	11/26/2019 22:55	WG1387386
Methylene Chloride	U		0.00725	0.0250	0.0273	1	11/26/2019 22:55	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0273	1	11/26/2019 22:55	WG1387386
Methyl tert-butyl ether	U		0.000322	0.00100	0.00109	1	11/26/2019 22:55	WG1387386
Naphthalene	U		0.00341	0.0125	0.0136	1	11/26/2019 22:55	WG1387386
n-Propylbenzene	U		0.00129	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
Styrene	U		0.00298	0.0125	0.0136	1	11/26/2019 22:55	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000546	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000426	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000737	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
Tetrachloroethene	U		0.000764	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
Toluene	0.00444	J	0.00136	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
1,2,3-Trichlorobenzene	U		0.000682	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
1,2,4-Trichlorobenzene	U		0.00526	0.0125	0.0136	1	11/26/2019 22:55	WG1387386
1,1,1-Trichloroethane	U		0.000300	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
1,1,2-Trichloroethane	U		0.000964	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
Trichloroethene	U		0.000437	0.00100	0.00109	1	11/26/2019 22:55	WG1387386
Trichlorofluoromethane	U		0.000546	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
1,2,3-Trichloropropane	U		0.00557	0.0125	0.0136	1	11/26/2019 22:55	WG1387386
1,2,4-Trimethylbenzene	U		0.00127	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
1,2,3-Trimethylbenzene	U		0.00126	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
1,3,5-Trimethylbenzene	U		0.00118	0.00500	0.00546	1	11/26/2019 22:55	WG1387386
Vinyl chloride	U		0.000745	0.00250	0.00273	1	11/26/2019 22:55	WG1387386
Xylenes, Total	U		0.00522	0.00650	0.00709	1	11/26/2019 22:55	WG1387386
(S) Toluene-d8	*103*				*75.0-131*		*11/26/2019 22:55*	WG1387386
(S) 4-Bromofluorobenzene	*97.0*				*67.0-138*		*11/26/2019 22:55*	WG1387386
(S) 1,2-Dichloroethane-d4	*95.9*				*70.0-130*		*11/26/2019 22:55*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	U		7.26	4.00	21.8	5	11/20/2019 07:54	WG1382642
Residual Range Organics (RRO)	123		18.2	10.0	54.6	5	11/20/2019 07:54	WG1382642
(S) o-Terphenyl	*66.0*				*18.0-148*		*11/20/2019 07:54*	WG1382642

Sample Narrative:

L1161924-59 WG1382642: Cannot run at lower dilution due to viscosity of extract

SB-29(6-8)

Collected date/time: 11/14/19 10:45

SAMPLE RESULTS - 60

L1161924

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.5		1	11/22/2019 19:33	WG1384993

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0395		0.00320	0.0300	0.0343	1	11/21/2019 20:37	WG1382812

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.93		0.526	2.00	2.29	1	11/21/2019 17:01	WG1382684
Barium	108		0.194	0.500	0.571	1	11/21/2019 17:01	WG1382684
Cadmium	0.222	J	0.0800	0.500	0.571	1	11/21/2019 17:01	WG1382684
Chromium	30.6		0.160	1.00	1.14	1	11/21/2019 17:01	WG1382684
Lead	6.93		0.217	0.500	0.571	1	11/21/2019 17:01	WG1382684
Selenium	U		0.709	2.00	2.29	1	11/21/2019 17:01	WG1382684
Silver	U		0.137	1.00	1.14	1	11/21/2019 17:01	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.969	0.100	2.86	25	11/24/2019 07:33	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*11/24/2019 07:33*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0368		0.0157	0.0250	0.0286	1	11/26/2019 23:15	WG1387386
Acrylonitrile	U		0.00217	0.0125	0.0143	1	11/26/2019 23:15	WG1387386
Benzene	U		0.000457	0.00100	0.00114	1	11/26/2019 23:15	WG1387386
Bromobenzene	U		0.00120	0.0125	0.0143	1	11/26/2019 23:15	WG1387386
Bromodichloromethane	U		0.000901	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
Bromoform	U		0.00683	0.0250	0.0286	1	11/26/2019 23:15	WG1387386
Bromomethane	U		0.00423	0.0125	0.0143	1	11/26/2019 23:15	WG1387386
n-Butylbenzene	U		0.00439	0.0125	0.0143	1	11/26/2019 23:15	WG1387386
sec-Butylbenzene	U		0.00289	0.0125	0.0143	1	11/26/2019 23:15	WG1387386
tert-Butylbenzene	U		0.00177	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
Carbon tetrachloride	U		0.00123	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
Chlorobenzene	U		0.000655	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
Chlorodibromomethane	U		0.000514	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
Chloroethane	U		0.00123	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
Chloroform	U		0.000474	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
Chloromethane	U		0.00159	0.0125	0.0143	1	11/26/2019 23:15	WG1387386
2-Chlorotoluene	U		0.00105	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
4-Chlorotoluene	U		0.00129	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00583	0.0250	0.0286	1	11/26/2019 23:15	WG1387386
1,2-Dibromoethane	U		0.000600	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
Dibromomethane	U		0.00114	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
1,2-Dichlorobenzene	U		0.00166	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
1,3-Dichlorobenzene	U		0.00194	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
1,4-Dichlorobenzene	U		0.00225	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
Dichlorodifluoromethane	U		0.000935	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
1,1-Dichloroethane	U		0.000657	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
1,2-Dichloroethane	U		0.000543	0.00250	0.00286	1	11/26/2019 23:15	WG1387386

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000571	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
cis-1,2-Dichloroethene	U		0.000789	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
trans-1,2-Dichloroethene	U		0.00163	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
1,2-Dichloropropane	U		0.00145	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
1,1-Dichloropropene	U		0.000800	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
1,3-Dichloropropane	U		0.00200	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
cis-1,3-Dichloropropene	U		0.000775	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
trans-1,3-Dichloropropene	U		0.00175	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
2,2-Dichloropropane	U		0.000906	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
Di-isopropyl ether	U		0.000400	0.00100	0.00114	1	11/26/2019 23:15	WG1387386
Ethylbenzene	U		0.000606	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
Hexachloro-1,3-butadiene	U		0.0145	0.0250	0.0286	1	11/26/2019 23:15	WG1387386
Isopropylbenzene	U		0.000986	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
p-Isopropyltoluene	0.0113		0.00266	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
2-Butanone (MEK)	0.0246	B J	0.0143	0.0250	0.0286	1	11/26/2019 23:15	WG1387386
Methylene Chloride	U		0.00759	0.0250	0.0286	1	11/26/2019 23:15	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0114	0.0250	0.0286	1	11/26/2019 23:15	WG1387386
Methyl tert-butyl ether	U		0.000337	0.00100	0.00114	1	11/26/2019 23:15	WG1387386
Naphthalene	U		0.00357	0.0125	0.0143	1	11/26/2019 23:15	WG1387386
n-Propylbenzene	U		0.00135	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
Styrene	U		0.00312	0.0125	0.0143	1	11/26/2019 23:15	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000571	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000446	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000771	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
Tetrachloroethene	U		0.000800	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
Toluene	0.00329	J	0.00143	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
1,2,3-Trichlorobenzene	U		0.000714	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
1,2,4-Trichlorobenzene	U		0.00551	0.0125	0.0143	1	11/26/2019 23:15	WG1387386
1,1,1-Trichloroethane	U		0.000314	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
1,1,2-Trichloroethane	U		0.00101	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
Trichloroethene	U		0.000457	0.00100	0.00114	1	11/26/2019 23:15	WG1387386
Trichlorofluoromethane	U		0.000571	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
1,2,3-Trichloropropane	U		0.00583	0.0125	0.0143	1	11/26/2019 23:15	WG1387386
1,2,4-Trimethylbenzene	U		0.00133	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
1,2,3-Trimethylbenzene	U		0.00131	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
1,3,5-Trimethylbenzene	U		0.00123	0.00500	0.00571	1	11/26/2019 23:15	WG1387386
Vinyl chloride	U		0.000781	0.00250	0.00286	1	11/26/2019 23:15	WG1387386
Xylenes, Total	U		0.00546	0.00650	0.00743	1	11/26/2019 23:15	WG1387386
(S) Toluene-d8	*101*				*75.0-131*		*11/26/2019 23:15*	WG1387386
(S) 4-Bromofluorobenzene	*97.5*				*67.0-138*		*11/26/2019 23:15*	WG1387386
(S) 1,2-Dichloroethane-d4	*95.6*				*70.0-130*		*11/26/2019 23:15*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	3.29	J	1.52	4.00	4.57	1	11/19/2019 23:46	WG1382642
Residual Range Organics (RRO)	18.5		3.81	10.0	11.4	1	11/19/2019 23:46	WG1382642
(S) o-Terphenyl	*55.9*				*18.0-148*		*11/19/2019 23:46*	WG1382642

SB-29(9-10)

Collected date/time: 11/14/19 10:47

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.8		1	11/22/2019 19:33	WG1384993

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0360		0.00326	0.0300	0.0350	1	11/19/2019 21:18	WG1382813

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.66		0.536	2.00	2.33	1	11/21/2019 17:03	WG1382684
Barium	99.4		0.198	0.500	0.583	1	11/21/2019 17:03	WG1382684
Cadmium	0.193	J	0.0816	0.500	0.583	1	11/21/2019 17:03	WG1382684
Chromium	32.8		0.163	1.00	1.17	1	11/21/2019 17:03	WG1382684
Lead	5.63		0.221	0.500	0.583	1	11/21/2019 17:03	WG1382684
Selenium	U		0.722	2.00	2.33	1	11/21/2019 17:03	WG1382684
Silver	U		0.140	1.00	1.17	1	11/21/2019 17:03	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.988	0.100	2.91	25	11/24/2019 07:58	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*98.8*				*77.0-120*		*11/24/2019 07:58*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0209	J	0.0160	0.0250	0.0291	1	11/26/2019 23:36	WG1387386
Acrylonitrile	U		0.00221	0.0125	0.0146	1	11/26/2019 23:36	WG1387386
Benzene	U		0.000466	0.00100	0.00117	1	11/26/2019 23:36	WG1387386
Bromobenzene	U		0.00122	0.0125	0.0146	1	11/26/2019 23:36	WG1387386
Bromodichloromethane	U		0.000918	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
Bromoform	U		0.00697	0.0250	0.0291	1	11/26/2019 23:36	WG1387386
Bromomethane	U		0.00431	0.0125	0.0146	1	11/26/2019 23:36	WG1387386
n-Butylbenzene	U		0.00447	0.0125	0.0146	1	11/26/2019 23:36	WG1387386
sec-Butylbenzene	U		0.00295	0.0125	0.0146	1	11/26/2019 23:36	WG1387386
tert-Butylbenzene	U		0.00181	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
Carbon tetrachloride	U		0.00126	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
Chlorobenzene	U		0.000668	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
Chlorodibromomethane	U		0.000524	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
Chloroethane	U		0.00126	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
Chloroform	0.000534	J	0.000484	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
Chloromethane	U		0.00162	0.0125	0.0146	1	11/26/2019 23:36	WG1387386
2-Chlorotoluene	U		0.00107	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
4-Chlorotoluene	U		0.00132	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
1,2-Dibromo-3-Chloropropane	U		0.00594	0.0250	0.0291	1	11/26/2019 23:36	WG1387386
1,2-Dibromoethane	U		0.000612	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
Dibromomethane	U		0.00117	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
1,2-Dichlorobenzene	U		0.00169	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
1,3-Dichlorobenzene	U		0.00198	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
1,4-Dichlorobenzene	U		0.00230	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
Dichlorodifluoromethane	U		0.000953	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
1,1-Dichloroethane	U		0.000670	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
1,2-Dichloroethane	0.000868	J	0.000553	0.00250	0.00291	1	11/26/2019 23:36	WG1387386

SB-29(9-10)

Collected date/time: 11/14/19 10:47

SAMPLE RESULTS - 61

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000583	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
cis-1,2-Dichloroethene	U		0.000804	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
trans-1,2-Dichloroethene	U		0.00167	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
1,2-Dichloropropane	U		0.00148	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
1,1-Dichloropropene	U		0.000816	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
1,3-Dichloropropane	U		0.00204	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
cis-1,3-Dichloropropene	U		0.000790	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
trans-1,3-Dichloropropene	U		0.00178	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
2,2-Dichloropropane	U		0.000924	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
Di-isopropyl ether	U		0.000408	0.00100	0.00117	1	11/26/2019 23:36	WG1387386
Ethylbenzene	U		0.000618	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
Hexachloro-1,3-butadiene	U		0.0148	0.0250	0.0291	1	11/26/2019 23:36	WG1387386
Isopropylbenzene	U		0.00101	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
p-Isopropyltoluene	0.0132		0.00272	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
2-Butanone (MEK)	0.0165	B J	0.0146	0.0250	0.0291	1	11/26/2019 23:36	WG1387386
Methylene Chloride	U		0.00774	0.0250	0.0291	1	11/26/2019 23:36	WG1387386
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0250	0.0291	1	11/26/2019 23:36	WG1387386
Methyl tert-butyl ether	U		0.000344	0.00100	0.00117	1	11/26/2019 23:36	WG1387386
Naphthalene	U		0.00364	0.0125	0.0146	1	11/26/2019 23:36	WG1387386
n-Propylbenzene	U		0.00137	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
Styrene	U		0.00318	0.0125	0.0146	1	11/26/2019 23:36	WG1387386
1,1,1,2-Tetrachloroethane	U		0.000583	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
1,1,2,2-Tetrachloroethane	U		0.000454	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
1,1,2-Trichlorotrifluoroethane	U		0.000787	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
Tetrachloroethene	U		0.000816	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
Toluene	0.00325	J	0.00146	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
1,2,3-Trichlorobenzene	U		0.000728	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
1,2,4-Trichlorobenzene	U		0.00562	0.0125	0.0146	1	11/26/2019 23:36	WG1387386
1,1,1-Trichloroethane	U		0.000320	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
1,1,2-Trichloroethane	U		0.00103	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
Trichloroethene	U		0.000466	0.00100	0.00117	1	11/26/2019 23:36	WG1387386
Trichlorofluoromethane	U		0.000583	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
1,2,3-Trichloropropane	U		0.00594	0.0125	0.0146	1	11/26/2019 23:36	WG1387386
1,2,4-Trimethylbenzene	U		0.00135	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
1,2,3-Trimethylbenzene	U		0.00134	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
1,3,5-Trimethylbenzene	U		0.00126	0.00500	0.00583	1	11/26/2019 23:36	WG1387386
Vinyl chloride	U		0.000796	0.00250	0.00291	1	11/26/2019 23:36	WG1387386
Xylenes, Total	U		0.00557	0.00650	0.00757	1	11/26/2019 23:36	WG1387386
(S) Toluene-d8	*101*				*75.0-131*		*11/26/2019 23:36*	WG1387386
(S) 4-Bromofluorobenzene	*97.8*				*67.0-138*		*11/26/2019 23:36*	WG1387386
(S) 1,2-Dichloroethane-d4	*92.9*				*70.0-130*		*11/26/2019 23:36*	WG1387386

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	9.99		1.55	4.00	4.66	1	11/21/2019 21:44	WG1384286
Residual Range Organics (RRO)	31.1		3.88	10.0	11.7	1	11/21/2019 21:44	WG1384286
(S) o-Terphenyl	*81.2*				*18.0-148*		*11/21/2019 21:44*	WG1384286

SB-29(11-12)
Collected date/time: 11/14/19 10:49

SAMPLE RESULTS - 62

L1161924

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.0		1	11/22/2019 19:33	WG1384993

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0316	J	0.00326	0.0300	0.0349	1	11/19/2019 21:25	WG1382813

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.68		0.535	2.00	2.33	1	11/21/2019 17:06	WG1382684
Barium	106		0.198	0.500	0.582	1	11/21/2019 17:06	WG1382684
Cadmium	0.172	J	0.0814	0.500	0.582	1	11/21/2019 17:06	WG1382684
Chromium	32.3		0.163	1.00	1.16	1	11/21/2019 17:06	WG1382684
Lead	7.13		0.221	0.500	0.582	1	11/21/2019 17:06	WG1382684
Selenium	U		0.721	2.00	2.33	1	11/21/2019 17:06	WG1382684
Silver	U		0.140	1.00	1.16	1	11/21/2019 17:06	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.986	0.100	2.91	25	11/24/2019 08:22	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/24/2019 08:22*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0159	0.0250	0.0291	1	11/26/2019 20:14	WG1387391
Acrylonitrile	U		0.00221	0.0125	0.0145	1	11/26/2019 20:14	WG1387391
Benzene	U		0.000465	0.00100	0.00116	1	11/26/2019 20:14	WG1387391
Bromobenzene	U		0.00122	0.0125	0.0145	1	11/26/2019 20:14	WG1387391
Bromodichloromethane	U		0.000917	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
Bromoform	U		0.00696	0.0250	0.0291	1	11/26/2019 20:14	WG1387391
Bromomethane	U		0.00430	0.0125	0.0145	1	11/26/2019 20:14	WG1387391
n-Butylbenzene	U		0.00447	0.0125	0.0145	1	11/26/2019 20:14	WG1387391
sec-Butylbenzene	U		0.00294	0.0125	0.0145	1	11/26/2019 20:14	WG1387391
tert-Butylbenzene	U		0.00180	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
Carbon tetrachloride	U		0.00126	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
Chlorobenzene	U		0.000667	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
Chlorodibromomethane	U		0.000523	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
Chloroethane	U		0.00126	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
Chloroform	U		0.000483	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
Chloromethane	U	J4	0.00162	0.0125	0.0145	1	11/26/2019 20:14	WG1387391
2-Chlorotoluene	U		0.00107	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
4-Chlorotoluene	U		0.00131	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
1,2-Dibromo-3-Chloropropane	U		0.00593	0.0250	0.0291	1	11/26/2019 20:14	WG1387391
1,2-Dibromoethane	U		0.000611	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
Dibromomethane	U		0.00116	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
1,2-Dichlorobenzene	U		0.00169	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
1,3-Dichlorobenzene	U		0.00198	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
1,4-Dichlorobenzene	U		0.00229	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
Dichlorodifluoromethane	U		0.000952	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
1,1-Dichloroethane	U		0.000669	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
1,2-Dichloroethane	U		0.000553	0.00250	0.00291	1	11/26/2019 20:14	WG1387391

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000582	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
cis-1,2-Dichloroethene	U		0.000803	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
trans-1,2-Dichloroethene	U		0.00166	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
1,2-Dichloropropane	U		0.00148	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
1,1-Dichloropropene	U		0.000814	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
1,3-Dichloropropane	U		0.00204	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
cis-1,3-Dichloropropene	U		0.000789	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
trans-1,3-Dichloropropene	U		0.00178	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
2,2-Dichloropropane	U	J4	0.000923	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
Di-isopropyl ether	U		0.000407	0.00100	0.00116	1	11/26/2019 20:14	WG1387391
Ethylbenzene	U		0.000617	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
Hexachloro-1,3-butadiene	U		0.0148	0.0250	0.0291	1	11/26/2019 20:14	WG1387391
Isopropylbenzene	U		0.00100	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
p-Isopropyltoluene	0.0104		0.00271	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
2-Butanone (MEK)	U		0.0145	0.0250	0.0291	1	11/26/2019 20:14	WG1387391
Methylene Chloride	U		0.00772	0.0250	0.0291	1	11/26/2019 20:14	WG1387391
4-Methyl-2-pentanone (MIBK)	U		0.0116	0.0250	0.0291	1	11/26/2019 20:14	WG1387391
Methyl tert-butyl ether	U		0.000343	0.00100	0.00116	1	11/26/2019 20:14	WG1387391
Naphthalene	U		0.00363	0.0125	0.0145	1	11/26/2019 20:14	WG1387391
n-Propylbenzene	U	J4	0.00137	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
Styrene	U		0.00318	0.0125	0.0145	1	11/26/2019 20:14	WG1387391
1,1,1,2-Tetrachloroethane	U		0.000582	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
1,1,2,2-Tetrachloroethane	U	J4	0.000454	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
1,1,2-Trichlorotrifluoroethane	U		0.000785	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
Tetrachloroethene	U		0.000814	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
Toluene	0.00337	J	0.00145	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
1,2,3-Trichlorobenzene	U		0.000727	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
1,2,4-Trichlorobenzene	U		0.00561	0.0125	0.0145	1	11/26/2019 20:14	WG1387391
1,1,1-Trichloroethane	U		0.000320	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
1,1,2-Trichloroethane	U		0.00103	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
Trichloroethene	U		0.000465	0.00100	0.00116	1	11/26/2019 20:14	WG1387391
Trichlorofluoromethane	U		0.000582	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
1,2,3-Trichloropropane	U		0.00593	0.0125	0.0145	1	11/26/2019 20:14	WG1387391
1,2,4-Trimethylbenzene	U		0.00135	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
1,2,3-Trimethylbenzene	U		0.00134	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
1,3,5-Trimethylbenzene	U		0.00126	0.00500	0.00582	1	11/26/2019 20:14	WG1387391
Vinyl chloride	U		0.000795	0.00250	0.00291	1	11/26/2019 20:14	WG1387391
Xylenes, Total	U		0.00556	0.00650	0.00756	1	11/26/2019 20:14	WG1387391
(S) Toluene-d8	*100*				*75.0-131*		*11/26/2019 20:14*	WG1387391
(S) 4-Bromofluorobenzene	*86.8*				*67.0-138*		*11/26/2019 20:14*	WG1387391
(S) 1,2-Dichloroethane-d4	*93.3*				*70.0-130*		*11/26/2019 20:14*	WG1387391

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	5.26		1.55	4.00	4.65	1	11/21/2019 21:57	WG1384286
Residual Range Organics (RRO)	20.9		3.87	10.0	11.6	1	11/21/2019 21:57	WG1384286
(S) o-Terphenyl	*78.5*				*18.0-148*		*11/21/2019 21:57*	WG1384286

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.0		1	11/22/2019 19:33	WG1384993

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.102		0.00342	0.0300	0.0366	1	11/19/2019 21:28	WG1382813

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.50		0.561	2.00	2.44	1	11/21/2019 17:08	WG1382684
Barium	124		0.207	0.500	0.610	1	11/21/2019 17:08	WG1382684
Cadmium	0.577	J	0.0854	0.500	0.610	1	11/21/2019 17:08	WG1382684
Chromium	33.0		0.171	1.00	1.22	1	11/21/2019 17:08	WG1382684
Lead	44.3		0.232	0.500	0.610	1	11/21/2019 17:08	WG1382684
Selenium	U		0.756	2.00	2.44	1	11/21/2019 17:08	WG1382684
Silver	U		0.146	1.00	1.22	1	11/21/2019 17:08	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.03	0.100	3.05	25	11/24/2019 08:46	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/24/2019 08:46*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0167	0.0250	0.0305	1	11/26/2019 20:33	WG1387391
Acrylonitrile	U		0.00232	0.0125	0.0152	1	11/26/2019 20:33	WG1387391
Benzene	0.000794	J	0.000488	0.00100	0.00122	1	11/26/2019 20:33	WG1387391
Bromobenzene	U		0.00128	0.0125	0.0152	1	11/26/2019 20:33	WG1387391
Bromodichloromethane	U		0.000961	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
Bromoform	U		0.00729	0.0250	0.0305	1	11/26/2019 20:33	WG1387391
Bromomethane	U		0.00451	0.0125	0.0152	1	11/26/2019 20:33	WG1387391
n-Butylbenzene	U		0.00468	0.0125	0.0152	1	11/26/2019 20:33	WG1387391
sec-Butylbenzene	U		0.00309	0.0125	0.0152	1	11/26/2019 20:33	WG1387391
tert-Butylbenzene	U		0.00189	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
Carbon tetrachloride	U		0.00132	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
Chlorobenzene	U		0.000699	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
Chlorodibromomethane	U		0.000549	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
Chloroethane	U		0.00132	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
Chloroform	U		0.000506	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
Chloromethane	U	J4	0.00170	0.0125	0.0152	1	11/26/2019 20:33	WG1387391
2-Chlorotoluene	U		0.00112	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
4-Chlorotoluene	U		0.00138	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
1,2-Dibromo-3-Chloropropane	U		0.00622	0.0250	0.0305	1	11/26/2019 20:33	WG1387391
1,2-Dibromoethane	U		0.000640	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
Dibromomethane	U		0.00122	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
1,2-Dichlorobenzene	U		0.00177	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
1,3-Dichlorobenzene	U		0.00207	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
1,4-Dichlorobenzene	U		0.00240	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
Dichlorodifluoromethane	U		0.000998	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
1,1-Dichloroethane	U		0.000701	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
1,2-Dichloroethane	U		0.000579	0.00250	0.00305	1	11/26/2019 20:33	WG1387391

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000610	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
cis-1,2-Dichloroethene	U		0.000842	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
trans-1,2-Dichloroethene	U		0.00174	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
1,2-Dichloropropane	U		0.00155	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
1,1-Dichloropropene	U		0.000854	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
1,3-Dichloropropane	U		0.00213	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
cis-1,3-Dichloropropene	U		0.000827	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
trans-1,3-Dichloropropene	U		0.00187	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
2,2-Dichloropropane	U	J4	0.000967	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
Di-isopropyl ether	U		0.000427	0.00100	0.00122	1	11/26/2019 20:33	WG1387391
Ethylbenzene	U		0.000646	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
Hexachloro-1,3-butadiene	U		0.0155	0.0250	0.0305	1	11/26/2019 20:33	WG1387391
Isopropylbenzene	U		0.00105	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
p-Isopropyltoluene	0.0132		0.00284	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
2-Butanone (MEK)	U		0.0152	0.0250	0.0305	1	11/26/2019 20:33	WG1387391
Methylene Chloride	U		0.00810	0.0250	0.0305	1	11/26/2019 20:33	WG1387391
4-Methyl-2-pentanone (MIBK)	U		0.0122	0.0250	0.0305	1	11/26/2019 20:33	WG1387391
Methyl tert-butyl ether	U		0.000360	0.00100	0.00122	1	11/26/2019 20:33	WG1387391
Naphthalene	0.0351		0.00381	0.0125	0.0152	1	11/26/2019 20:33	WG1387391
n-Propylbenzene	U	J4	0.00144	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
Styrene	U		0.00333	0.0125	0.0152	1	11/26/2019 20:33	WG1387391
1,1,1,2-Tetrachloroethane	U		0.000610	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
1,1,2,2-Tetrachloroethane	U	J4	0.000476	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
1,1,2-Trichlorotrifluoroethane	U		0.000823	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
Tetrachloroethene	U		0.000854	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
Toluene	0.00671		0.00152	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
1,2,3-Trichlorobenzene	U		0.000762	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
1,2,4-Trichlorobenzene	U		0.00588	0.0125	0.0152	1	11/26/2019 20:33	WG1387391
1,1,1-Trichloroethane	U		0.000335	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
1,1,2-Trichloroethane	U		0.00108	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
Trichloroethene	U		0.000488	0.00100	0.00122	1	11/26/2019 20:33	WG1387391
Trichlorofluoromethane	U		0.000610	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
1,2,3-Trichloropropane	U		0.00622	0.0125	0.0152	1	11/26/2019 20:33	WG1387391
1,2,4-Trimethylbenzene	0.00307	J	0.00141	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
1,2,3-Trimethylbenzene	0.00200	J	0.00140	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
1,3,5-Trimethylbenzene	U		0.00132	0.00500	0.00610	1	11/26/2019 20:33	WG1387391
Vinyl chloride	U		0.000833	0.00250	0.00305	1	11/26/2019 20:33	WG1387391
Xylenes, Total	U		0.00583	0.00650	0.00793	1	11/26/2019 20:33	WG1387391
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 20:33*	WG1387391
(S) 4-Bromofluorobenzene	*89.6*				*67.0-138*		*11/26/2019 20:33*	WG1387391
(S) 1,2-Dichloroethane-d4	*96.0*				*70.0-130*		*11/26/2019 20:33*	WG1387391

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	112		16.2	4.00	48.8	10	11/22/2019 22:58	WG1384286
Residual Range Organics (RRO)	753		40.6	10.0	122	10	11/22/2019 22:58	WG1384286
(S) o-Terphenyl	*54.1*				*18.0-148*		*11/22/2019 22:58*	WG1384286

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.1		1	11/22/2019 19:33	WG1384993

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0874		0.00341	0.0300	0.0366	1	11/19/2019 20:45	WG1382813

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.00		0.561	2.00	2.44	1	11/21/2019 17:11	WG1382684
Barium	100		0.207	0.500	0.609	1	11/21/2019 17:11	WG1382684
Cadmium	0.305	J	0.0853	0.500	0.609	1	11/21/2019 17:11	WG1382684
Chromium	34.6		0.171	1.00	1.22	1	11/21/2019 17:11	WG1382684
Lead	20.2		0.232	0.500	0.609	1	11/21/2019 17:11	WG1382684
Selenium	U		0.755	2.00	2.44	1	11/21/2019 17:11	WG1382684
Silver	U		0.146	1.00	1.22	1	11/21/2019 17:11	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.31	0.100	3.87	31.8	11/24/2019 09:10	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*99.9*				*77.0-120*		*11/24/2019 09:10*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0167	0.0250	0.0305	1	11/26/2019 20:52	WG1387391
Acrylonitrile	U		0.00232	0.0125	0.0152	1	11/26/2019 20:52	WG1387391
Benzene	U		0.000487	0.00100	0.00122	1	11/26/2019 20:52	WG1387391
Bromobenzene	U		0.00128	0.0125	0.0152	1	11/26/2019 20:52	WG1387391
Bromodichloromethane	U		0.000960	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
Bromoform	U		0.00729	0.0250	0.0305	1	11/26/2019 20:52	WG1387391
Bromomethane	U		0.00451	0.0125	0.0152	1	11/26/2019 20:52	WG1387391
n-Butylbenzene	U		0.00468	0.0125	0.0152	1	11/26/2019 20:52	WG1387391
sec-Butylbenzene	U		0.00308	0.0125	0.0152	1	11/26/2019 20:52	WG1387391
tert-Butylbenzene	U		0.00189	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
Carbon tetrachloride	U		0.00132	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
Chlorobenzene	U		0.000698	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
Chlorodibromomethane	U		0.000548	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
Chloroethane	U		0.00132	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
Chloroform	U		0.000506	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
Chloromethane	U	J4	0.00169	0.0125	0.0152	1	11/26/2019 20:52	WG1387391
2-Chlorotoluene	U		0.00112	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
4-Chlorotoluene	U		0.00138	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
1,2-Dibromo-3-Chloropropane	U		0.00621	0.0250	0.0305	1	11/26/2019 20:52	WG1387391
1,2-Dibromoethane	U		0.000640	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
Dibromomethane	U		0.00122	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
1,2-Dichlorobenzene	U		0.00177	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
1,3-Dichlorobenzene	U		0.00207	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
1,4-Dichlorobenzene	U		0.00240	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
Dichlorodifluoromethane	U		0.000997	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
1,1-Dichloroethane	U		0.000701	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
1,2-Dichloroethane	U		0.000579	0.00250	0.00305	1	11/26/2019 20:52	WG1387391

SB-29(19-20)

Collected date/time: 11/14/19 10:53

SAMPLE RESULTS - 64

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000609	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
cis-1,2-Dichloroethene	U		0.000841	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
trans-1,2-Dichloroethene	U		0.00174	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
1,2-Dichloropropane	U		0.00155	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
1,1-Dichloropropene	U		0.000853	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
1,3-Dichloropropane	U		0.00213	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
cis-1,3-Dichloropropene	U		0.000826	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
trans-1,3-Dichloropropene	U		0.00186	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
2,2-Dichloropropane	U	J4	0.000966	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
Di-isopropyl ether	U		0.000426	0.00100	0.00122	1	11/26/2019 20:52	WG1387391
Ethylbenzene	U		0.000646	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
Hexachloro-1,3-butadiene	U		0.0155	0.0250	0.0305	1	11/26/2019 20:52	WG1387391
Isopropylbenzene	U		0.00105	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
p-Isopropyltoluene	U		0.00284	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
2-Butanone (MEK)	U		0.0152	0.0250	0.0305	1	11/26/2019 20:52	WG1387391
Methylene Chloride	U		0.00809	0.0250	0.0305	1	11/26/2019 20:52	WG1387391
4-Methyl-2-pentanone (MIBK)	U		0.0122	0.0250	0.0305	1	11/26/2019 20:52	WG1387391
Methyl tert-butyl ether	U		0.000359	0.00100	0.00122	1	11/26/2019 20:52	WG1387391
Naphthalene	0.00612	J	0.00380	0.0125	0.0152	1	11/26/2019 20:52	WG1387391
n-Propylbenzene	U	J4	0.00144	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
Styrene	U		0.00333	0.0125	0.0152	1	11/26/2019 20:52	WG1387391
1,1,1,2-Tetrachloroethane	U		0.000609	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
1,1,2,2-Tetrachloroethane	U	J4	0.000475	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
1,1,2-Trichlorotrifluoroethane	U		0.000823	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
Tetrachloroethene	U		0.000853	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
Toluene	0.00308	J	0.00152	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
1,2,3-Trichlorobenzene	U		0.000762	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
1,2,4-Trichlorobenzene	U		0.00587	0.0125	0.0152	1	11/26/2019 20:52	WG1387391
1,1,1-Trichloroethane	U		0.000335	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
1,1,2-Trichloroethane	U		0.00108	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
Trichloroethene	U		0.000487	0.00100	0.00122	1	11/26/2019 20:52	WG1387391
Trichlorofluoromethane	U		0.000609	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
1,2,3-Trichloropropane	U		0.00621	0.0125	0.0152	1	11/26/2019 20:52	WG1387391
1,2,4-Trimethylbenzene	U		0.00141	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
1,2,3-Trimethylbenzene	U		0.00140	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
1,3,5-Trimethylbenzene	U		0.00132	0.00500	0.00609	1	11/26/2019 20:52	WG1387391
Vinyl chloride	U		0.000832	0.00250	0.00305	1	11/26/2019 20:52	WG1387391
Xylenes, Total	U		0.00582	0.00650	0.00792	1	11/26/2019 20:52	WG1387391
(S) Toluene-d8	*104*				*75.0-131*		*11/26/2019 20:52*	WG1387391
(S) 4-Bromofluorobenzene	*87.1*				*67.0-138*		*11/26/2019 20:52*	WG1387391
(S) 1,2-Dichloroethane-d4	*99.6*				*70.0-130*		*11/26/2019 20:52*	WG1387391

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	25.2	J	16.2	4.00	48.7	10	11/21/2019 22:09	WG1384286
Residual Range Organics (RRO)	185		40.6	10.0	122	10	11/21/2019 22:09	WG1384286
(S) o-Terphenyl	*86.9*				*18.0-148*		*11/21/2019 22:09*	WG1384286

Sample Narrative:

L1161924-64 WG1384286: Dilution due to matrix impact during extract concentration procedure

SB-30(0-0.5)
Collected date/time: 11/14/19 13:35

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.9		1	11/22/2019 19:33	WG1384993

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0277	J	0.00298	0.0300	0.0319	1	11/19/2019 21:31	WG1382813

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	338		0.490	2.00	2.13	1	11/21/2019 17:13	WG1382684
Barium	68.8		0.181	0.500	0.532	1	11/21/2019 17:13	WG1382684
Cadmium	0.911		0.0745	0.500	0.532	1	11/21/2019 17:13	WG1382684
Chromium	43.9		0.149	1.00	1.06	1	11/21/2019 17:13	WG1382684
Lead	301		0.202	0.500	0.532	1	11/21/2019 17:13	WG1382684
Selenium	U		0.660	2.00	2.13	1	11/21/2019 17:13	WG1382684
Silver	0.783	J	0.128	1.00	1.06	1	11/21/2019 17:13	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.902	0.100	2.66	25	11/24/2019 09:35	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*11/24/2019 09:35*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0146	0.0250	0.0266	1	11/26/2019 21:11	WG1387391
Acrylonitrile	U		0.00202	0.0125	0.0133	1	11/26/2019 21:11	WG1387391
Benzene	0.00111		0.000426	0.00100	0.00106	1	11/26/2019 21:11	WG1387391
Bromobenzene	U		0.00112	0.0125	0.0133	1	11/26/2019 21:11	WG1387391
Bromodichloromethane	U		0.000839	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
Bromoform	U		0.00637	0.0250	0.0266	1	11/26/2019 21:11	WG1387391
Bromomethane	U		0.00394	0.0125	0.0133	1	11/26/2019 21:11	WG1387391
n-Butylbenzene	U		0.00409	0.0125	0.0133	1	11/26/2019 21:11	WG1387391
sec-Butylbenzene	U		0.00269	0.0125	0.0133	1	11/26/2019 21:11	WG1387391
tert-Butylbenzene	U		0.00165	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
Carbon tetrachloride	U		0.00115	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
Chlorobenzene	U		0.000610	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
Chlorodibromomethane	U		0.000479	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
Chloroethane	U		0.00115	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
Chloroform	U		0.000442	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
Chloromethane	U	J4	0.00148	0.0125	0.0133	1	11/26/2019 21:11	WG1387391
2-Chlorotoluene	U		0.000979	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
4-Chlorotoluene	U		0.00120	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
1,2-Dibromo-3-Chloropropane	U		0.00543	0.0250	0.0266	1	11/26/2019 21:11	WG1387391
1,2-Dibromoethane	U		0.000559	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
Dibromomethane	U		0.00106	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
1,2-Dichlorobenzene	U		0.00154	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
1,3-Dichlorobenzene	U		0.00181	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
1,4-Dichlorobenzene	U		0.00210	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
Dichlorodifluoromethane	U		0.000871	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
1,1-Dichloroethane	U		0.000612	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
1,2-Dichloroethane	U		0.000506	0.00250	0.00266	1	11/26/2019 21:11	WG1387391

SB-30(0-0.5)
Collected date/time: 11/14/19 13:35

SAMPLE RESULTS - 65

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000532	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
cis-1,2-Dichloroethene	U		0.000735	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
trans-1,2-Dichloroethene	U		0.00152	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
1,2-Dichloropropane	U		0.00135	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
1,1-Dichloropropene	U		0.000745	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
1,3-Dichloropropane	U		0.00186	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
cis-1,3-Dichloropropene	U		0.000722	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
trans-1,3-Dichloropropene	U		0.00163	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
2,2-Dichloropropane	U	J4	0.000844	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
Di-isopropyl ether	U		0.000373	0.00100	0.00106	1	11/26/2019 21:11	WG1387391
Ethylbenzene	U		0.000564	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
Hexachloro-1,3-butadiene	U		0.0135	0.0250	0.0266	1	11/26/2019 21:11	WG1387391
Isopropylbenzene	U		0.000919	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
p-Isopropyltoluene	0.00274	J	0.00248	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
2-Butanone (MEK)	U		0.0133	0.0250	0.0266	1	11/26/2019 21:11	WG1387391
Methylene Chloride	U		0.00707	0.0250	0.0266	1	11/26/2019 21:11	WG1387391
4-Methyl-2-pentanone (MIBK)	U		0.0106	0.0250	0.0266	1	11/26/2019 21:11	WG1387391
Methyl tert-butyl ether	U		0.000314	0.00100	0.00106	1	11/26/2019 21:11	WG1387391
Naphthalene	U		0.00332	0.0125	0.0133	1	11/26/2019 21:11	WG1387391
n-Propylbenzene	0.00133	J J4	0.00126	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
Styrene	U		0.00291	0.0125	0.0133	1	11/26/2019 21:11	WG1387391
1,1,1,2-Tetrachloroethane	U		0.000532	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
1,1,2,2-Tetrachloroethane	U	J4	0.000415	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
1,1,2-Trichlorotrifluoroethane	U		0.000719	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
Tetrachloroethene	U		0.000745	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
Toluene	0.00729		0.00133	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
1,2,3-Trichlorobenzene	U		0.000665	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
1,2,4-Trichlorobenzene	U		0.00513	0.0125	0.0133	1	11/26/2019 21:11	WG1387391
1,1,1-Trichloroethane	U		0.000293	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
1,1,2-Trichloroethane	U		0.000940	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
Trichloroethene	U		0.000426	0.00100	0.00106	1	11/26/2019 21:11	WG1387391
Trichlorofluoromethane	U		0.000532	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
1,2,3-Trichloropropane	U		0.00543	0.0125	0.0133	1	11/26/2019 21:11	WG1387391
1,2,4-Trimethylbenzene	0.00705		0.00123	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
1,2,3-Trimethylbenzene	0.00228	J	0.00122	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
1,3,5-Trimethylbenzene	0.00208	J	0.00115	0.00500	0.00532	1	11/26/2019 21:11	WG1387391
Vinyl chloride	U		0.000727	0.00250	0.00266	1	11/26/2019 21:11	WG1387391
Xylenes, Total	0.0109		0.00509	0.00650	0.00692	1	11/26/2019 21:11	WG1387391
(S) Toluene-d8	*98.8*				*75.0-131*		*11/26/2019 21:11*	WG1387391
(S) 4-Bromofluorobenzene	*91.8*				*67.0-138*		*11/26/2019 21:11*	WG1387391
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*11/26/2019 21:11*	WG1387391

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	87.5	J	70.8	4.00	213	50	11/21/2019 22:59	WG1384286
Residual Range Organics (RRO)	804		177	10.0	532	50	11/21/2019 22:59	WG1384286
(S) o-Terphenyl	*93.0*	J7			*18.0-148*		*11/21/2019 22:59*	WG1384286

Sample Narrative:

L1161924-65 WG1384286: Cannot run at lower dilution due to viscosity of extract

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

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-D	U		0.00747	0.0700	0.0745	1	11/23/2019 19:49	WG1384420
Dalapon	U		0.0120	0.0700	0.0745	1	11/23/2019 19:49	WG1384420
2,4-DB	U		0.0316	0.0700	0.0745	1	11/23/2019 19:49	WG1384420
Dicamba	U		0.0167	0.0700	0.0745	1	11/23/2019 19:49	WG1384420
Dichloroprop	U		0.0261	0.0700	0.0745	1	11/23/2019 19:49	WG1384420
Dinoseb	U	J4	0.00742	0.0700	0.0745	1	11/23/2019 19:49	WG1384420
MCPA	U		0.472	6.50	6.92	1	11/23/2019 19:49	WG1384420
MCPP	U		0.391	6.50	6.92	1	11/23/2019 19:49	WG1384420
2,4,5-T	U		0.00907	0.0700	0.0745	1	11/23/2019 19:49	WG1384420
2,4,5-TP (Silvex)	U		0.0114	0.0700	0.0745	1	11/23/2019 19:49	WG1384420
(S) 2,4-Dichlorophenyl Acetic Acid	*148*	J1			*22.0-132*		*11/23/2019 19:49*	WG1384420

OP Pesticides by Method 8141B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Azinphos-Methyl	U		0.0805	0.100	2.13	20	11/20/2019 19:45	WG1382165
Bolstar (Sulprofos)	U		0.118	0.100	2.13	20	11/20/2019 19:45	WG1382165
Chlorpyrifos	U		0.197	0.100	2.13	20	11/20/2019 19:45	WG1382165
Coumaphos	U		0.145	0.100	2.13	20	11/20/2019 19:45	WG1382165
Demeton,-O and -S	U		0.0722	0.0700	1.49	20	11/20/2019 19:45	WG1382165
Diazinon	U		0.0952	0.100	2.13	20	11/20/2019 19:45	WG1382165
Dichlorvos	U		0.206	0.100	2.13	20	11/20/2019 19:45	WG1382165
Dimethoate	U		0.422	0.100	2.13	20	11/20/2019 19:45	WG1382165
Disulfoton	U		0.106	0.100	2.13	20	11/20/2019 19:45	WG1382165
EPN	U	J4	0.109	0.100	2.13	20	11/20/2019 19:45	WG1382165
Ethoprop	U		0.0990	0.100	2.13	20	11/20/2019 19:45	WG1382165
Ethyl Parathion	U		0.122	0.100	2.13	20	11/20/2019 19:45	WG1382165
Fensulfothion	U		0.360	0.100	2.13	20	11/20/2019 19:45	WG1382165
Fenthion	U		0.129	0.100	2.13	20	11/20/2019 19:45	WG1382165
Malathion	U		0.149	0.100	2.13	20	11/20/2019 19:45	WG1382165
Merphos	U	J4	0.115	0.100	2.13	20	11/20/2019 19:45	WG1382165
Methyl parathion	U		0.142	0.100	2.13	20	11/20/2019 19:45	WG1382165
Mevinphos	U		0.217	0.100	2.13	20	11/20/2019 19:45	WG1382165
Naled	U		0.0890	0.100	2.13	20	11/20/2019 19:45	WG1382165
Phorate	U		0.100	0.100	2.13	20	11/20/2019 19:45	WG1382165
Ronnel	U		0.0930	0.100	2.13	20	11/20/2019 19:45	WG1382165
Stirophos	U		0.114	0.100	2.13	20	11/20/2019 19:45	WG1382165
Sulfotep	U		0.0822	0.100	2.13	20	11/20/2019 19:45	WG1382165
TEPP	U		3.34	1.00	21.3	20	11/20/2019 19:45	WG1382165
Tokuthion (Prothothiofos)	U		0.129	0.100	2.13	20	11/20/2019 19:45	WG1382165
Trichloronate	U		0.141	0.100	2.13	20	11/20/2019 19:45	WG1382165
(S) Triphenyl Phosphate	*79.9*	J7			*36.0-121*		*11/20/2019 19:45*	WG1382165

Sample Narrative:

L1161924-65 WG1382165: Cannot run at lower dilution due to viscosity of extract

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00144	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Alpha BHC	U		0.00145	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Beta BHC	U		0.00170	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Delta BHC	U		0.00152	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Gamma BHC	U		0.00154	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Chlordane	U		0.0415	0.200	0.213	1	11/19/2019 14:26	WG1382839

SB-30(0-0.5)

Collected date/time: 11/14/19 13:35

SAMPLE RESULTS - 65

L1161924

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
4,4-DDD	U		0.00166	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
4,4-DDE	U		0.00164	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
4,4-DDT	U		0.00213	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Dieldrin	0.00314	J	0.00162	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Endosulfan I	U		0.00159	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Endosulfan II	U		0.00170	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Endosulfan sulfate	U		0.00161	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Endrin	U		0.00167	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Endrin aldehyde	U		0.00137	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Endrin ketone	U		0.00176	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Hexachlorobenzene	U		0.00132	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Heptachlor	U		0.00164	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Heptachlor epoxide	U		0.00171	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Methoxychlor	U		0.00189	0.0200	0.0213	1	11/19/2019 14:26	WG1382839
Toxaphene	U		0.0383	0.400	0.426	1	11/19/2019 14:26	WG1382839
(S) Decachlorobiphenyl	*109*				*10.0-135*		*11/19/2019 14:26*	WG1382839
(S) Tetrachloro-m-xylene	*110*				*10.0-139*		*11/19/2019 14:26*	WG1382839

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

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.7		1	11/22/2019 19:33	WG1384993

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0250	J	0.00299	0.0300	0.0320	1	11/19/2019 21:33	WG1382813

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	291		0.491	2.00	2.14	1	11/21/2019 15:57	WG1382684
Barium	71.0		0.182	0.500	0.534	1	11/21/2019 15:57	WG1382684
Cadmium	0.850		0.0747	0.500	0.534	1	11/21/2019 15:57	WG1382684
Chromium	37.4		0.149	1.00	1.07	1	11/21/2019 15:57	WG1382684
Lead	261		0.203	0.500	0.534	1	11/21/2019 15:57	WG1382684
Selenium	U		0.662	2.00	2.14	1	11/21/2019 15:57	WG1382684
Silver	0.620	J	0.128	1.00	1.07	1	11/21/2019 15:57	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.905	0.100	2.67	25	11/24/2019 09:59	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/24/2019 09:59*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0146	0.0250	0.0267	1	11/26/2019 21:30	WG1387391
Acrylonitrile	U		0.00203	0.0125	0.0133	1	11/26/2019 21:30	WG1387391
Benzene	0.00211		0.000427	0.00100	0.00107	1	11/26/2019 21:30	WG1387391
Bromobenzene	U		0.00112	0.0125	0.0133	1	11/26/2019 21:30	WG1387391
Bromodichloromethane	U		0.000841	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
Bromoform	U		0.00638	0.0250	0.0267	1	11/26/2019 21:30	WG1387391
Bromomethane	U		0.00395	0.0125	0.0133	1	11/26/2019 21:30	WG1387391
n-Butylbenzene	U		0.00410	0.0125	0.0133	1	11/26/2019 21:30	WG1387391
sec-Butylbenzene	U		0.00270	0.0125	0.0133	1	11/26/2019 21:30	WG1387391
tert-Butylbenzene	U		0.00165	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
Carbon tetrachloride	U		0.00115	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
Chlorobenzene	U		0.000612	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
Chlorodibromomethane	U		0.000480	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
Chloroethane	U		0.00115	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
Chloroform	0.000627	J	0.000443	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
Chloromethane	U	J4	0.00148	0.0125	0.0133	1	11/26/2019 21:30	WG1387391
2-Chlorotoluene	U		0.000982	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
4-Chlorotoluene	U		0.00121	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
1,2-Dibromo-3-Chloropropane	U		0.00545	0.0250	0.0267	1	11/26/2019 21:30	WG1387391
1,2-Dibromoethane	U		0.000561	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
Dibromomethane	U		0.00107	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
1,2-Dichlorobenzene	U		0.00155	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
1,3-Dichlorobenzene	U		0.00182	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
1,4-Dichlorobenzene	U		0.00210	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
Dichlorodifluoromethane	U		0.000873	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
1,1-Dichloroethane	U		0.000614	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
1,2-Dichloroethane	U		0.000507	0.00250	0.00267	1	11/26/2019 21:30	WG1387391

SB-30(0.5-1)

Collected date/time: 11/14/19 13:36

SAMPLE RESULTS - 66

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000534	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
cis-1,2-Dichloroethene	U		0.000737	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
trans-1,2-Dichloroethene	U		0.00153	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
1,2-Dichloropropane	U		0.00136	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
1,1-Dichloropropene	U		0.000747	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
1,3-Dichloropropane	U		0.00187	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
cis-1,3-Dichloropropene	U		0.000724	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
trans-1,3-Dichloropropene	U		0.00163	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
2,2-Dichloropropane	U	J4	0.000847	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
Di-isopropyl ether	U		0.000374	0.00100	0.00107	1	11/26/2019 21:30	WG1387391
Ethylbenzene	0.00167	J	0.000566	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
Hexachloro-1,3-butadiene	U		0.0136	0.0250	0.0267	1	11/26/2019 21:30	WG1387391
Isopropylbenzene	U		0.000921	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
p-Isopropyltoluene	0.00253	J	0.00249	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
2-Butanone (MEK)	U		0.0133	0.0250	0.0267	1	11/26/2019 21:30	WG1387391
Methylene Chloride	U		0.00709	0.0250	0.0267	1	11/26/2019 21:30	WG1387391
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0250	0.0267	1	11/26/2019 21:30	WG1387391
Methyl tert-butyl ether	U		0.000315	0.00100	0.00107	1	11/26/2019 21:30	WG1387391
Naphthalene	U		0.00333	0.0125	0.0133	1	11/26/2019 21:30	WG1387391
n-Propylbenzene	U	J4	0.00126	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
Styrene	U		0.00291	0.0125	0.0133	1	11/26/2019 21:30	WG1387391
1,1,1,2-Tetrachloroethane	U		0.000534	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
1,1,2,2-Tetrachloroethane	U	J4	0.000416	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
1,1,2-Trichlorotrifluoroethane	U		0.000721	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
Tetrachloroethene	U		0.000747	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
Toluene	0.0111		0.00133	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
1,2,3-Trichlorobenzene	U		0.000667	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
1,2,4-Trichlorobenzene	U		0.00515	0.0125	0.0133	1	11/26/2019 21:30	WG1387391
1,1,1-Trichloroethane	U		0.000294	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
1,1,2-Trichloroethane	U		0.000943	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
Trichloroethene	U		0.000427	0.00100	0.00107	1	11/26/2019 21:30	WG1387391
Trichlorofluoromethane	U		0.000534	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
1,2,3-Trichloropropane	U		0.00545	0.0125	0.0133	1	11/26/2019 21:30	WG1387391
1,2,4-Trimethylbenzene	0.00361	J	0.00124	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
1,2,3-Trimethylbenzene	0.00145	J	0.00123	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
1,3,5-Trimethylbenzene	U		0.00115	0.00500	0.00534	1	11/26/2019 21:30	WG1387391
Vinyl chloride	U		0.000729	0.00250	0.00267	1	11/26/2019 21:30	WG1387391
Xylenes, Total	0.00745		0.00510	0.00650	0.00694	1	11/26/2019 21:30	WG1387391
(S) Toluene-d8	*101*				*75.0-131*		*11/26/2019 21:30*	WG1387391
(S) 4-Bromofluorobenzene	*85.9*				*67.0-138*		*11/26/2019 21:30*	WG1387391
(S) 1,2-Dichloroethane-d4	*94.6*				*70.0-130*		*11/26/2019 21:30*	WG1387391

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	89.9	J	71.0	4.00	214	50	11/21/2019 23:12	WG1384286
Residual Range Organics (RRO)	842		178	10.0	534	50	11/21/2019 23:12	WG1384286
(S) o-Terphenyl	*96.1*	J7			*18.0-148*		*11/21/2019 23:12*	WG1384286

Sample Narrative:

L1161924-66 WG1384286: Cannot run at lower dilution due to viscosity of extract

SB-30(0.5-1)

Collected date/time: 11/14/19 13:36

SAMPLE RESULTS - 66

L1161924

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-D	U		0.00750	0.0700	0.0747	1	11/23/2019 20:02	WG1384420
Dalapon	U		0.0121	0.0700	0.0747	1	11/23/2019 20:02	WG1384420
2,4-DB	U		0.0317	0.0700	0.0747	1	11/23/2019 20:02	WG1384420
Dicamba	U		0.0168	0.0700	0.0747	1	11/23/2019 20:02	WG1384420
Dichloroprop	U		0.0262	0.0700	0.0747	1	11/23/2019 20:02	WG1384420
Dinoseb	U	J4	0.00744	0.0700	0.0747	1	11/23/2019 20:02	WG1384420
MCPA	U		0.473	6.50	6.94	1	11/23/2019 20:02	WG1384420
MCPP	U		0.392	6.50	6.94	1	11/23/2019 20:02	WG1384420
2,4,5-T	U		0.00910	0.0700	0.0747	1	11/23/2019 20:02	WG1384420
2,4,5-TP (Silvex)	U		0.0114	0.0700	0.0747	1	11/23/2019 20:02	WG1384420
(S) 2,4-Dichlorophenyl Acetic Acid	*74.3*				*22.0-132*		*11/23/2019 20:02*	WG1384420

OP Pesticides by Method 8141B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Azinphos-Methyl	U		0.0807	0.100	2.14	20	11/20/2019 20:16	WG1382165
Bolstar (Sulprofos)	U		0.118	0.100	2.14	20	11/20/2019 20:16	WG1382165
Chlorpyrifos	U		0.197	0.100	2.14	20	11/20/2019 20:16	WG1382165
Coumaphos	U		0.145	0.100	2.14	20	11/20/2019 20:16	WG1382165
Demeton,-O and -S	U		0.0724	0.0700	1.49	20	11/20/2019 20:16	WG1382165
Diazinon	U		0.0955	0.100	2.14	20	11/20/2019 20:16	WG1382165
Dichlorvos	U		0.207	0.100	2.14	20	11/20/2019 20:16	WG1382165
Dimethoate	U		0.423	0.100	2.14	20	11/20/2019 20:16	WG1382165
Disulfoton	U		0.106	0.100	2.14	20	11/20/2019 20:16	WG1382165
EPN	U	J4	0.109	0.100	2.14	20	11/20/2019 20:16	WG1382165
Ethoprop	U		0.0993	0.100	2.14	20	11/20/2019 20:16	WG1382165
Ethyl Parathion	U		0.122	0.100	2.14	20	11/20/2019 20:16	WG1382165
Fensulfothion	U		0.361	0.100	2.14	20	11/20/2019 20:16	WG1382165
Fenthion	U		0.130	0.100	2.14	20	11/20/2019 20:16	WG1382165
Malathion	U		0.149	0.100	2.14	20	11/20/2019 20:16	WG1382165
Merphos	U	J4	0.115	0.100	2.14	20	11/20/2019 20:16	WG1382165
Methyl parathion	U		0.143	0.100	2.14	20	11/20/2019 20:16	WG1382165
Mevinphos	U		0.218	0.100	2.14	20	11/20/2019 20:16	WG1382165
Naled	U		0.0893	0.100	2.14	20	11/20/2019 20:16	WG1382165
Phorate	U		0.101	0.100	2.14	20	11/20/2019 20:16	WG1382165
Ronnel	U		0.0933	0.100	2.14	20	11/20/2019 20:16	WG1382165
Stirophos	U		0.115	0.100	2.14	20	11/20/2019 20:16	WG1382165
Sulfotep	U		0.0824	0.100	2.14	20	11/20/2019 20:16	WG1382165
TEPP	U		3.35	1.00	21.4	20	11/20/2019 20:16	WG1382165
Tokuthion (Prothothiofos)	U		0.129	0.100	2.14	20	11/20/2019 20:16	WG1382165
Trichloronate	U		0.142	0.100	2.14	20	11/20/2019 20:16	WG1382165
(S) Triphenyl Phosphate	*85.7*	J7			*36.0-121*		*11/20/2019 20:16*	WG1382165

Sample Narrative:

L1161924-66 WG1382165: Cannot run at lower dilution due to viscosity of extract

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00144	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Alpha BHC	U		0.00145	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Beta BHC	U		0.00171	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Delta BHC	U		0.00153	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Gamma BHC	U		0.00155	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Chlordane	U		0.0416	0.200	0.214	1	11/19/2019 15:03	WG1382839

SB-30(0.5-1)

Collected date/time: 11/14/19 13:36

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
4,4-DDD	U		0.00167	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
4,4-DDE	U		0.00164	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
4,4-DDT	U		0.00214	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Dieldrin	0.00290	J	0.00162	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Endosulfan I	U		0.00159	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Endosulfan II	U		0.00171	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Endosulfan sulfate	U		0.00161	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Endrin	U		0.00168	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Endrin aldehyde	U		0.00138	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Endrin ketone	U		0.00176	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Hexachlorobenzene	U		0.00132	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Heptachlor	U		0.00164	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Heptachlor epoxide	U		0.00172	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Methoxychlor	U		0.00190	0.0200	0.0214	1	11/19/2019 15:03	WG1382839
Toxaphene	U		0.0384	0.400	0.427	1	11/19/2019 15:03	WG1382839
(S) Decachlorobiphenyl	*103*				*10.0-135*		*11/19/2019 15:03*	WG1382839
(S) Tetrachloro-m-xylene	*107*				*10.0-139*		*11/19/2019 15:03*	WG1382839

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

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5		1	11/22/2019 19:33	WG1384993

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0278	J	0.00300	0.0300	0.0321	1	11/19/2019 21:36	WG1382813

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	142		0.492	2.00	2.14	1	11/21/2019 16:00	WG1382684
Barium	86.9		0.182	0.500	0.535	1	11/21/2019 16:00	WG1382684
Cadmium	0.498	J	0.0749	0.500	0.535	1	11/21/2019 16:00	WG1382684
Chromium	33.3		0.150	1.00	1.07	1	11/21/2019 16:00	WG1382684
Lead	127		0.203	0.500	0.535	1	11/21/2019 16:00	WG1382684
Selenium	U		0.663	2.00	2.14	1	11/21/2019 16:00	WG1382684
Silver	0.226	J	0.128	1.00	1.07	1	11/21/2019 16:00	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.36	0.100	4.01	37.5	11/24/2019 10:23	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*11/24/2019 10:23*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0155	0.0250	0.0284	1.06	11/26/2019 21:48	WG1387391
Acrylonitrile	U		0.00215	0.0125	0.0142	1.06	11/26/2019 21:48	WG1387391
Benzene	U		0.000454	0.00100	0.00113	1.06	11/26/2019 21:48	WG1387391
Bromobenzene	U		0.00119	0.0125	0.0142	1.06	11/26/2019 21:48	WG1387391
Bromodichloromethane	U		0.000894	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
Bromoform	U		0.00678	0.0250	0.0284	1.06	11/26/2019 21:48	WG1387391
Bromomethane	U		0.00420	0.0125	0.0142	1.06	11/26/2019 21:48	WG1387391
n-Butylbenzene	U		0.00435	0.0125	0.0142	1.06	11/26/2019 21:48	WG1387391
sec-Butylbenzene	U		0.00287	0.0125	0.0142	1.06	11/26/2019 21:48	WG1387391
tert-Butylbenzene	U		0.00176	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
Carbon tetrachloride	U		0.00122	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
Chlorobenzene	U		0.000650	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
Chlorodibromomethane	U		0.000510	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
Chloroethane	U		0.00122	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
Chloroform	U		0.000471	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
Chloromethane	U	J4	0.00158	0.0125	0.0142	1.06	11/26/2019 21:48	WG1387391
2-Chlorotoluene	U		0.00104	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
4-Chlorotoluene	U		0.00128	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
1,2-Dibromo-3-Chloropropane	U		0.00578	0.0250	0.0284	1.06	11/26/2019 21:48	WG1387391
1,2-Dibromoethane	U		0.000595	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
Dibromomethane	U		0.00113	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
1,2-Dichlorobenzene	U		0.00164	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
1,3-Dichlorobenzene	U		0.00193	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
1,4-Dichlorobenzene	U		0.00223	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
Dichlorodifluoromethane	U		0.000928	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
1,1-Dichloroethane	U		0.000652	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
1,2-Dichloroethane	U		0.000539	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391

SB-30(1-1.5)

Collected date/time: 11/14/19 13:37

SAMPLE RESULTS - 67

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000567	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
cis-1,2-Dichloroethene	U		0.000782	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
trans-1,2-Dichloroethene	U		0.00162	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
1,2-Dichloropropane	U		0.00144	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
1,1-Dichloropropene	U		0.000794	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
1,3-Dichloropropane	U		0.00198	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
cis-1,3-Dichloropropene	U		0.000769	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
trans-1,3-Dichloropropene	U		0.00174	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
2,2-Dichloropropane	U	J4	0.000899	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
Di-isopropyl ether	U		0.000397	0.00100	0.00113	1.06	11/26/2019 21:48	WG1387391
Ethylbenzene	U		0.000601	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
Hexachloro-1,3-butadiene	U		0.0144	0.0250	0.0284	1.06	11/26/2019 21:48	WG1387391
Isopropylbenzene	U		0.000979	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
p-Isopropyltoluene	0.00445	J	0.00264	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
2-Butanone (MEK)	U		0.0142	0.0250	0.0284	1.06	11/26/2019 21:48	WG1387391
Methylene Chloride	U		0.00753	0.0250	0.0284	1.06	11/26/2019 21:48	WG1387391
4-Methyl-2-pentanone (MIBK)	U		0.0113	0.0250	0.0284	1.06	11/26/2019 21:48	WG1387391
Methyl tert-butyl ether	U		0.000335	0.00100	0.00113	1.06	11/26/2019 21:48	WG1387391
Naphthalene	U		0.00354	0.0125	0.0142	1.06	11/26/2019 21:48	WG1387391
n-Propylbenzene	U	J4	0.00134	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
Styrene	U		0.00310	0.0125	0.0142	1.06	11/26/2019 21:48	WG1387391
1,1,1,2-Tetrachloroethane	U		0.000567	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
1,1,2,2-Tetrachloroethane	U	J4	0.000442	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
1,1,2-Trichlorotrifluoroethane	U		0.000765	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
Tetrachloroethene	U		0.000794	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
Toluene	0.00547	J	0.00142	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
1,2,3-Trichlorobenzene	U		0.000709	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
1,2,4-Trichlorobenzene	U		0.00547	0.0125	0.0142	1.06	11/26/2019 21:48	WG1387391
1,1,1-Trichloroethane	U		0.000312	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
1,1,2-Trichloroethane	U		0.00100	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
Trichloroethene	U		0.000454	0.00100	0.00113	1.06	11/26/2019 21:48	WG1387391
Trichlorofluoromethane	U		0.000567	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
1,2,3-Trichloropropane	U		0.00578	0.0125	0.0142	1.06	11/26/2019 21:48	WG1387391
1,2,4-Trimethylbenzene	0.00187	J	0.00132	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
1,2,3-Trimethylbenzene	U		0.00130	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
1,3,5-Trimethylbenzene	U		0.00122	0.00500	0.00567	1.06	11/26/2019 21:48	WG1387391
Vinyl chloride	U		0.000775	0.00250	0.00284	1.06	11/26/2019 21:48	WG1387391
Xylenes, Total	U		0.00542	0.00650	0.00737	1.06	11/26/2019 21:48	WG1387391
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 21:48*	WG1387391
(S) 4-Bromofluorobenzene	*86.7*				*67.0-138*		*11/26/2019 21:48*	WG1387391
(S) 1,2-Dichloroethane-d4	*94.5*				*70.0-130*		*11/26/2019 21:48*	WG1387391

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	33.0	J	14.2	4.00	42.8	10	11/22/2019 23:11	WG1384286
Residual Range Organics (RRO)	233		35.6	10.0	107	10	11/22/2019 23:11	WG1384286
(S) o-Terphenyl	*103*				*18.0-148*		*11/22/2019 23:11*	WG1384286

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

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

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-D	U		0.00751	0.0700	0.0749	1	11/23/2019 20:16	WG1384420
Dalapon	U		0.0121	0.0700	0.0749	1	11/23/2019 20:16	WG1384420
2,4-DB	U		0.0318	0.0700	0.0749	1	11/23/2019 20:16	WG1384420
Dicamba	U		0.0168	0.0700	0.0749	1	11/23/2019 20:16	WG1384420
Dichloroprop	U		0.0262	0.0700	0.0749	1	11/23/2019 20:16	WG1384420
Dinoseb	U	J4	0.00746	0.0700	0.0749	1	11/23/2019 20:16	WG1384420
MCPA	U		0.474	6.50	6.95	1	11/23/2019 20:16	WG1384420
MCPP	U		0.393	6.50	6.95	1	11/23/2019 20:16	WG1384420
2,4,5-T	U		0.00911	0.0700	0.0749	1	11/23/2019 20:16	WG1384420
2,4,5-TP (Silvex)	U		0.0114	0.0700	0.0749	1	11/23/2019 20:16	WG1384420
(S) 2,4-Dichlorophenyl Acetic Acid	*85.0*				*22.0-132*		*11/23/2019 20:16*	WG1384420

OP Pesticides by Method 8141B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Azinphos-Methyl	U		0.00404	0.100	0.107	1	11/21/2019 13:01	WG1382165
Bolstar (Sulprofos)	U		0.00593	0.100	0.107	1	11/21/2019 13:01	WG1382165
Chlorpyrifos	U		0.00987	0.100	0.107	1	11/21/2019 13:01	WG1382165
Coumaphos	U		0.00727	0.100	0.107	1	11/21/2019 13:01	WG1382165
Demeton,-O and -S	U		0.00363	0.0700	0.0749	1	11/21/2019 13:01	WG1382165
Diazinon	U		0.00478	0.100	0.107	1	11/21/2019 13:01	WG1382165
Dichlorvos	U		0.0104	0.100	0.107	1	11/21/2019 13:01	WG1382165
Dimethoate	U		0.0212	0.100	0.107	1	11/21/2019 13:01	WG1382165
Disulfoton	U		0.00533	0.100	0.107	1	11/21/2019 13:01	WG1382165
EPN	U	J4	0.00548	0.100	0.107	1	11/21/2019 13:01	WG1382165
Ethoprop	U		0.00497	0.100	0.107	1	11/21/2019 13:01	WG1382165
Ethyl Parathion	U		0.00611	0.100	0.107	1	11/21/2019 13:01	WG1382165
Fensulfothion	U		0.0181	0.100	0.107	1	11/21/2019 13:01	WG1382165
Fenthion	U		0.00650	0.100	0.107	1	11/21/2019 13:01	WG1382165
Malathion	U		0.00749	0.100	0.107	1	11/21/2019 13:01	WG1382165
Merphos	U	J4	0.00577	0.100	0.107	1	11/21/2019 13:01	WG1382165
Methyl parathion	U		0.00716	0.100	0.107	1	11/21/2019 13:01	WG1382165
Mevinphos	U		0.0109	0.100	0.107	1	11/21/2019 13:01	WG1382165
Naled	U		0.00447	0.100	0.107	1	11/21/2019 13:01	WG1382165
Phorate	U		0.00504	0.100	0.107	1	11/21/2019 13:01	WG1382165
Ronnel	U		0.00468	0.100	0.107	1	11/21/2019 13:01	WG1382165
Stirophos	U		0.00574	0.100	0.107	1	11/21/2019 13:01	WG1382165
Sulfotep	U		0.00413	0.100	0.107	1	11/21/2019 13:01	WG1382165
TEPP	U		0.168	1.00	1.07	1	11/21/2019 13:01	WG1382165
Tokuthion (Protothiofos)	U		0.00646	0.100	0.107	1	11/21/2019 13:01	WG1382165
Trichloronate	U		0.00710	0.100	0.107	1	11/21/2019 13:01	WG1382165
(S) Triphenyl Phosphate	*39.8*				*36.0-121*		*11/21/2019 13:01*	WG1382165

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00144	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Alpha BHC	U		0.00145	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Beta BHC	U		0.00171	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Delta BHC	U		0.00153	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Gamma BHC	U		0.00155	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Chlordane	U		0.0417	0.200	0.214	1	11/19/2019 15:15	WG1382839
4,4-DDD	U		0.00167	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
4,4-DDE	U		0.00165	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
4,4-DDT	U		0.00214	0.0200	0.0214	1	11/19/2019 15:15	WG1382839

SB-30(1-1.5)

Collected date/time: 11/14/19 13:37

SAMPLE RESULTS - 67

L1161924

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Dieldrin	0.00200	J	0.00163	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Endosulfan I	U		0.00159	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Endosulfan II	U		0.00171	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Endosulfan sulfate	U		0.00162	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Endrin	U		0.00168	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Endrin aldehyde	U		0.00138	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Endrin ketone	U		0.00177	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Hexachlorobenzene	U		0.00133	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Heptachlor	U		0.00165	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Heptachlor epoxide	U		0.00172	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Methoxychlor	U		0.00190	0.0200	0.0214	1	11/19/2019 15:15	WG1382839
Toxaphene	U		0.0385	0.400	0.428	1	11/19/2019 15:15	WG1382839
(S) Decachlorobiphenyl	*87.9*				*10.0-135*		*11/19/2019 15:15*	WG1382839
(S) Tetrachloro-m-xylene	*92.7*				*10.0-139*		*11/19/2019 15:15*	WG1382839

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.1		1	11/22/2019 19:22	WG1384994

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0337		0.00304	0.0300	0.0326	1	11/19/2019 21:38	WG1382813

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	86.9		0.500	2.00	2.17	1	11/21/2019 16:02	WG1382684
Barium	87.5		0.185	0.500	0.543	1	11/21/2019 16:02	WG1382684
Cadmium	0.341	J	0.0760	0.500	0.543	1	11/21/2019 16:02	WG1382684
Chromium	36.9		0.152	1.00	1.09	1	11/21/2019 16:02	WG1382684
Lead	74.6		0.206	0.500	0.543	1	11/21/2019 16:02	WG1382684
Selenium	U		0.673	2.00	2.17	1	11/21/2019 16:02	WG1382684
Silver	U		0.130	1.00	1.09	1	11/21/2019 16:02	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.920	0.100	2.71	25	11/24/2019 10:48	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*11/24/2019 10:48*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0149	0.0250	0.0271	1	11/26/2019 22:07	WG1387391
Acrylonitrile	U		0.00206	0.0125	0.0136	1	11/26/2019 22:07	WG1387391
Benzene	0.000887	J	0.000434	0.00100	0.00109	1	11/26/2019 22:07	WG1387391
Bromobenzene	U		0.00114	0.0125	0.0136	1	11/26/2019 22:07	WG1387391
Bromodichloromethane	U		0.000856	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
Bromoform	U		0.00649	0.0250	0.0271	1	11/26/2019 22:07	WG1387391
Bromomethane	U		0.00402	0.0125	0.0136	1	11/26/2019 22:07	WG1387391
n-Butylbenzene	U		0.00417	0.0125	0.0136	1	11/26/2019 22:07	WG1387391
sec-Butylbenzene	U		0.00275	0.0125	0.0136	1	11/26/2019 22:07	WG1387391
tert-Butylbenzene	U		0.00168	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
Carbon tetrachloride	U		0.00117	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
Chlorobenzene	U		0.000622	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
Chlorodibromomethane	U		0.000489	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
Chloroethane	U		0.00117	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
Chloroform	U		0.000451	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
Chloromethane	U	J4	0.00151	0.0125	0.0136	1	11/26/2019 22:07	WG1387391
2-Chlorotoluene	U		0.000999	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
4-Chlorotoluene	U		0.00123	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
1,2-Dibromo-3-Chloropropane	U		0.00554	0.0250	0.0271	1	11/26/2019 22:07	WG1387391
1,2-Dibromoethane	U		0.000570	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
Dibromomethane	U		0.00109	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
1,2-Dichlorobenzene	U		0.00157	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
1,3-Dichlorobenzene	U		0.00185	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
1,4-Dichlorobenzene	U		0.00214	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
Dichlorodifluoromethane	U		0.000888	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
1,1-Dichloroethane	U		0.000624	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
1,2-Dichloroethane	U		0.000516	0.00250	0.00271	1	11/26/2019 22:07	WG1387391

SB-30(1.5-2)

Collected date/time: 11/14/19 13:38

SAMPLE RESULTS - 68

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000543	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
cis-1,2-Dichloroethene	U		0.000749	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
trans-1,2-Dichloroethene	U		0.00155	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
1,2-Dichloropropane	U		0.00138	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
1,1-Dichloropropene	U		0.000760	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
1,3-Dichloropropane	U		0.00190	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
cis-1,3-Dichloropropene	U		0.000736	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
trans-1,3-Dichloropropene	U		0.00166	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
2,2-Dichloropropane	U	J4	0.000861	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
Di-isopropyl ether	U		0.000380	0.00100	0.00109	1	11/26/2019 22:07	WG1387391
Ethylbenzene	U		0.000576	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
Hexachloro-1,3-butadiene	U		0.0138	0.0250	0.0271	1	11/26/2019 22:07	WG1387391
Isopropylbenzene	U		0.000937	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
p-Isopropyltoluene	0.00285	J	0.00253	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
2-Butanone (MEK)	U		0.0136	0.0250	0.0271	1	11/26/2019 22:07	WG1387391
Methylene Chloride	U		0.00721	0.0250	0.0271	1	11/26/2019 22:07	WG1387391
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0271	1	11/26/2019 22:07	WG1387391
Methyl tert-butyl ether	U		0.000320	0.00100	0.00109	1	11/26/2019 22:07	WG1387391
Naphthalene	U		0.00339	0.0125	0.0136	1	11/26/2019 22:07	WG1387391
n-Propylbenzene	U	J4	0.00128	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
Styrene	U		0.00296	0.0125	0.0136	1	11/26/2019 22:07	WG1387391
1,1,1,2-Tetrachloroethane	U		0.000543	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
1,1,2,2-Tetrachloroethane	U	J4	0.000424	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
1,1,2-Trichlorotrifluoroethane	U		0.000733	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
Tetrachloroethene	U		0.000760	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
Toluene	0.00551		0.00136	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
1,2,3-Trichlorobenzene	U		0.000679	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
1,2,4-Trichlorobenzene	U		0.00523	0.0125	0.0136	1	11/26/2019 22:07	WG1387391
1,1,1-Trichloroethane	U		0.000299	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
1,1,2-Trichloroethane	U		0.000959	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
Trichloroethene	U		0.000434	0.00100	0.00109	1	11/26/2019 22:07	WG1387391
Trichlorofluoromethane	U		0.000543	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
1,2,3-Trichloropropane	U		0.00554	0.0125	0.0136	1	11/26/2019 22:07	WG1387391
1,2,4-Trimethylbenzene	0.00222	J	0.00126	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
1,2,3-Trimethylbenzene	U		0.00125	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
1,3,5-Trimethylbenzene	U		0.00117	0.00500	0.00543	1	11/26/2019 22:07	WG1387391
Vinyl chloride	U		0.000742	0.00250	0.00271	1	11/26/2019 22:07	WG1387391
Xylenes, Total	U		0.00519	0.00650	0.00706	1	11/26/2019 22:07	WG1387391
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 22:07*	WG1387391
(S) 4-Bromofluorobenzene	*85.4*				*67.0-138*		*11/26/2019 22:07*	WG1387391
(S) 1,2-Dichloroethane-d4	*98.5*				*70.0-130*		*11/26/2019 22:07*	WG1387391

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	30.5	J	14.4	4.00	43.4	10	11/22/2019 23:23	WG1384286
Residual Range Organics (RRO)	218		36.2	10.0	109	10	11/22/2019 23:23	WG1384286
(S) o-Terphenyl	*97.3*				*18.0-148*		*11/22/2019 23:23*	WG1384286

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

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

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-D	U		0.00762	0.0700	0.0760	1	11/23/2019 21:11	WG1384420
Dalapon	U		0.0123	0.0700	0.0760	1	11/23/2019 21:11	WG1384420
2,4-DB	U		0.0323	0.0700	0.0760	1	11/23/2019 21:11	WG1384420
Dicamba	U		0.0170	0.0700	0.0760	1	11/23/2019 21:11	WG1384420
Dichloroprop	U		0.0266	0.0700	0.0760	1	11/23/2019 21:11	WG1384420
Dinoseb	U	J4	0.00757	0.0700	0.0760	1	11/23/2019 21:11	WG1384420
MCPA	U		0.481	6.50	7.06	1	11/23/2019 21:11	WG1384420
MCPP	U		0.399	6.50	7.06	1	11/23/2019 21:11	WG1384420
2,4,5-T	U		0.00925	0.0700	0.0760	1	11/23/2019 21:11	WG1384420
2,4,5-TP (Silvex)	U		0.0116	0.0700	0.0760	1	11/23/2019 21:11	WG1384420
(S) 2,4-Dichlorophenyl Acetic Acid	*103*				*22.0-132*		*11/23/2019 21:11*	WG1384420

OP Pesticides by Method 8141B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Azinphos-Methyl	U		0.00410	0.100	0.109	1	11/21/2019 13:33	WG1382165
Bolstar (Sulprofos)	U		0.00602	0.100	0.109	1	11/21/2019 13:33	WG1382165
Chlorpyrifos	U		0.0100	0.100	0.109	1	11/21/2019 13:33	WG1382165
Coumaphos	U		0.00738	0.100	0.109	1	11/21/2019 13:33	WG1382165
Demeton,-O and -S	U		0.00368	0.0700	0.0760	1	11/21/2019 13:33	WG1382165
Diazinon	U		0.00485	0.100	0.109	1	11/21/2019 13:33	WG1382165
Dichlorvos	U		0.0105	0.100	0.109	1	11/21/2019 13:33	WG1382165
Dimethoate	U		0.0215	0.100	0.109	1	11/21/2019 13:33	WG1382165
Disulfoton	U		0.00541	0.100	0.109	1	11/21/2019 13:33	WG1382165
EPN	U	J4	0.00556	0.100	0.109	1	11/21/2019 13:33	WG1382165
Ethoprop	U		0.00505	0.100	0.109	1	11/21/2019 13:33	WG1382165
Ethyl Parathion	U		0.00620	0.100	0.109	1	11/21/2019 13:33	WG1382165
Fensulfothion	U		0.0184	0.100	0.109	1	11/21/2019 13:33	WG1382165
Fenthion	U		0.00660	0.100	0.109	1	11/21/2019 13:33	WG1382165
Malathion	U		0.00760	0.100	0.109	1	11/21/2019 13:33	WG1382165
Merphos	U	J4	0.00585	0.100	0.109	1	11/21/2019 13:33	WG1382165
Methyl parathion	U		0.00727	0.100	0.109	1	11/21/2019 13:33	WG1382165
Mevinphos	U		0.0111	0.100	0.109	1	11/21/2019 13:33	WG1382165
Naled	U		0.00454	0.100	0.109	1	11/21/2019 13:33	WG1382165
Phorate	U		0.00511	0.100	0.109	1	11/21/2019 13:33	WG1382165
Ronnel	U		0.00475	0.100	0.109	1	11/21/2019 13:33	WG1382165
Stirophos	U		0.00583	0.100	0.109	1	11/21/2019 13:33	WG1382165
Sulfotep	U		0.00419	0.100	0.109	1	11/21/2019 13:33	WG1382165
TEPP	U		0.170	1.00	1.09	1	11/21/2019 13:33	WG1382165
Tokuthion (Prothothiofos)	U		0.00656	0.100	0.109	1	11/21/2019 13:33	WG1382165
Trichloronate	U		0.00721	0.100	0.109	1	11/21/2019 13:33	WG1382165
(S) Triphenyl Phosphate	*42.0*				*36.0-121*		*11/21/2019 13:33*	WG1382165

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00147	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Alpha BHC	U		0.00148	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Beta BHC	U		0.00174	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Delta BHC	U		0.00155	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Gamma BHC	U		0.00157	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Chlordane	U		0.0424	0.200	0.217	1	11/19/2019 15:28	WG1382839
4,4-DDD	U		0.00169	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
4,4-DDE	U		0.00167	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
4,4-DDT	U		0.00217	0.0200	0.0217	1	11/19/2019 15:28	WG1382839

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Dieldrin	0.00245	J	0.00165	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Endosulfan I	U		0.00162	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Endosulfan II	U		0.00174	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Endosulfan sulfate	U		0.00164	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Endrin	U		0.00170	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Endrin aldehyde	U		0.00140	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Endrin ketone	U		0.00179	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Hexachlorobenzene	U		0.00135	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Heptachlor	U		0.00167	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Heptachlor epoxide	U		0.00175	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Methoxychlor	U		0.00193	0.0200	0.0217	1	11/19/2019 15:28	WG1382839
Toxaphene	U		0.0391	0.400	0.434	1	11/19/2019 15:28	WG1382839
(S) Decachlorobiphenyl	*98.0*				*10.0-135*		*11/19/2019 15:28*	WG1382839
(S) Tetrachloro-m-xylene	*103*				*10.0-139*		*11/19/2019 15:28*	WG1382839

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	91.7		1	11/22/2019 19:22	WG1384994

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0333		0.00305	0.0300	0.0327	1	11/19/2019 21:41	WG1382813

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	59.3		0.502	2.00	2.18	1	11/21/2019 16:05	WG1382684
Barium	86.0		0.185	0.500	0.545	1	11/21/2019 16:05	WG1382684
Cadmium	0.446	J	0.0764	0.500	0.545	1	11/21/2019 16:05	WG1382684
Chromium	30.3		0.153	1.00	1.09	1	11/21/2019 16:05	WG1382684
Lead	84.5		0.207	0.500	0.545	1	11/21/2019 16:05	WG1382684
Selenium	U		0.676	2.00	2.18	1	11/21/2019 16:05	WG1382684
Silver	U		0.131	1.00	1.09	1	11/21/2019 16:05	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.924	0.100	2.73	25	11/24/2019 11:12	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*11/24/2019 11:12*	WG1386130

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	0.0296		0.0149	0.0250	0.0273	1	11/26/2019 22:25	WG1387391
Acrylonitrile	U		0.00207	0.0125	0.0136	1	11/26/2019 22:25	WG1387391
Benzene	0.00105	J	0.000436	0.00100	0.00109	1	11/26/2019 22:25	WG1387391
Bromobenzene	U		0.00115	0.0125	0.0136	1	11/26/2019 22:25	WG1387391
Bromodichloromethane	U		0.000860	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
Bromoform	U		0.00652	0.0250	0.0273	1	11/26/2019 22:25	WG1387391
Bromomethane	U		0.00404	0.0125	0.0136	1	11/26/2019 22:25	WG1387391
n-Butylbenzene	U		0.00419	0.0125	0.0136	1	11/26/2019 22:25	WG1387391
sec-Butylbenzene	U		0.00276	0.0125	0.0136	1	11/26/2019 22:25	WG1387391
tert-Butylbenzene	U		0.00169	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
Carbon tetrachloride	U		0.00118	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
Chlorobenzene	U		0.000625	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
Chlorodibromomethane	U		0.000491	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
Chloroethane	U		0.00118	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
Chloroform	U		0.000453	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
Chloromethane	U	J4	0.00152	0.0125	0.0136	1	11/26/2019 22:25	WG1387391
2-Chlorotoluene	U		0.00100	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
4-Chlorotoluene	U		0.00123	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
1,2-Dibromo-3-Chloropropane	U		0.00556	0.0250	0.0273	1	11/26/2019 22:25	WG1387391
1,2-Dibromoethane	U		0.000573	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
Dibromomethane	U		0.00109	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
1,2-Dichlorobenzene	U		0.00158	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
1,3-Dichlorobenzene	U		0.00185	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
1,4-Dichlorobenzene	U		0.00215	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
Dichlorodifluoromethane	U		0.000892	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
1,1-Dichloroethane	U		0.000627	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
1,2-Dichloroethane	U		0.000518	0.00250	0.00273	1	11/26/2019 22:25	WG1387391

SB-31(0-0.5)

Collected date/time: 11/14/19 14:30

SAMPLE RESULTS - 69

L1161924

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

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000545	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
cis-1,2-Dichloroethene	U		0.000753	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
trans-1,2-Dichloroethene	U		0.00156	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
1,2-Dichloropropane	U		0.00139	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
1,1-Dichloropropene	U		0.000764	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
1,3-Dichloropropane	U		0.00191	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
cis-1,3-Dichloropropene	U		0.000740	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
trans-1,3-Dichloropropene	U		0.00167	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
2,2-Dichloropropane	U	J4	0.000865	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
Di-isopropyl ether	U		0.000382	0.00100	0.00109	1	11/26/2019 22:25	WG1387391
Ethylbenzene	0.00675		0.000578	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0273	1	11/26/2019 22:25	WG1387391
Isopropylbenzene	U		0.000941	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
p-Isopropyltoluene	0.00289	J	0.00254	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
2-Butanone (MEK)	0.0214	B J	0.0136	0.0250	0.0273	1	11/26/2019 22:25	WG1387391
Methylene Chloride	U		0.00724	0.0250	0.0273	1	11/26/2019 22:25	WG1387391
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0273	1	11/26/2019 22:25	WG1387391
Methyl tert-butyl ether	U		0.000322	0.00100	0.00109	1	11/26/2019 22:25	WG1387391
Naphthalene	0.00944	J	0.00340	0.0125	0.0136	1	11/26/2019 22:25	WG1387391
n-Propylbenzene	0.00273	J J4	0.00129	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
Styrene	U		0.00298	0.0125	0.0136	1	11/26/2019 22:25	WG1387391
1,1,1,2-Tetrachloroethane	U		0.000545	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
1,1,2,2-Tetrachloroethane	U	J4	0.000425	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
1,1,2-Trichlorotrifluoroethane	U		0.000736	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
Tetrachloroethene	U		0.000764	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
Toluene	0.00188	J	0.00136	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
1,2,3-Trichlorobenzene	U		0.000682	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
1,2,4-Trichlorobenzene	U		0.00526	0.0125	0.0136	1	11/26/2019 22:25	WG1387391
1,1,1-Trichloroethane	U		0.000300	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
1,1,2-Trichloroethane	U		0.000963	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
Trichloroethene	U		0.000436	0.00100	0.00109	1	11/26/2019 22:25	WG1387391
Trichlorofluoromethane	U		0.000545	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
1,2,3-Trichloropropane	U		0.00556	0.0125	0.0136	1	11/26/2019 22:25	WG1387391
1,2,4-Trimethylbenzene	0.0154		0.00127	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
1,2,3-Trimethylbenzene	0.00768		0.00125	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
1,3,5-Trimethylbenzene	0.00663		0.00118	0.00500	0.00545	1	11/26/2019 22:25	WG1387391
Vinyl chloride	U		0.000745	0.00250	0.00273	1	11/26/2019 22:25	WG1387391
Xylenes, Total	0.0538		0.00521	0.00650	0.00709	1	11/26/2019 22:25	WG1387391
(S) Toluene-d8	*97.8*				*75.0-131*		*11/26/2019 22:25*	WG1387391
(S) 4-Bromofluorobenzene	*94.4*				*67.0-138*		*11/26/2019 22:25*	WG1387391
(S) 1,2-Dichloroethane-d4	*109*				*70.0-130*		*11/26/2019 22:25*	WG1387391

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	98.6	J	72.5	4.00	218	50	11/21/2019 23:49	WG1384286
Residual Range Organics (RRO)	1150		182	10.0	545	50	11/21/2019 23:49	WG1384286
(S) o-Terphenyl	*112*	J7			*18.0-148*		*11/21/2019 23:49*	WG1384286

Sample Narrative:

L1161924-69 WG1384286: Cannot run at lower dilution due to viscosity of extract

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-D	U		0.00766	0.0700	0.0764	1	11/23/2019 21:24	WG1384420
Dalapon	U		0.0123	0.0700	0.0764	1	11/23/2019 21:24	WG1384420
2,4-DB	U		0.0324	0.0700	0.0764	1	11/23/2019 21:24	WG1384420
Dicamba	U		0.0171	0.0700	0.0764	1	11/23/2019 21:24	WG1384420
Dichloroprop	U		0.0267	0.0700	0.0764	1	11/23/2019 21:24	WG1384420
Dinoseb	U	J4	0.00760	0.0700	0.0764	1	11/23/2019 21:24	WG1384420
MCPA	U		0.483	6.50	7.09	1	11/23/2019 21:24	WG1384420
MCPP	U		0.400	6.50	7.09	1	11/23/2019 21:24	WG1384420
2,4,5-T	U		0.00929	0.0700	0.0764	1	11/23/2019 21:24	WG1384420
2,4,5-TP (Silvex)	U		0.0117	0.0700	0.0764	1	11/23/2019 21:24	WG1384420
(S) 2,4-Dichlorophenyl Acetic Acid	*68.9*				*22.0-132*		*11/23/2019 21:24*	WG1384420

OP Pesticides by Method 8141B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Azinphos-Methyl	U		0.00412	0.100	0.109	1	11/21/2019 14:05	WG1382165
Bolstar (Sulprofos)	U		0.00604	0.100	0.109	1	11/21/2019 14:05	WG1382165
Chlorpyrifos	U		0.0101	0.100	0.109	1	11/21/2019 14:05	WG1382165
Coumaphos	U		0.00742	0.100	0.109	1	11/21/2019 14:05	WG1382165
Demeton,-O and -S	U		0.00370	0.0700	0.0764	1	11/21/2019 14:05	WG1382165
Diazinon	U		0.00488	0.100	0.109	1	11/21/2019 14:05	WG1382165
Dichlorvos	U		0.0106	0.100	0.109	1	11/21/2019 14:05	WG1382165
Dimethoate	U		0.0216	0.100	0.109	1	11/21/2019 14:05	WG1382165
Disulfoton	U		0.00543	0.100	0.109	1	11/21/2019 14:05	WG1382165
EPN	U	J4	0.00559	0.100	0.109	1	11/21/2019 14:05	WG1382165
Ethoprop	U		0.00507	0.100	0.109	1	11/21/2019 14:05	WG1382165
Ethyl Parathion	U		0.00623	0.100	0.109	1	11/21/2019 14:05	WG1382165
Fensulfothion	U		0.0184	0.100	0.109	1	11/21/2019 14:05	WG1382165
Fenthion	U		0.00663	0.100	0.109	1	11/21/2019 14:05	WG1382165
Malathion	U		0.00764	0.100	0.109	1	11/21/2019 14:05	WG1382165
Merphos	U	J4	0.00588	0.100	0.109	1	11/21/2019 14:05	WG1382165
Methyl parathion	U		0.00730	0.100	0.109	1	11/21/2019 14:05	WG1382165
Mevinphos	U		0.0111	0.100	0.109	1	11/21/2019 14:05	WG1382165
Naled	U		0.00456	0.100	0.109	1	11/21/2019 14:05	WG1382165
Phorate	U		0.00514	0.100	0.109	1	11/21/2019 14:05	WG1382165
Ronnel	U		0.00477	0.100	0.109	1	11/21/2019 14:05	WG1382165
Stirophos	U		0.00586	0.100	0.109	1	11/21/2019 14:05	WG1382165
Sulfotep	U		0.00421	0.100	0.109	1	11/21/2019 14:05	WG1382165
TEPP	U		0.171	1.00	1.09	1	11/21/2019 14:05	WG1382165
Tokuthion (Protothiofos)	U		0.00659	0.100	0.109	1	11/21/2019 14:05	WG1382165
Trichloronate	U		0.00724	0.100	0.109	1	11/21/2019 14:05	WG1382165
(S) Triphenyl Phosphate	*47.3*				*36.0-121*		*11/21/2019 14:05*	WG1382165

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00147	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Alpha BHC	U		0.00148	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Beta BHC	U		0.00175	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Delta BHC	U		0.00156	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Gamma BHC	U		0.00158	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Chlordane	U		0.0425	0.200	0.218	1	11/19/2019 15:40	WG1382839
4,4-DDD	U		0.00170	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
4,4-DDE	U		0.00168	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
4,4-DDT	U		0.00218	0.0200	0.0218	1	11/19/2019 15:40	WG1382839

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

SB-31(0-0.5)

Collected date/time: 11/14/19 14:30

SAMPLE RESULTS - 69

L1161924

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Dieldrin	0.00249	J P	0.00166	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Endosulfan I	U		0.00163	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Endosulfan II	U		0.00175	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Endosulfan sulfate	U		0.00165	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Endrin	U		0.00171	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Endrin aldehyde	U		0.00141	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Endrin ketone	U		0.00180	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Hexachlorobenzene	U		0.00135	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Heptachlor	U		0.00168	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Heptachlor epoxide	U		0.00176	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Methoxychlor	U		0.00194	0.0200	0.0218	1	11/19/2019 15:40	WG1382839
Toxaphene	U		0.0393	0.400	0.436	1	11/19/2019 15:40	WG1382839
(S) Decachlorobiphenyl	*82.7*				*10.0-135*		*11/19/2019 15:40*	WG1382839
(S) Tetrachloro-m-xylene	*90.2*				*10.0-139*		*11/19/2019 15:40*	WG1382839

SB-31(0.5-1)
Collected date/time: 11/14/19 14:31

SAMPLE RESULTS - 70

L1161924

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.0		1	11/22/2019 19:22	WG1384994

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0308	J	0.00315	0.0300	0.0337	1	11/19/2019 21:44	WG1382813

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	51.7		0.517	2.00	2.25	1	11/21/2019 16:07	WG1382684
Barium	71.5		0.191	0.500	0.562	1	11/21/2019 16:07	WG1382684
Cadmium	0.411	J	0.0786	0.500	0.562	1	11/21/2019 16:07	WG1382684
Chromium	27.8		0.157	1.00	1.12	1	11/21/2019 16:07	WG1382684
Lead	65.4		0.213	0.500	0.562	1	11/21/2019 16:07	WG1382684
Selenium	U		0.697	2.00	2.25	1	11/21/2019 16:07	WG1382684
Silver	U		0.135	1.00	1.12	1	11/21/2019 16:07	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.952	0.100	2.81	25	11/24/2019 11:36	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*11/24/2019 11:36*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0154	0.0250	0.0281	1	11/26/2019 22:44	WG1387391
Acrylonitrile	U		0.00213	0.0125	0.0140	1	11/26/2019 22:44	WG1387391
Benzene	0.00208		0.000449	0.00100	0.00112	1	11/26/2019 22:44	WG1387391
Bromobenzene	U		0.00118	0.0125	0.0140	1	11/26/2019 22:44	WG1387391
Bromodichloromethane	U		0.000885	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
Bromoform	U		0.00672	0.0250	0.0281	1	11/26/2019 22:44	WG1387391
Bromomethane	U		0.00416	0.0125	0.0140	1	11/26/2019 22:44	WG1387391
n-Butylbenzene	U		0.00431	0.0125	0.0140	1	11/26/2019 22:44	WG1387391
sec-Butylbenzene	U		0.00284	0.0125	0.0140	1	11/26/2019 22:44	WG1387391
tert-Butylbenzene	U		0.00174	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
Carbon tetrachloride	U		0.00121	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
Chlorobenzene	U		0.000644	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
Chlorodibromomethane	U		0.000506	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
Chloroethane	U		0.00121	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
Chloroform	U		0.000466	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
Chloromethane	U	J4	0.00156	0.0125	0.0140	1	11/26/2019 22:44	WG1387391
2-Chlorotoluene	U		0.00103	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
4-Chlorotoluene	U		0.00127	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
1,2-Dibromo-3-Chloropropane	U		0.00573	0.0250	0.0281	1	11/26/2019 22:44	WG1387391
1,2-Dibromoethane	U		0.000590	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
Dibromomethane	U		0.00112	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
1,2-Dichlorobenzene	U		0.00163	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
1,3-Dichlorobenzene	U		0.00191	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
1,4-Dichlorobenzene	U		0.00221	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
Dichlorodifluoromethane	U		0.000919	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
1,1-Dichloroethane	U		0.000646	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
1,2-Dichloroethane	U		0.000534	0.00250	0.00281	1	11/26/2019 22:44	WG1387391

SB-31(0.5-1)

Collected date/time: 11/14/19 14:31

SAMPLE RESULTS - 70

L1161924

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

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000562	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
cis-1,2-Dichloroethene	U		0.000775	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
trans-1,2-Dichloroethene	U		0.00161	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
1,2-Dichloropropane	U		0.00143	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
1,1-Dichloropropene	U		0.000786	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
1,3-Dichloropropane	U		0.00197	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
cis-1,3-Dichloropropene	U		0.000762	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
trans-1,3-Dichloropropene	U		0.00172	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
2,2-Dichloropropane	U	J4	0.000891	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
Di-isopropyl ether	U		0.000393	0.00100	0.00112	1	11/26/2019 22:44	WG1387391
Ethylbenzene	0.00513		0.000595	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
Hexachloro-1,3-butadiene	U		0.0143	0.0250	0.0281	1	11/26/2019 22:44	WG1387391
Isopropylbenzene	U		0.000970	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
p-Isopropyltoluene	0.00812		0.00262	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
2-Butanone (MEK)	0.0203	B J	0.0140	0.0250	0.0281	1	11/26/2019 22:44	WG1387391
Methylene Chloride	U		0.00746	0.0250	0.0281	1	11/26/2019 22:44	WG1387391
4-Methyl-2-pentanone (MIBK)	U		0.0112	0.0250	0.0281	1	11/26/2019 22:44	WG1387391
Methyl tert-butyl ether	U		0.000331	0.00100	0.00112	1	11/26/2019 22:44	WG1387391
Naphthalene	0.0160		0.00351	0.0125	0.0140	1	11/26/2019 22:44	WG1387391
n-Propylbenzene	0.00411	J J4	0.00133	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
Styrene	U		0.00307	0.0125	0.0140	1	11/26/2019 22:44	WG1387391
1,1,1,2-Tetrachloroethane	U		0.000562	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
1,1,2,2-Tetrachloroethane	U	J4	0.000438	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
1,1,2-Trichlorotrifluoroethane	U		0.000758	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
Tetrachloroethene	U		0.000786	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
Toluene	0.00471	J	0.00140	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
1,2,3-Trichlorobenzene	U		0.000702	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
1,2,4-Trichlorobenzene	U		0.00542	0.0125	0.0140	1	11/26/2019 22:44	WG1387391
1,1,1-Trichloroethane	U		0.000309	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
1,1,2-Trichloroethane	U		0.000992	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
Trichloroethene	U		0.000449	0.00100	0.00112	1	11/26/2019 22:44	WG1387391
Trichlorofluoromethane	U		0.000562	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
1,2,3-Trichloropropane	U		0.00573	0.0125	0.0140	1	11/26/2019 22:44	WG1387391
1,2,4-Trimethylbenzene	0.0129		0.00130	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
1,2,3-Trimethylbenzene	0.00480	J	0.00129	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
1,3,5-Trimethylbenzene	0.00736		0.00121	0.00500	0.00562	1	11/26/2019 22:44	WG1387391
Vinyl chloride	U		0.000767	0.00250	0.00281	1	11/26/2019 22:44	WG1387391
Xylenes, Total	0.0246		0.00537	0.00650	0.00730	1	11/26/2019 22:44	WG1387391
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 22:44*	WG1387391
(S) 4-Bromofluorobenzene	*88.1*				*67.0-138*		*11/26/2019 22:44*	WG1387391
(S) 1,2-Dichloroethane-d4	*93.4*				*70.0-130*		*11/26/2019 22:44*	WG1387391

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	76.5	J	74.7	4.00	225	50	11/22/2019 00:02	WG1384286
Residual Range Organics (RRO)	1160		187	10.0	562	50	11/22/2019 00:02	WG1384286
(S) o-Terphenyl	*127*	J7			*18.0-148*		*11/22/2019 00:02*	WG1384286

Sample Narrative:

L1161924-70 WG1384286: Cannot run at lower dilution due to viscosity of extract

SB-31(0.5-1)
Collected date/time: 11/14/19 14:31

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-D	U		0.00789	0.0700	0.0786	1	11/23/2019 21:38	WG1384420
Dalapon	U		0.0127	0.0700	0.0786	1	11/23/2019 21:38	WG1384420
2,4-DB	U		0.0334	0.0700	0.0786	1	11/23/2019 21:38	WG1384420
Dicamba	U		0.0176	0.0700	0.0786	1	11/23/2019 21:38	WG1384420
Dichloroprop	U		0.0275	0.0700	0.0786	1	11/23/2019 21:38	WG1384420
Dinoseb	U	J4	0.00783	0.0700	0.0786	1	11/23/2019 21:38	WG1384420
MCPA	U		0.498	6.50	7.30	1	11/23/2019 21:38	WG1384420
MCPP	U		0.412	6.50	7.30	1	11/23/2019 21:38	WG1384420
2,4,5-T	U		0.00957	0.0700	0.0786	1	11/23/2019 21:38	WG1384420
2,4,5-TP (Silvex)	U		0.0120	0.0700	0.0786	1	11/23/2019 21:38	WG1384420
(S) 2,4-Dichlorophenyl Acetic Acid	*92.2*				*22.0-132*		*11/23/2019 21:38*	WG1384420

OP Pesticides by Method 8141B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Azinphos-Methyl	U		0.00425	0.100	0.112	1	11/21/2019 14:37	WG1382165
Bolstar (Sulprofos)	U		0.00622	0.100	0.112	1	11/21/2019 14:37	WG1382165
Chlorpyrifos	U		0.0104	0.100	0.112	1	11/21/2019 14:37	WG1382165
Coumaphos	U		0.00764	0.100	0.112	1	11/21/2019 14:37	WG1382165
Demeton,-O and -S	U		0.00381	0.0700	0.0786	1	11/21/2019 14:37	WG1382165
Diazinon	U		0.00502	0.100	0.112	1	11/21/2019 14:37	WG1382165
Dichlorvos	U		0.0109	0.100	0.112	1	11/21/2019 14:37	WG1382165
Dimethoate	U		0.0222	0.100	0.112	1	11/21/2019 14:37	WG1382165
Disulfoton	U		0.00559	0.100	0.112	1	11/21/2019 14:37	WG1382165
EPN	U	J4	0.00575	0.100	0.112	1	11/21/2019 14:37	WG1382165
Ethoprop	U		0.00522	0.100	0.112	1	11/21/2019 14:37	WG1382165
Ethyl Parathion	U		0.00641	0.100	0.112	1	11/21/2019 14:37	WG1382165
Fensulfothion	U		0.0190	0.100	0.112	1	11/21/2019 14:37	WG1382165
Fenthion	U		0.00683	0.100	0.112	1	11/21/2019 14:37	WG1382165
Malathion	U		0.00786	0.100	0.112	1	11/21/2019 14:37	WG1382165
Merphos	U	J4	0.00606	0.100	0.112	1	11/21/2019 14:37	WG1382165
Methyl parathion	U		0.00752	0.100	0.112	1	11/21/2019 14:37	WG1382165
Mevinphos	U		0.0115	0.100	0.112	1	11/21/2019 14:37	WG1382165
Naled	U		0.00470	0.100	0.112	1	11/21/2019 14:37	WG1382165
Phorate	U		0.00529	0.100	0.112	1	11/21/2019 14:37	WG1382165
Ronnel	U		0.00491	0.100	0.112	1	11/21/2019 14:37	WG1382165
Stirophos	U		0.00603	0.100	0.112	1	11/21/2019 14:37	WG1382165
Sulfotep	U		0.00434	0.100	0.112	1	11/21/2019 14:37	WG1382165
TEPP	U		0.176	1.00	1.12	1	11/21/2019 14:37	WG1382165
Tokuthion (Prothothiofos)	U		0.00679	0.100	0.112	1	11/21/2019 14:37	WG1382165
Trichloronate	U		0.00746	0.100	0.112	1	11/21/2019 14:37	WG1382165
(S) Triphenyl Phosphate	*50.8*				*36.0-121*		*11/21/2019 14:37*	WG1382165

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00152	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Alpha BHC	U		0.00153	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Beta BHC	U		0.00180	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Delta BHC	U		0.00161	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Gamma BHC	U		0.00163	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Chlordane	U		0.0438	0.200	0.225	1	11/19/2019 15:53	WG1382839
4,4-DDD	U		0.00175	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
4,4-DDE	U		0.00173	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
4,4-DDT	U		0.00225	0.0200	0.0225	1	11/19/2019 15:53	WG1382839

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

SB-31(0.5-1)

Collected date/time: 11/14/19 14:31

SAMPLE RESULTS - 70

L1161924

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Dieldrin	0.00201	J P	0.00171	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Endosulfan I	U		0.00167	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Endosulfan II	U		0.00180	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Endosulfan sulfate	U		0.00170	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Endrin	U		0.00176	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Endrin aldehyde	U		0.00145	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Endrin ketone	U		0.00185	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Hexachlorobenzene	U		0.00139	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Heptachlor	U		0.00173	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Heptachlor epoxide	U		0.00181	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Methoxychlor	U		0.00200	0.0200	0.0225	1	11/19/2019 15:53	WG1382839
Toxaphene	U		0.0404	0.400	0.449	1	11/19/2019 15:53	WG1382839
(S) Decachlorobiphenyl	*85.8*				*10.0-135*		*11/19/2019 15:53*	WG1382839
(S) Tetrachloro-m-xylene	*92.4*				*10.0-139*		*11/19/2019 15:53*	WG1382839

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.6		1	11/22/2019 19:22	WG1384994

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0370		0.00316	0.0300	0.0338	1	11/19/2019 21:46	WG1382813

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	125		0.519	2.00	2.26	1	11/21/2019 16:10	WG1382684
Barium	74.4		0.192	0.500	0.564	1	11/21/2019 16:10	WG1382684
Cadmium	0.986		0.0790	0.500	0.564	1	11/21/2019 16:10	WG1382684
Chromium	34.1		0.158	1.00	1.13	1	11/21/2019 16:10	WG1382684
Lead	143		0.214	0.500	0.564	1	11/21/2019 16:10	WG1382684
Selenium	U		0.700	2.00	2.26	1	11/21/2019 16:10	WG1382684
Silver	0.263	J	0.135	1.00	1.13	1	11/21/2019 16:10	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.956	0.100	2.82	25	11/24/2019 12:00	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*11/24/2019 12:00*	WG1386130

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0178	0.0250	0.0325	1.15	11/26/2019 23:03	WG1387391
Acrylonitrile	U		0.00247	0.0125	0.0162	1.15	11/26/2019 23:03	WG1387391
Benzene	0.00168		0.000519	0.00100	0.00130	1.15	11/26/2019 23:03	WG1387391
Bromobenzene	U		0.00136	0.0125	0.0162	1.15	11/26/2019 23:03	WG1387391
Bromodichloromethane	U		0.00102	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
Bromoform	U		0.00776	0.0250	0.0325	1.15	11/26/2019 23:03	WG1387391
Bromomethane	U		0.00480	0.0125	0.0162	1.15	11/26/2019 23:03	WG1387391
n-Butylbenzene	U		0.00498	0.0125	0.0162	1.15	11/26/2019 23:03	WG1387391
sec-Butylbenzene	U		0.00328	0.0125	0.0162	1.15	11/26/2019 23:03	WG1387391
tert-Butylbenzene	U		0.00201	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
Carbon tetrachloride	U		0.00140	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
Chlorobenzene	U		0.000743	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
Chlorodibromomethane	U		0.000584	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
Chloroethane	U		0.00140	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
Chloroform	U		0.000538	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
Chloromethane	U	J4	0.00180	0.0125	0.0162	1.15	11/26/2019 23:03	WG1387391
2-Chlorotoluene	U		0.00119	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
4-Chlorotoluene	U		0.00147	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
1,2-Dibromo-3-Chloropropane	U		0.00662	0.0250	0.0325	1.15	11/26/2019 23:03	WG1387391
1,2-Dibromoethane	U		0.000681	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
Dibromomethane	U		0.00130	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
1,2-Dichlorobenzene	U		0.00188	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
1,3-Dichlorobenzene	U		0.00221	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
1,4-Dichlorobenzene	U		0.00256	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
Dichlorodifluoromethane	U		0.00106	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
1,1-Dichloroethane	U		0.000746	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
1,2-Dichloroethane	U		0.000616	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391

SB-31(1-1.5)

Collected date/time: 11/14/19 14:32

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000649	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
cis-1,2-Dichloroethene	U		0.000895	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
trans-1,2-Dichloroethene	U		0.00186	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
1,2-Dichloropropane	U		0.00165	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
1,1-Dichloropropene	U		0.000908	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
1,3-Dichloropropane	U		0.00227	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
cis-1,3-Dichloropropene	U		0.000880	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
trans-1,3-Dichloropropene	U		0.00199	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
2,2-Dichloropropane	U	J4	0.00103	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
Di-isopropyl ether	U		0.000454	0.00100	0.00130	1.15	11/26/2019 23:03	WG1387391
Ethylbenzene	0.00357		0.000688	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
Hexachloro-1,3-butadiene	U		0.0165	0.0250	0.0325	1.15	11/26/2019 23:03	WG1387391
Isopropylbenzene	U		0.00112	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
p-Isopropyltoluene	0.0106		0.00302	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
2-Butanone (MEK)	0.0402	B	0.0162	0.0250	0.0325	1.15	11/26/2019 23:03	WG1387391
Methylene Chloride	U		0.00862	0.0250	0.0325	1.15	11/26/2019 23:03	WG1387391
4-Methyl-2-pentanone (MIBK)	U		0.0130	0.0250	0.0325	1.15	11/26/2019 23:03	WG1387391
Methyl tert-butyl ether	U		0.000383	0.00100	0.00130	1.15	11/26/2019 23:03	WG1387391
Naphthalene	0.00794	J	0.00405	0.0125	0.0162	1.15	11/26/2019 23:03	WG1387391
n-Propylbenzene	0.00351	J J4	0.00153	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
Styrene	U		0.00354	0.0125	0.0162	1.15	11/26/2019 23:03	WG1387391
1,1,1,2-Tetrachloroethane	U		0.000649	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
1,1,2,2-Tetrachloroethane	U	J4	0.000506	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
1,1,2-Trichlorotrifluoroethane	U		0.000876	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
Tetrachloroethene	U		0.000908	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
Toluene	0.00322	J	0.00162	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
1,2,3-Trichlorobenzene	U		0.000811	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
1,2,4-Trichlorobenzene	U		0.00625	0.0125	0.0162	1.15	11/26/2019 23:03	WG1387391
1,1,1-Trichloroethane	U		0.000357	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
1,1,2-Trichloroethane	U		0.00115	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
Trichloroethene	U		0.000519	0.00100	0.00130	1.15	11/26/2019 23:03	WG1387391
Trichlorofluoromethane	U		0.000649	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
1,2,3-Trichloropropane	U		0.00662	0.0125	0.0162	1.15	11/26/2019 23:03	WG1387391
1,2,4-Trimethylbenzene	0.0110		0.00151	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
1,2,3-Trimethylbenzene	0.00434	J	0.00149	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
1,3,5-Trimethylbenzene	0.00872		0.00140	0.00500	0.00649	1.15	11/26/2019 23:03	WG1387391
Vinyl chloride	U		0.000886	0.00250	0.00325	1.15	11/26/2019 23:03	WG1387391
Xylenes, Total	0.0138		0.00620	0.00650	0.00844	1.15	11/26/2019 23:03	WG1387391
(S) Toluene-d8	*102*				*75.0-131*		*11/26/2019 23:03*	WG1387391
(S) 4-Bromofluorobenzene	*89.3*				*67.0-138*		*11/26/2019 23:03*	WG1387391
(S) 1,2-Dichloroethane-d4	*93.6*				*70.0-130*		*11/26/2019 23:03*	WG1387391

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	22.1	J	15.0	4.00	45.1	10	11/21/2019 22:22	WG1384286
Residual Range Organics (RRO)	157		37.6	10.0	113	10	11/21/2019 22:22	WG1384286
(S) o-Terphenyl	*124*				*18.0-148*		*11/21/2019 22:22*	WG1384286

Sample Narrative:

L1161924-71 WG1384286: Dilution due to matrix impact during extract concentration procedure

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

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-D	U		0.00792	0.0700	0.0790	1	11/21/2019 00:22	WG1383608
Dalapon	U		0.0127	0.0700	0.0790	1	11/21/2019 00:22	WG1383608
2,4-DB	U		0.0335	0.0700	0.0790	1	11/21/2019 00:22	WG1383608
Dicamba	U		0.0177	0.0700	0.0790	1	11/21/2019 00:22	WG1383608
Dichloroprop	U		0.0276	0.0700	0.0790	1	11/21/2019 00:22	WG1383608
Dinoseb	U		0.00786	0.0700	0.0790	1	11/21/2019 00:22	WG1383608
MCPA	U		0.500	6.50	7.33	1	11/21/2019 00:22	WG1383608
MCPP	U	J4	0.414	6.50	7.33	1	11/21/2019 00:22	WG1383608
2,4,5-T	U		0.00961	0.0700	0.0790	1	11/21/2019 00:22	WG1383608
2,4,5-TP (Silvex)	U		0.0121	0.0700	0.0790	1	11/21/2019 00:22	WG1383608
(S) 2,4-Dichlorophenyl Acetic Acid	*70.1*				*22.0-132*		*11/21/2019 00:22*	WG1383608

OP Pesticides by Method 8141B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Azinphos-Methyl	U		0.00426	0.100	0.113	1	11/21/2019 15:08	WG1382165
Bolstar (Sulprofos)	U		0.00625	0.100	0.113	1	11/21/2019 15:08	WG1382165
Chlorpyrifos	U		0.0104	0.100	0.113	1	11/21/2019 15:08	WG1382165
Coumaphos	U		0.00767	0.100	0.113	1	11/21/2019 15:08	WG1382165
Demeton,-O and -S	U		0.00382	0.0700	0.0790	1	11/21/2019 15:08	WG1382165
Diazinon	U		0.00504	0.100	0.113	1	11/21/2019 15:08	WG1382165
Dichlorvos	U		0.0109	0.100	0.113	1	11/21/2019 15:08	WG1382165
Dimethoate	U		0.0223	0.100	0.113	1	11/21/2019 15:08	WG1382165
Disulfoton	U		0.00562	0.100	0.113	1	11/21/2019 15:08	WG1382165
EPN	U	J4	0.00578	0.100	0.113	1	11/21/2019 15:08	WG1382165
Ethoprop	U		0.00525	0.100	0.113	1	11/21/2019 15:08	WG1382165
Ethyl Parathion	U		0.00644	0.100	0.113	1	11/21/2019 15:08	WG1382165
Fensulfothion	U		0.0191	0.100	0.113	1	11/21/2019 15:08	WG1382165
Fenthion	U		0.00686	0.100	0.113	1	11/21/2019 15:08	WG1382165
Malathion	U		0.00790	0.100	0.113	1	11/21/2019 15:08	WG1382165
Merphos	U	J4	0.00608	0.100	0.113	1	11/21/2019 15:08	WG1382165
Methyl parathion	U		0.00755	0.100	0.113	1	11/21/2019 15:08	WG1382165
Mevinphos	U		0.0115	0.100	0.113	1	11/21/2019 15:08	WG1382165
Naled	U		0.00472	0.100	0.113	1	11/21/2019 15:08	WG1382165
Phorate	U		0.00531	0.100	0.113	1	11/21/2019 15:08	WG1382165
Ronnel	U		0.00493	0.100	0.113	1	11/21/2019 15:08	WG1382165
Stirophos	U		0.00606	0.100	0.113	1	11/21/2019 15:08	WG1382165
Sulfotep	U		0.00436	0.100	0.113	1	11/21/2019 15:08	WG1382165
TEPP	U		0.177	1.00	1.13	1	11/21/2019 15:08	WG1382165
Tokuthion (Prothothiofos)	U		0.00681	0.100	0.113	1	11/21/2019 15:08	WG1382165
Trichloronate	U		0.00749	0.100	0.113	1	11/21/2019 15:08	WG1382165
(S) Triphenyl Phosphate	*49.8*				*36.0-121*		*11/21/2019 15:08*	WG1382165

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00152	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Alpha BHC	U		0.00153	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Beta BHC	U		0.00181	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Delta BHC	U		0.00161	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Gamma BHC	U		0.00164	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Chlordane	U		0.0440	0.200	0.226	1	11/19/2019 16:05	WG1382839
4,4-DDD	U		0.00176	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
4,4-DDE	U		0.00174	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
4,4-DDT	U		0.00226	0.0200	0.0226	1	11/19/2019 16:05	WG1382839

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Collected date/time: 11/14/19 14:32

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Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Dieldrin	0.00657	J P	0.00171	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Endosulfan I	U		0.00168	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Endosulfan II	U		0.00181	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Endosulfan sulfate	U		0.00170	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Endrin	U		0.00177	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Endrin aldehyde	U		0.00146	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Endrin ketone	U		0.00186	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Hexachlorobenzene	U		0.00140	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Heptachlor	U		0.00174	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Heptachlor epoxide	U		0.00182	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Methoxychlor	U		0.00201	0.0200	0.0226	1	11/19/2019 16:05	WG1382839
Toxaphene	U		0.0406	0.400	0.451	1	11/19/2019 16:05	WG1382839
(S) Decachlorobiphenyl	*78.1*				*10.0-135*		*11/19/2019 16:05*	WG1382839
(S) Tetrachloro-m-xylene	*86.0*				*10.0-139*		*11/19/2019 16:05*	WG1382839

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

SB-31(1.5-2)

Collected date/time: 11/14/19 14:33

SAMPLE RESULTS - 72

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	89.1		1	11/22/2019 19:22	WG1384994

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0334	J	0.00314	0.0300	0.0337	1	11/19/2019 21:49	WG1382813

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	163		0.516	2.00	2.25	1	11/21/2019 16:12	WG1382684
Barium	84.0		0.191	0.500	0.561	1	11/21/2019 16:12	WG1382684
Cadmium	1.15		0.0786	0.500	0.561	1	11/21/2019 16:12	WG1382684
Chromium	35.4		0.157	1.00	1.12	1	11/21/2019 16:12	WG1382684
Lead	182		0.213	0.500	0.561	1	11/21/2019 16:12	WG1382684
Selenium	U		0.696	2.00	2.25	1	11/21/2019 16:12	WG1382684
Silver	0.458	J	0.135	1.00	1.12	1	11/21/2019 16:12	WG1382684

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.951	0.100	2.81	25	11/24/2019 12:25	WG1386130
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*11/24/2019 12:25*	WG1386130

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

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0154	0.0250	0.0281	1	11/26/2019 23:22	WG1387391
Acrylonitrile	U		0.00213	0.0125	0.0140	1	11/26/2019 23:22	WG1387391
Benzene	0.00174		0.000449	0.00100	0.00112	1	11/26/2019 23:22	WG1387391
Bromobenzene	U		0.00118	0.0125	0.0140	1	11/26/2019 23:22	WG1387391
Bromodichloromethane	U		0.000885	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
Bromoform	U		0.00671	0.0250	0.0281	1	11/26/2019 23:22	WG1387391
Bromomethane	U		0.00415	0.0125	0.0140	1	11/26/2019 23:22	WG1387391
n-Butylbenzene	U		0.00431	0.0125	0.0140	1	11/26/2019 23:22	WG1387391
sec-Butylbenzene	U		0.00284	0.0125	0.0140	1	11/26/2019 23:22	WG1387391
tert-Butylbenzene	U		0.00174	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
Carbon tetrachloride	U		0.00121	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
Chlorobenzene	U		0.000643	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
Chlorodibromomethane	U		0.000505	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
Chloroethane	U		0.00121	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
Chloroform	U		0.000466	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
Chloromethane	U	J4	0.00156	0.0125	0.0140	1	11/26/2019 23:22	WG1387391
2-Chlorotoluene	U		0.00103	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
4-Chlorotoluene	U		0.00127	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
1,2-Dibromo-3-Chloropropane	U		0.00573	0.0250	0.0281	1	11/26/2019 23:22	WG1387391
1,2-Dibromoethane	U		0.000589	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
Dibromomethane	U		0.00112	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
1,2-Dichlorobenzene	U		0.00163	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
1,3-Dichlorobenzene	U		0.00191	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
1,4-Dichlorobenzene	U		0.00221	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
Dichlorodifluoromethane	U		0.000918	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
1,1-Dichloroethane	U		0.000645	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
1,2-Dichloroethane	U		0.000533	0.00250	0.00281	1	11/26/2019 23:22	WG1387391

SB-31(1.5-2)

Collected date/time: 11/14/19 14:33

SAMPLE RESULTS - 72

L1161924

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000561	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
cis-1,2-Dichloroethene	U		0.000775	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
trans-1,2-Dichloroethene	U		0.00161	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
1,2-Dichloropropane	U		0.00143	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
1,1-Dichloropropene	U		0.000786	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
1,3-Dichloropropane	U		0.00196	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
cis-1,3-Dichloropropene	U		0.000761	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
trans-1,3-Dichloropropene	U		0.00172	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
2,2-Dichloropropane	U	J4	0.000890	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
Di-isopropyl ether	U		0.000393	0.00100	0.00112	1	11/26/2019 23:22	WG1387391
Ethylbenzene	0.00356		0.000595	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
Hexachloro-1,3-butadiene	U		0.0143	0.0250	0.0281	1	11/26/2019 23:22	WG1387391
Isopropylbenzene	U		0.000969	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
p-Isopropyltoluene	0.00764		0.00262	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
2-Butanone (MEK)	0.0141	B J	0.0140	0.0250	0.0281	1	11/26/2019 23:22	WG1387391
Methylene Chloride	U		0.00745	0.0250	0.0281	1	11/26/2019 23:22	WG1387391
4-Methyl-2-pentanone (MIBK)	U		0.0112	0.0250	0.0281	1	11/26/2019 23:22	WG1387391
Methyl tert-butyl ether	U		0.000331	0.00100	0.00112	1	11/26/2019 23:22	WG1387391
Naphthalene	0.00782	J	0.00350	0.0125	0.0140	1	11/26/2019 23:22	WG1387391
n-Propylbenzene	0.00192	J J4	0.00132	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
Styrene	U		0.00306	0.0125	0.0140	1	11/26/2019 23:22	WG1387391
1,1,1,2-Tetrachloroethane	U		0.000561	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
1,1,2,2-Tetrachloroethane	U	J4	0.000438	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
1,1,2-Trichlorotrifluoroethane	U		0.000758	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
Tetrachloroethene	U		0.000786	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
Toluene	0.00352	J	0.00140	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
1,2,3-Trichlorobenzene	U		0.000702	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
1,2,4-Trichlorobenzene	U		0.00541	0.0125	0.0140	1	11/26/2019 23:22	WG1387391
1,1,1-Trichloroethane	U		0.000309	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
1,1,2-Trichloroethane	U		0.000991	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
Trichloroethene	U		0.000449	0.00100	0.00112	1	11/26/2019 23:22	WG1387391
Trichlorofluoromethane	U		0.000561	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
1,2,3-Trichloropropane	U		0.00573	0.0125	0.0140	1	11/26/2019 23:22	WG1387391
1,2,4-Trimethylbenzene	0.00548	J	0.00130	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
1,2,3-Trimethylbenzene	0.00285	J	0.00129	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
1,3,5-Trimethylbenzene	0.00377	J	0.00121	0.00500	0.00561	1	11/26/2019 23:22	WG1387391
Vinyl chloride	U		0.000767	0.00250	0.00281	1	11/26/2019 23:22	WG1387391
Xylenes, Total	0.0129		0.00537	0.00650	0.00730	1	11/26/2019 23:22	WG1387391
(S) Toluene-d8	*103*				*75.0-131*		*11/26/2019 23:22*	WG1387391
(S) 4-Bromofluorobenzene	*91.8*				*67.0-138*		*11/26/2019 23:22*	WG1387391
(S) 1,2-Dichloroethane-d4	*93.6*				*70.0-130*		*11/26/2019 23:22*	WG1387391

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	165		14.9	4.00	44.9	10	11/21/2019 22:34	WG1384286
Residual Range Organics (RRO)	642		37.4	10.0	112	10	11/21/2019 22:34	WG1384286
(S) o-Terphenyl	*118*				*18.0-148*		*11/21/2019 22:34*	WG1384286

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

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-D	U		0.00788	0.0700	0.0786	1	11/21/2019 00:35	WG1383608
Dalapon	U		0.0127	0.0700	0.0786	1	11/21/2019 00:35	WG1383608
2,4-DB	U		0.0333	0.0700	0.0786	1	11/21/2019 00:35	WG1383608
Dicamba	U		0.0176	0.0700	0.0786	1	11/21/2019 00:35	WG1383608
Dichloroprop	U		0.0275	0.0700	0.0786	1	11/21/2019 00:35	WG1383608
Dinoseb	U		0.00782	0.0700	0.0786	1	11/21/2019 00:35	WG1383608
MCPA	U		0.497	6.50	7.30	1	11/21/2019 00:35	WG1383608
MCPP	U	J4	0.412	6.50	7.30	1	11/21/2019 00:35	WG1383608
2,4,5-T	U		0.00956	0.0700	0.0786	1	11/21/2019 00:35	WG1383608
2,4,5-TP (Silvex)	U		0.0120	0.0700	0.0786	1	11/21/2019 00:35	WG1383608
(S) 2,4-Dichlorophenyl Acetic Acid	*67.1*				*22.0-132*		*11/21/2019 00:35*	WG1383608

OP Pesticides by Method 8141B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Azinphos-Methyl	U		0.00424	0.100	0.112	1	11/21/2019 12:30	WG1382165
Bolstar (Sulprofos)	U		0.00622	0.100	0.112	1	11/21/2019 12:30	WG1382165
Chlorpyrifos	U		0.0104	0.100	0.112	1	11/21/2019 12:30	WG1382165
Coumaphos	U		0.00763	0.100	0.112	1	11/21/2019 12:30	WG1382165
Demeton,-O and -S	U		0.00381	0.0700	0.0786	1	11/21/2019 12:30	WG1382165
Diazinon	U		0.00502	0.100	0.112	1	11/21/2019 12:30	WG1382165
Dichlorvos	U		0.0109	0.100	0.112	1	11/21/2019 12:30	WG1382165
Dimethoate	U		0.0222	0.100	0.112	1	11/21/2019 12:30	WG1382165
Disulfoton	U		0.00559	0.100	0.112	1	11/21/2019 12:30	WG1382165
EPN	U	J4	0.00575	0.100	0.112	1	11/21/2019 12:30	WG1382165
Ethoprop	U		0.00522	0.100	0.112	1	11/21/2019 12:30	WG1382165
Ethyl Parathion	U		0.00641	0.100	0.112	1	11/21/2019 12:30	WG1382165
Fensulfothion	U		0.0190	0.100	0.112	1	11/21/2019 12:30	WG1382165
Fenthion	U		0.00683	0.100	0.112	1	11/21/2019 12:30	WG1382165
Malathion	U		0.00786	0.100	0.112	1	11/21/2019 12:30	WG1382165
Merphos	U	J4	0.00605	0.100	0.112	1	11/21/2019 12:30	WG1382165
Methyl parathion	U		0.00751	0.100	0.112	1	11/21/2019 12:30	WG1382165
Mevinphos	U		0.0115	0.100	0.112	1	11/21/2019 12:30	WG1382165
Naled	U		0.00469	0.100	0.112	1	11/21/2019 12:30	WG1382165
Phorate	U		0.00529	0.100	0.112	1	11/21/2019 12:30	WG1382165
Ronnel	U		0.00491	0.100	0.112	1	11/21/2019 12:30	WG1382165
Stirophos	U		0.00603	0.100	0.112	1	11/21/2019 12:30	WG1382165
Sulfotep	U		0.00433	0.100	0.112	1	11/21/2019 12:30	WG1382165
TEPP	U		0.176	1.00	1.12	1	11/21/2019 12:30	WG1382165
Tokuthion (Prothothiofos)	U		0.00678	0.100	0.112	1	11/21/2019 12:30	WG1382165
Trichloronate	U		0.00745	0.100	0.112	1	11/21/2019 12:30	WG1382165
(S) Triphenyl Phosphate	*41.4*				*36.0-121*		*11/21/2019 12:30*	WG1382165

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00152	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Alpha BHC	U		0.00153	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Beta BHC	U		0.00180	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Delta BHC	U		0.00161	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Gamma BHC	U		0.00163	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Chlordane	U		0.0438	0.200	0.225	1	11/19/2019 16:18	WG1382839
4,4-DDD	U		0.00175	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
4,4-DDE	U		0.00173	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
4,4-DDT	U		0.00225	0.0200	0.0225	1	11/19/2019 16:18	WG1382839

SB-31(1.5-2)
Collected date/time: 11/14/19 14:33

SAMPLE RESULTS - 72

L1161924

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Dieldrin	0.00549	J P	0.00171	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Endosulfan I	U		0.00167	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Endosulfan II	U		0.00180	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Endosulfan sulfate	U		0.00170	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Endrin	U		0.00176	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Endrin aldehyde	U		0.00145	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Endrin ketone	U		0.00185	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Hexachlorobenzene	U		0.00139	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Heptachlor	U		0.00173	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Heptachlor epoxide	U		0.00181	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Methoxychlor	U		0.00200	0.0200	0.0225	1	11/19/2019 16:18	WG1382839
Toxaphene	U		0.0404	0.400	0.449	1	11/19/2019 16:18	WG1382839
(S) Decachlorobiphenyl	*91.9*				*10.0-135*		*11/19/2019 16:18*	WG1382839
(S) Tetrachloro-m-xylene	*96.8*				*10.0-139*		*11/19/2019 16:18*	WG1382839

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

Method Blank (MB)

(MB) R3475332-1 11/22/19 16:46

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1161924-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-02 11/22/19 16:46 • (DUP) R3475332-3 11/22/19 16:46

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.9	90.2	1	1.52		10

Laboratory Control Sample (LCS)

(LCS) R3475332-2 11/22/19 16:46

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) R3475330-1 11/22/19 16:23

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00500			

L1161924-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-14 11/22/19 16:23 • (DUP) R3475330-3 11/22/19 16:23

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	84.5	82.4	1	2.55		10

Laboratory Control Sample (LCS)

(LCS) R3475330-2 11/22/19 16:23

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	49.9	99.9	85.0-115	

Method Blank (MB)

(MB) R3475326-1 11/22/19 16:02

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00300			

L1161924-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-25 11/22/19 16:02 • (DUP) R3475326-3 11/22/19 16:02

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.7	90.5	1	0.935		10

Laboratory Control Sample (LCS)

(LCS) R3475326-2 11/22/19 16:02

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3475325-1 11/22/19 15:46

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00500			

L1161924-36 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-36 11/22/19 15:46 • (DUP) R3475325-3 11/22/19 15:46

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	79.9	80.0	1	0.0729		10

Laboratory Control Sample (LCS)

(LCS) R3475325-2 11/22/19 15:46

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) R3475320-1 11/22/19 15:19

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1161924-47 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-47 11/22/19 15:19 • (DUP) R3475320-3 11/22/19 15:19

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.5	91.1	1	0.433		10

Laboratory Control Sample (LCS)

(LCS) R3475320-2 11/22/19 15:19

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

WG1384990

Total Solids by Method 2540 G-2011

L1161924-48,49,50,51,52,53,54,55,56,57

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

Method Blank (MB)

(MB) R3475318-1 11/22/19 15:04

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00400			

L1161924-56 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-56 11/22/19 15:04 • (DUP) R3475318-3 11/22/19 15:04

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	91.5	90.3	1	1.34		10

Laboratory Control Sample (LCS)

(LCS) R3475318-2 11/22/19 15:04

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3475273-1 11/22/19 19:33

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1161924-58 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-58 11/22/19 19:33 • (DUP) R3475273-3 11/22/19 19:33

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.3	91.1	1	0.279		10

Laboratory Control Sample (LCS)

(LCS) R3475273-2 11/22/19 19:33

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3475270-1 11/22/19 19:22

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1161924-69 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-69 11/22/19 19:22 • (DUP) R3475270-3 11/22/19 19:22

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.7	90.0	1	1.80		10

Laboratory Control Sample (LCS)

(LCS) R3475270-2 11/22/19 19:22

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.5	101	85.0-115	

Method Blank (MB)

(MB) R3474819-1 11/21/19 16:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	0.00429	J	0.00280	0.0300

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

(LCS) R3474819-2 11/21/19 16:46 • (LCSD) R3474819-3 11/21/19 16:49

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 %
Mercury	0.500	0.532	0.531	106	106	80.0-120			0.157	20

L1161924-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161924-09 11/21/19 16:51 • (MS) R3474819-4 11/21/19 16:54 • (MSD) R3474819-5 11/21/19 16:56

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 %
Mercury	0.553	0.0209	0.580	0.588	101	102	1	75.0-125			1.36	20

Method Blank (MB)

(MB) R3474821-1 11/21/19 18:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.00280	0.0300

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

(LCS) R3474821-2 11/21/19 18:09 • (LCSD) R3474821-3 11/21/19 18:12

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 %
Mercury	0.500	0.499	0.521	99.9	104	80.0-120			4.20	20

L1161924-28 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161924-28 11/21/19 18:14 • (MS) R3474821-4 11/21/19 18:17 • (MSD) R3474821-5 11/21/19 18:24

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 %
Mercury	0.514	0.0359	0.516	0.513	93.5	93.0	1	75.0-125			0.498	20

WG1382812

Mercury by Method 7471A

Method Blank (MB)

(MB) R3474822-1 11/21/19 19:25

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.00280	0.0300

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

(LCS) R3474822-2 11/21/19 19:28 • (LCSD) R3474822-3 11/21/19 19:30

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 %
Mercury	0.500	0.431	0.525	86.2	105	80.0-120			19.6	20

L1161924-46 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161924-46 11/21/19 19:33 • (MS) R3474822-4 11/21/19 19:36 • (MSD) R3474822-5 11/21/19 19:38

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 %
Mercury	0.545	0.0343	0.573	0.620	98.8	107	1	75.0-125			7.84	20

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

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

Method Blank (MB)

(MB) R3473928-1 11/19/19 20:37

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.00280	0.0300

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

(LCS) R3473928-2 11/19/19 20:39 • (LCSD) R3473928-3 11/19/19 20:42

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 %
Mercury	0.500	0.489	0.497	97.7	99.3	80.0-120			1.65	20

L1161924-64 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161924-64 11/19/19 20:45 • (MS) R3473928-4 11/19/19 20:47 • (MSD) R3473928-5 11/19/19 20:55

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 %
Mercury	0.609	0.0874	0.645	0.706	91.5	102	1	75.0-125			9.09	20

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

Method Blank (MB)

(MB) R3473954-1 11/19/19 23:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	0.137	J	0.120	1.00

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

(LCS) R3473954-2 11/19/19 23:46 • (LCSD) R3473954-3 11/19/19 23:48

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 %
Arsenic	100	95.7	91.5	95.7	91.5	80.0-120			4.57	20
Barium	100	98.9	94.4	98.9	94.4	80.0-120			4.72	20
Cadmium	100	96.9	92.2	96.9	92.2	80.0-120			5.01	20
Chromium	100	107	101	107	101	80.0-120			5.37	20
Lead	100	103	97.7	103	97.7	80.0-120			5.27	20
Selenium	100	96.4	91.3	96.4	91.3	80.0-120			5.51	20
Silver	20.0	19.6	18.5	97.8	92.5	80.0-120			5.55	20

L1161023-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161023-03 11/19/19 23:51 • (MS) R3473954-6 11/19/19 23:59 • (MSD) R3473954-7 11/20/19 00:02

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 %
Arsenic	106	ND	90.8	94.0	84.6	87.6	1	75.0-125			3.46	20
Barium	106	38.8	131	133	87.5	88.7	1	75.0-125			0.982	20
Cadmium	106	ND	91.6	94.4	86.1	88.8	1	75.0-125			3.08	20
Chromium	106	16.8	116	124	93.9	101	1	75.0-125			6.65	20
Lead	106	36.7	132	152	90.2	109	1	75.0-125			13.9	20
Selenium	106	ND	89.1	92.5	84.2	87.3	1	75.0-125			3.69	20
Silver	21.2	ND	18.7	19.2	87.4	89.5	1	75.0-125			2.43	20

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

Method Blank (MB)

(MB) R3474364-1 11/20/19 14:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	U		0.120	1.00

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

(LCS) R3474364-2 11/20/19 14:11 • (LCSD) R3474364-3 11/20/19 14:14

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 %
Arsenic	100	99.5	99.1	99.5	99.1	80.0-120			0.415	20
Barium	100	108	108	108	108	80.0-120			0.661	20
Cadmium	100	103	102	103	102	80.0-120			1.00	20
Chromium	100	107	106	107	106	80.0-120			1.48	20
Lead	100	103	102	103	102	80.0-120			0.721	20
Selenium	100	104	102	104	102	80.0-120			1.89	20
Silver	20.0	19.7	19.7	98.3	98.5	80.0-120			0.205	20

L1161924-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161924-08 11/20/19 14:16 • (MS) R3474364-6 11/20/19 14:24 • (MSD) R3474364-7 11/20/19 14:26

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 %
Arsenic	105	4.07	105	103	96.5	94.1	1	75.0-125			2.41	20
Barium	105	78.7	176	167	92.6	84.0	1	75.0-125			5.29	20
Cadmium	105	0.175	105	103	101	97.9	1	75.0-125			2.68	20
Chromium	105	98.1	181	166	78.8	65.0	1	75.0-125		J6	8.37	20
Lead	105	9.13	114	110	100	96.9	1	75.0-125			3.04	20
Selenium	105	U	104	101	99.4	96.9	1	75.0-125			2.53	20
Silver	20.9	U	20.4	20.0	97.3	95.5	1	75.0-125			1.86	20

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

Method Blank (MB)

(MB) R3474365-1 11/20/19 15:33

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	U		0.120	1.00

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

(LCS) R3474365-2 11/20/19 15:35 • (LCSD) R3474365-3 11/20/19 15:38

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Arsenic	100	98.0	96.6	98.0	96.6	80.0-120			1.45	20
Barium	100	106	105	106	105	80.0-120			1.15	20
Cadmium	100	101	100	101	100	80.0-120			0.505	20
Chromium	100	104	104	104	104	80.0-120			0.288	20
Lead	100	100	100	100	100	80.0-120			0.121	20
Selenium	100	99.9	101	99.9	101	80.0-120			0.893	20
Silver	20.0	19.2	19.1	95.8	95.7	80.0-120			0.0834	20

L1161924-27 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161924-27 11/20/19 15:40 • (MS) R3474365-6 11/20/19 15:48 • (MSD) R3474365-7 11/20/19 15:50

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	111	102	122	114	18.5	10.9	1	75.0-125	J6	J6	7.19	20
Barium	111	68.1	194	177	113	98.1	1	75.0-125			9.08	20
Cadmium	111	0.179	115	111	103	99.2	1	75.0-125			3.66	20
Chromium	111	32.1	144	147	101	103	1	75.0-125			1.50	20
Lead	111	37.0	150	153	102	105	1	75.0-125			1.94	20
Selenium	111	0.724	113	109	101	97.5	1	75.0-125			3.20	20
Silver	22.3	U	22.3	21.5	100	96.3	1	75.0-125			3.93	20

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

Method Blank (MB)

(MB) R3474838-1 11/21/19 16:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	U		0.120	1.00

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

(LCS) R3474838-2 11/21/19 16:23 • (LCSD) R3474838-3 11/21/19 16:25

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 %
Arsenic	100	96.7	96.4	96.7	96.4	80.0-120			0.305	20
Barium	100	106	105	106	105	80.0-120			0.500	20
Cadmium	100	97.9	97.5	97.9	97.5	80.0-120			0.412	20
Chromium	100	100	99.7	100	99.7	80.0-120			0.723	20
Lead	100	99.0	98.8	99.0	98.8	80.0-120			0.254	20
Selenium	100	101	100	101	100	80.0-120			0.490	20
Silver	20.0	19.2	19.1	96.2	95.7	80.0-120			0.524	20

L1161924-44 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161924-44 11/21/19 16:28 • (MS) R3474838-6 11/21/19 16:35 • (MSD) R3474838-7 11/21/19 16:38

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 %
Arsenic	108	3.78	104	105	92.6	93.2	1	75.0-125			0.658	20
Barium	108	79.3	171	176	84.6	88.9	1	75.0-125			2.71	20
Cadmium	108	0.171	103	104	95.0	95.9	1	75.0-125			0.953	20
Chromium	108	24.5	129	131	96.6	98.4	1	75.0-125			1.53	20
Lead	108	3.60	112	113	101	101	1	75.0-125			0.123	20
Selenium	108	U	104	105	96.4	97.5	1	75.0-125			1.10	20
Silver	21.6	U	20.5	20.5	94.6	94.8	1	75.0-125			0.192	20

Method Blank (MB)

(MB) R3475414-3 11/22/19 01:36

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)	*99.2*			*77.0-120*

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

(LCS) R3475414-1 11/22/19 00:00 • (LCSD) R3475414-2 11/22/19 00:24

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 %
Gasoline Range Organics-NWTPH	5.50	5.11	5.73	92.9	104	71.0-124			11.4	20
(S) a,a,a-Trifluorotoluene(FID)				*107*	*107*	*77.0-120*				

L1161924-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161924-02 11/22/19 02:24 • (MS) R3475414-4 11/22/19 10:02 • (MSD) R3475414-5 11/22/19 10:26

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	143	U	185	196	129	137	25	10.0-149			5.92	27
(S) a,a,a-Trifluorotoluene(FID)					*111*	*112*		*77.0-120*				

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

Method Blank (MB)

(MB) R3474982-5 11/22/19 02:58

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	0.0362	J	0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*

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

(LCS) R3474982-3 11/22/19 01:56 • (LCSD) R3474982-4 11/22/19 02:17

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 %
Gasoline Range Organics-NWTPH	5.50	5.12	4.92	93.1	89.5	71.0-124			3.98	20
(S) a,a,a-Trifluorotoluene(FID)				*109*	*107*	*77.0-120*				

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

Method Blank (MB)

(MB) R3475415-3 11/23/19 04:20

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)	*99.2*			*77.0-120*

Method Blank (MB)

(MB) R3475415-6 11/23/19 03:55

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) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3475415-1 11/23/19 02:43 • (LCSD) R3475415-2 11/23/19 03:07

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 %
Gasoline Range Organics-NWTPH	5.50	6.74	6.76	123	123	71.0-124			0.296	20
(S) a,a,a-Trifluorotoluene(FID)				*110*	*110*	*77.0-120*				

L1161924-56 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161924-56 11/23/19 12:24 • (MS) R3475415-4 11/23/19 12:48 • (MSD) R3475415-5 11/23/19 13:12

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	122	U	111	134	91.1	110	25	10.0-149			18.7	27
(S) a,a,a-Trifluorotoluene(FID)					*109*	*109*		*77.0-120*				

Method Blank (MB)

(MB) R3475872-2 11/24/19 05:57

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)	*99.5*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3475872-1 11/24/19 04:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	6.20	113	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*109*	*77.0-120*	

Method Blank (MB)

(MB) R3475906-3 11/23/19 21:01

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) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3475906-1 11/23/19 19:20 • (LCSD) R3475906-2 11/23/19 20:05

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 %
Gasoline Range Organics-NWTPH	5.50	5.04	4.97	91.6	90.4	71.0-124			1.40	20
(S) a,a,a-Trifluorotoluene(FID)				*106*	*107*	*77.0-120*				

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

Method Blank (MB)

(MB) R3476545-2 11/24/19 23:34

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3476545-2 11/24/19 23:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0454		0.0125	0.0250
Methylene Chloride	0.0130	J	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	0.00250
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 chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*101*			*75.0-131*
(S) 4-Bromofluorobenzene	*90.4*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*75.0*			*70.0-130*

Method Blank (MB) - TENTATIVELY IDENTIFIED COMPOUNDS

(MB) R3476545-2 11/24/19 23:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg	CAS #

Number of TICs found: 0

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.

Laboratory Control Sample (LCS)

(LCS) R3476545-1 11/24/19 21:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.797	128	10.0-160	
Acrylonitrile	0.625	0.646	103	45.0-153	
Benzene	0.125	0.137	110	70.0-123	
Bromobenzene	0.125	0.123	98.4	73.0-121	
Bromodichloromethane	0.125	0.132	106	73.0-121	
Bromoform	0.125	0.0990	79.2	64.0-132	
Bromomethane	0.125	0.151	121	56.0-147	
n-Butylbenzene	0.125	0.162	130	68.0-135	
sec-Butylbenzene	0.125	0.143	114	74.0-130	
tert-Butylbenzene	0.125	0.122	97.6	75.0-127	
Carbon tetrachloride	0.125	0.117	93.6	66.0-128	
Chlorobenzene	0.125	0.107	85.6	76.0-128	
Chlorodibromomethane	0.125	0.105	84.0	74.0-127	
Chloroethane	0.125	0.163	130	61.0-134	
Chloroform	0.125	0.113	90.4	72.0-123	
Chloromethane	0.125	0.178	142	51.0-138	J4
2-Chlorotoluene	0.125	0.136	109	75.0-124	
4-Chlorotoluene	0.125	0.137	110	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.123	98.4	59.0-130	
1,2-Dibromoethane	0.125	0.102	81.6	74.0-128	
Dibromomethane	0.125	0.109	87.2	75.0-122	
1,2-Dichlorobenzene	0.125	0.120	96.0	76.0-124	
1,3-Dichlorobenzene	0.125	0.130	104	76.0-125	
1,4-Dichlorobenzene	0.125	0.119	95.2	77.0-121	
Dichlorodifluoromethane	0.125	0.155	124	43.0-156	
1,1-Dichloroethane	0.125	0.103	82.4	70.0-127	
1,2-Dichloroethane	0.125	0.121	96.8	65.0-131	
1,1-Dichloroethene	0.125	0.120	96.0	65.0-131	
cis-1,2-Dichloroethene	0.125	0.114	91.2	73.0-125	
trans-1,2-Dichloroethene	0.125	0.125	100	71.0-125	
1,2-Dichloropropane	0.125	0.120	96.0	74.0-125	
1,1-Dichloropropene	0.125	0.113	90.4	73.0-125	
1,3-Dichloropropane	0.125	0.118	94.4	80.0-125	
cis-1,3-Dichloropropene	0.125	0.114	91.2	76.0-127	
trans-1,3-Dichloropropene	0.125	0.111	88.8	73.0-127	
2,2-Dichloropropane	0.125	0.129	103	59.0-135	
Di-isopropyl ether	0.125	0.126	101	60.0-136	
Ethylbenzene	0.125	0.106	84.8	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.133	106	57.0-150	
Isopropylbenzene	0.125	0.110	88.0	72.0-127	

Laboratory Control Sample (LCS)

(LCS) R3476545-1 11/24/19 21:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	0.125	0.132	106	72.0-133	
2-Butanone (MEK)	0.625	0.577	92.3	30.0-160	
Methylene Chloride	0.125	0.114	91.2	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.722	116	56.0-143	
Methyl tert-butyl ether	0.125	0.126	101	66.0-132	
Naphthalene	0.125	0.118	94.4	59.0-130	
n-Propylbenzene	0.125	0.146	117	74.0-126	
Styrene	0.125	0.0950	76.0	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.114	91.2	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.145	116	68.0-128	
Tetrachloroethene	0.125	0.108	86.4	70.0-136	
Toluene	0.125	0.116	92.8	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.117	93.6	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.132	106	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.129	103	62.0-137	
1,1,1-Trichloroethane	0.125	0.142	114	69.0-126	
1,1,2-Trichloroethane	0.125	0.115	92.0	78.0-123	
Trichloroethene	0.125	0.129	103	76.0-126	
Trichlorofluoromethane	0.125	0.123	98.4	61.0-142	
1,2,3-Trichloropropane	0.125	0.146	117	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.120	96.0	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.127	102	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.128	102	73.0-127	
Vinyl chloride	0.125	0.162	130	63.0-134	
Xylenes, Total	0.375	0.318	84.8	72.0-127	
(S) Toluene-d8			*97.9*	*75.0-131*	
(S) 4-Bromofluorobenzene			*92.4*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*105*	*70.0-130*	

Method Blank (MB)

(MB) R3476517-2 11/25/19 23:10

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
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 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	0.000850	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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3476517-2 11/25/19 23:10

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0197	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	0.00250
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 chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*104*			*75.0-131*
(S) 4-Bromofluorobenzene	*85.9*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*94.7*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3476517-1 11/25/19 21:17

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Acetone	0.625	0.524	83.8	10.0-160	
Acrylonitrile	0.625	0.560	89.6	45.0-153	
Benzene	0.125	0.139	111	70.0-123	
Bromobenzene	0.125	0.124	99.2	73.0-121	
Bromodichloromethane	0.125	0.130	104	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3476517-1 11/25/19 21:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.0961	76.9	64.0-132	
Bromomethane	0.125	0.168	134	56.0-147	
n-Butylbenzene	0.125	0.176	141	68.0-135	J4
sec-Butylbenzene	0.125	0.158	126	74.0-130	
tert-Butylbenzene	0.125	0.134	107	75.0-127	
Carbon tetrachloride	0.125	0.124	99.2	66.0-128	
Chlorobenzene	0.125	0.111	88.8	76.0-128	
Chlorodibromomethane	0.125	0.106	84.8	74.0-127	
Chloroethane	0.125	0.181	145	61.0-134	J4
Chloroform	0.125	0.101	80.8	72.0-123	
Chloromethane	0.125	0.120	96.0	51.0-138	
2-Chlorotoluene	0.125	0.149	119	75.0-124	
4-Chlorotoluene	0.125	0.149	119	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.126	101	59.0-130	
1,2-Dibromoethane	0.125	0.101	80.8	74.0-128	
Dibromomethane	0.125	0.108	86.4	75.0-122	
1,2-Dichlorobenzene	0.125	0.120	96.0	76.0-124	
1,3-Dichlorobenzene	0.125	0.134	107	76.0-125	
1,4-Dichlorobenzene	0.125	0.121	96.8	77.0-121	
Dichlorodifluoromethane	0.125	0.186	149	43.0-156	
1,1-Dichloroethane	0.125	0.100	80.0	70.0-127	
1,2-Dichloroethane	0.125	0.115	92.0	65.0-131	
1,1-Dichloroethene	0.125	0.129	103	65.0-131	
cis-1,2-Dichloroethene	0.125	0.116	92.8	73.0-125	
trans-1,2-Dichloroethene	0.125	0.126	101	71.0-125	
1,2-Dichloropropane	0.125	0.120	96.0	74.0-125	
1,1-Dichloropropene	0.125	0.121	96.8	73.0-125	
1,3-Dichloropropane	0.125	0.121	96.8	80.0-125	
cis-1,3-Dichloropropene	0.125	0.115	92.0	76.0-127	
trans-1,3-Dichloropropene	0.125	0.115	92.0	73.0-127	
2,2-Dichloropropane	0.125	0.168	134	59.0-135	
Di-isopropyl ether	0.125	0.124	99.2	60.0-136	
Ethylbenzene	0.125	0.109	87.2	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.140	112	57.0-150	
Isopropylbenzene	0.125	0.115	92.0	72.0-127	
p-Isopropyltoluene	0.125	0.145	116	72.0-133	
2-Butanone (MEK)	0.625	0.583	93.3	30.0-160	
Methylene Chloride	0.125	0.102	81.6	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.666	107	56.0-143	
Methyl tert-butyl ether	0.125	0.103	82.4	66.0-132	

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

Laboratory Control Sample (LCS)

(LCS) R3476517-1 11/25/19 21:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.114	91.2	59.0-130	
n-Propylbenzene	0.125	0.164	131	74.0-126	J4
Styrene	0.125	0.0916	73.3	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.114	91.2	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.163	130	68.0-128	J4
Tetrachloroethene	0.125	0.119	95.2	70.0-136	
Toluene	0.125	0.122	97.6	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.135	108	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.133	106	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.132	106	62.0-137	
1,1,1-Trichloroethane	0.125	0.143	114	69.0-126	
1,1,2-Trichloroethane	0.125	0.117	93.6	78.0-123	
Trichloroethene	0.125	0.121	96.8	76.0-126	
Trichlorofluoromethane	0.125	0.140	112	61.0-142	
1,2,3-Trichloropropane	0.125	0.143	114	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.124	99.2	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.135	108	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.138	110	73.0-127	
Vinyl chloride	0.125	0.180	144	63.0-134	J4
Xylenes, Total	0.375	0.326	86.9	72.0-127	
(S) Toluene-d8			*101*	*75.0-131*	
(S) 4-Bromofluorobenzene			*91.4*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*101*	*70.0-130*	

Method Blank (MB)

(MB) R3476647-1 11/26/19 08:14

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

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

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

Method Blank (MB)

(MB) R3476647-1 11/26/19 08:14

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0211	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	0.00250
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 chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*84.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*85.8*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3476647-2 11/26/19 08:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.799	128	10.0-160	
Acrylonitrile	0.625	0.692	111	45.0-153	
Benzene	0.125	0.140	112	70.0-123	
Bromobenzene	0.125	0.120	96.0	73.0-121	
Bromodichloromethane	0.125	0.130	104	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3476647-2 11/26/19 08:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.0976	78.1	64.0-132	
Bromomethane	0.125	0.150	120	56.0-147	
n-Butylbenzene	0.125	0.148	118	68.0-135	
sec-Butylbenzene	0.125	0.138	110	74.0-130	
tert-Butylbenzene	0.125	0.115	92.0	75.0-127	
Carbon tetrachloride	0.125	0.118	94.4	66.0-128	
Chlorobenzene	0.125	0.105	84.0	76.0-128	
Chlorodibromomethane	0.125	0.107	85.6	74.0-127	
Chloroethane	0.125	0.189	151	61.0-134	J4
Chloroform	0.125	0.128	102	72.0-123	
Chloromethane	0.125	0.171	137	51.0-138	
2-Chlorotoluene	0.125	0.134	107	75.0-124	
4-Chlorotoluene	0.125	0.134	107	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.124	99.2	59.0-130	
1,2-Dibromoethane	0.125	0.103	82.4	74.0-128	
Dibromomethane	0.125	0.112	89.6	75.0-122	
1,2-Dichlorobenzene	0.125	0.110	88.0	76.0-124	
1,3-Dichlorobenzene	0.125	0.125	100	76.0-125	
1,4-Dichlorobenzene	0.125	0.113	90.4	77.0-121	
Dichlorodifluoromethane	0.125	0.156	125	43.0-156	
1,1-Dichloroethane	0.125	0.119	95.2	70.0-127	
1,2-Dichloroethane	0.125	0.129	103	65.0-131	
1,1-Dichloroethene	0.125	0.134	107	65.0-131	
cis-1,2-Dichloroethene	0.125	0.137	110	73.0-125	
trans-1,2-Dichloroethene	0.125	0.148	118	71.0-125	
1,2-Dichloropropane	0.125	0.120	96.0	74.0-125	
1,1-Dichloropropene	0.125	0.116	92.8	73.0-125	
1,3-Dichloropropane	0.125	0.114	91.2	80.0-125	
cis-1,3-Dichloropropene	0.125	0.116	92.8	76.0-127	
trans-1,3-Dichloropropene	0.125	0.114	91.2	73.0-127	
2,2-Dichloropropane	0.125	0.169	135	59.0-135	
Di-isopropyl ether	0.125	0.146	117	60.0-136	
Ethylbenzene	0.125	0.0998	79.8	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.125	100	57.0-150	
Isopropylbenzene	0.125	0.100	80.0	72.0-127	
p-Isopropyltoluene	0.125	0.123	98.4	72.0-133	
2-Butanone (MEK)	0.625	0.669	107	30.0-160	
Methylene Chloride	0.125	0.131	105	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.724	116	56.0-143	
Methyl tert-butyl ether	0.125	0.143	114	66.0-132	

Laboratory Control Sample (LCS)

(LCS) R3476647-2 11/26/19 08:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.104	83.2	59.0-130	
n-Propylbenzene	0.125	0.145	116	74.0-126	
Styrene	0.125	0.0897	71.8	72.0-127	J4
1,1,1,2-Tetrachloroethane	0.125	0.112	89.6	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.170	136	68.0-128	J4
Tetrachloroethene	0.125	0.106	84.8	70.0-136	
Toluene	0.125	0.116	92.8	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.122	97.6	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.112	89.6	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.103	82.4	62.0-137	
1,1,1-Trichloroethane	0.125	0.146	117	69.0-126	
1,1,2-Trichloroethane	0.125	0.118	94.4	78.0-123	
Trichloroethene	0.125	0.114	91.2	76.0-126	
Trichlorofluoromethane	0.125	0.189	151	61.0-142	J4
1,2,3-Trichloropropane	0.125	0.153	122	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.112	89.6	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.115	92.0	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.124	99.2	73.0-127	
Vinyl chloride	0.125	0.155	124	63.0-134	
Xylenes, Total	0.375	0.304	81.1	72.0-127	
(S) Toluene-d8			*98.8*	*75.0-131*	
(S) 4-Bromofluorobenzene			*88.5*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*110*	*70.0-130*	

L1161985-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161985-05 11/26/19 16:09 • (MS) R3476647-3 11/26/19 16:28 • (MSD) R3476647-4 11/26/19 16:47

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	11.6	ND	6.90	12.1	59.6	105	40	10.0-160		J3	54.8	40
Acrylonitrile	11.6	ND	9.50	11.0	82.0	95.3	40	10.0-160			15.0	40
Benzene	2.32	11.7	3.54	4.07	0.000	0.000	40	10.0-149	V	V	13.9	37
Bromobenzene	2.32	ND	2.25	2.47	97.2	107	40	10.0-156			9.26	38
Bromodichloromethane	2.32	ND	2.22	2.64	95.6	114	40	10.0-143			17.5	37
Bromoform	2.32	ND	1.69	2.01	72.8	86.7	40	10.0-146			17.4	36
Bromomethane	2.32	ND	2.78	3.30	120	142	40	10.0-149			16.9	38
n-Butylbenzene	2.32	11.2	4.98	4.84	0.000	0.000	40	10.0-160	V	V	2.88	40
sec-Butylbenzene	2.32	3.68	3.13	3.41	0.000	0.000	40	10.0-159	J6	J6	8.66	39
tert-Butylbenzene	2.32	ND	2.24	2.56	96.7	111	40	10.0-156			13.4	39

L1161985-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161985-05 11/26/19 16:09 • (MS) R3476647-3 11/26/19 16:28 • (MSD) R3476647-4 11/26/19 16:47

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 %
Carbon tetrachloride	2.32	ND	2.03	2.63	87.8	113	40	10.0-145			25.4	37
Chlorobenzene	2.32	ND	1.84	2.22	79.4	95.6	40	10.0-152			18.4	39
Chlorodibromomethane	2.32	ND	1.88	2.11	81.1	91.1	40	10.0-146			11.6	37
Chloroethane	2.32	ND	3.01	3.52	130	152	40	10.0-146		J5	15.4	40
Chloroform	2.32	ND	2.09	2.37	90.0	102	40	10.0-146			12.7	37
Chloromethane	2.32	ND	3.08	3.54	133	153	40	10.0-159			14.0	37
2-Chlorotoluene	2.32	ND	2.52	2.82	109	122	40	10.0-159			11.1	38
4-Chlorotoluene	2.32	ND	2.42	2.72	104	117	40	10.0-155			11.5	39
1,2-Dibromo-3-Chloropropane	2.32	ND	2.51	2.52	108	109	40	10.0-151			0.512	39
1,2-Dibromoethane	2.32	ND	1.75	1.97	75.6	85.0	40	10.0-148			11.8	34
Dibromomethane	2.32	ND	1.87	2.09	80.6	90.0	40	10.0-147			11.1	35
1,2-Dichlorobenzene	2.32	ND	2.07	2.29	89.4	98.9	40	10.0-155			10.0	37
1,3-Dichlorobenzene	2.32	ND	2.32	2.50	100	108	40	10.0-153			7.49	38
1,4-Dichlorobenzene	2.32	ND	2.06	2.28	88.9	98.3	40	10.0-151			10.1	38
Dichlorodifluoromethane	2.32	ND	3.04	3.92	131	169	40	10.0-160		J5	25.2	35
1,1-Dichloroethane	2.32	ND	1.88	2.20	81.1	95.0	40	10.0-147			15.8	37
1,2-Dichloroethane	2.32	ND	2.00	2.25	86.1	97.2	40	10.0-148			12.1	35
1,1-Dichloroethene	2.32	ND	2.19	2.78	94.4	120	40	10.0-155			23.8	37
cis-1,2-Dichloroethene	2.32	ND	2.22	2.60	95.6	112	40	10.0-149			16.0	37
trans-1,2-Dichloroethene	2.32	ND	2.33	2.82	101	122	40	10.0-150			19.0	37
1,2-Dichloropropane	2.32	ND	2.09	2.41	90.0	104	40	10.0-148			14.3	37
1,1-Dichloropropene	2.32	ND	1.87	2.49	80.6	107	40	10.0-153			28.4	35
1,3-Dichloropropane	2.32	ND	2.05	2.29	88.3	98.9	40	10.0-154			11.3	35
cis-1,3-Dichloropropene	2.32	ND	2.00	2.41	86.1	104	40	10.0-151			18.7	37
trans-1,3-Dichloropropene	2.32	ND	2.02	2.33	87.2	101	40	10.0-148			14.2	37
2,2-Dichloropropane	2.32	ND	2.79	3.32	121	143	40	10.0-138		J5	17.3	36
Di-isopropyl ether	2.32	0.0667	2.49	2.79	104	118	40	10.0-147			11.7	36
Ethylbenzene	2.32	67.2	9.49	9.85	0.000	0.000	40	10.0-160	V	V	3.73	38
Hexachloro-1,3-butadiene	2.32	ND	2.58	2.86	111	123	40	10.0-160			10.4	40
Isopropylbenzene	2.32	7.69	2.81	3.32	0.000	0.000	40	10.0-155	J6	J6	16.8	38
p-Isopropyltoluene	2.32	ND	2.78	3.89	43.3	91.1	40	10.0-160			33.2	40
2-Butanone (MEK)	11.6	ND	9.67	12.1	83.4	104	40	10.0-160			22.0	40
Methylene Chloride	2.32	ND	2.02	2.27	87.2	97.8	40	10.0-141			11.4	37
4-Methyl-2-pentanone (MIBK)	11.6	ND	11.4	13.0	98.4	112	40	10.0-160			13.1	35
Methyl tert-butyl ether	2.32	ND	2.22	2.60	95.6	112	40	11.0-147			16.0	35
Naphthalene	2.32	57.7	21.6	18.2	0.000	0.000	40	10.0-160	V	V	17.5	36
n-Propylbenzene	2.32	43.5	8.10	8.05	0.000	0.000	40	10.0-158	V	V	0.638	38
Styrene	2.32	ND	1.78	2.14	76.7	92.2	40	10.0-160			18.4	40
1,1,1,2-Tetrachloroethane	2.32	ND	1.97	2.32	85.0	100	40	10.0-149			16.2	39

L1161985-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161985-05 11/26/19 16:09 • (MS) R3476647-3 11/26/19 16:28 • (MSD) R3476647-4 11/26/19 16:47

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
1,1,2,2-Tetrachloroethane	2.32	ND	2.95	2.95	127	127	40	10.0-160			0.000	35
Tetrachloroethene	2.32	ND	1.87	2.29	80.6	98.9	40	10.0-156			20.4	39
Toluene	2.32	183	20.9	20.7	0.000	0.000	40	10.0-156	V	V	0.619	38
1,1,2-Trichlorotrifluoroethane	2.32	ND	2.10	2.85	90.6	123	40	10.0-160			30.2	36
1,2,3-Trichlorobenzene	2.32	ND	2.82	2.46	122	106	40	10.0-160			13.7	40
1,2,4-Trichlorobenzene	2.32	ND	2.76	2.59	119	112	40	10.0-160			6.27	40
1,1,1-Trichloroethane	2.32	ND	2.42	3.04	104	131	40	10.0-144			22.6	35
1,1,2-Trichloroethane	2.32	ND	2.03	2.28	87.8	98.3	40	10.0-160			11.3	35
Trichloroethene	2.32	ND	2.00	2.45	86.1	106	40	10.0-156			20.3	38
Trichlorofluoromethane	2.32	ND	2.28	2.18	98.3	93.9	40	10.0-160			4.62	40
1,2,3-Trichloropropane	2.32	ND	2.49	2.58	107	111	40	10.0-156			3.56	35
1,2,3-Trimethylbenzene	2.32	78.0	16.5	15.6	0.000	0.000	40	10.0-160	V	V	5.62	36
1,2,4-Trimethylbenzene	2.32	281	44.9	42.1	0.000	0.000	40	10.0-160	V	V	6.51	36
1,3,5-Trimethylbenzene	2.32	67.9	11.9	11.3	0.000	0.000	40	10.0-160	V	V	4.88	38
Vinyl chloride	2.32	ND	2.83	3.55	122	153	40	10.0-160			22.6	37
Xylenes, Total	6.95	389	51.4	53.6	0.000	0.000	40	10.0-160	V	V	4.17	38
(S) Toluene-d8					*99.7*	*98.3*		*75.0-131*				
(S) 4-Bromofluorobenzene					*87.3*	*93.2*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*97.6*	*99.1*		*70.0-130*				

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

Method Blank (MB)

(MB) R3476832-2 11/26/19 16:43

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

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

Method Blank (MB)

(MB) R3476832-2 11/26/19 16:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0840		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	0.00250
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	0.00191	J	0.00115	0.00500
1,2,4-Trimethylbenzene	0.00180	J	0.00116	0.00500
1,3,5-Trimethylbenzene	0.00111	J	0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*96.2*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*94.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3476832-1 11/26/19 15:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.584	93.4	10.0-160	
Acrylonitrile	0.625	0.694	111	45.0-153	
Benzene	0.125	0.131	105	70.0-123	
Bromobenzene	0.125	0.132	106	73.0-121	
Bromodichloromethane	0.125	0.138	110	73.0-121	

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

Laboratory Control Sample (LCS)

(LCS) R3476832-1 11/26/19 15:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.135	108	64.0-132	
Bromomethane	0.125	0.136	109	56.0-147	
n-Butylbenzene	0.125	0.144	115	68.0-135	
sec-Butylbenzene	0.125	0.142	114	74.0-130	
tert-Butylbenzene	0.125	0.140	112	75.0-127	
Carbon tetrachloride	0.125	0.144	115	66.0-128	
Chlorobenzene	0.125	0.136	109	76.0-128	
Chlorodibromomethane	0.125	0.142	114	74.0-127	
Chloroethane	0.125	0.137	110	61.0-134	
Chloroform	0.125	0.131	105	72.0-123	
Chloromethane	0.125	0.124	99.2	51.0-138	
2-Chlorotoluene	0.125	0.136	109	75.0-124	
4-Chlorotoluene	0.125	0.138	110	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.144	115	59.0-130	
1,2-Dibromoethane	0.125	0.138	110	74.0-128	
Dibromomethane	0.125	0.131	105	75.0-122	
1,2-Dichlorobenzene	0.125	0.135	108	76.0-124	
1,3-Dichlorobenzene	0.125	0.136	109	76.0-125	
1,4-Dichlorobenzene	0.125	0.135	108	77.0-121	
Dichlorodifluoromethane	0.125	0.159	127	43.0-156	
1,1-Dichloroethane	0.125	0.137	110	70.0-127	
1,2-Dichloroethane	0.125	0.126	101	65.0-131	
1,1-Dichloroethene	0.125	0.139	111	65.0-131	
cis-1,2-Dichloroethene	0.125	0.137	110	73.0-125	
trans-1,2-Dichloroethene	0.125	0.140	112	71.0-125	
1,2-Dichloropropane	0.125	0.135	108	74.0-125	
1,1-Dichloropropene	0.125	0.139	111	73.0-125	
1,3-Dichloropropane	0.125	0.135	108	80.0-125	
cis-1,3-Dichloropropene	0.125	0.138	110	76.0-127	
trans-1,3-Dichloropropene	0.125	0.134	107	73.0-127	
2,2-Dichloropropane	0.125	0.138	110	59.0-135	
Di-isopropyl ether	0.125	0.139	111	60.0-136	
Ethylbenzene	0.125	0.134	107	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.149	119	57.0-150	
Isopropylbenzene	0.125	0.137	110	72.0-127	
p-Isopropyltoluene	0.125	0.143	114	72.0-133	
2-Butanone (MEK)	0.625	0.659	105	30.0-160	
Methylene Chloride	0.125	0.131	105	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.673	108	56.0-143	
Methyl tert-butyl ether	0.125	0.138	110	66.0-132	

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

Laboratory Control Sample (LCS)

(LCS) R3476832-1 11/26/19 15:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.145	116	59.0-130	
n-Propylbenzene	0.125	0.136	109	74.0-126	
Styrene	0.125	0.139	111	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.135	108	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.135	108	68.0-128	
Tetrachloroethene	0.125	0.141	113	70.0-136	
Toluene	0.125	0.137	110	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.143	114	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.155	124	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.138	110	62.0-137	
1,1,1-Trichloroethane	0.125	0.140	112	69.0-126	
1,1,2-Trichloroethane	0.125	0.137	110	78.0-123	
Trichloroethene	0.125	0.141	113	76.0-126	
Trichlorofluoromethane	0.125	0.140	112	61.0-142	
1,2,3-Trichloropropane	0.125	0.140	112	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.130	104	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.134	107	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.131	105	73.0-127	
Vinyl chloride	0.125	0.140	112	63.0-134	
Xylenes, Total	0.375	0.410	109	72.0-127	
(S) Toluene-d8			*98.6*	*75.0-131*	
(S) 4-Bromofluorobenzene			*101*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*101*	*70.0-130*	

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

(MB) R3476943-2 11/26/19 19:56

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3476943-2 11/26/19 19:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0233	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	0.00250
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 chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*104*			*75.0-131*
(S) 4-Bromofluorobenzene	*85.2*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*94.3*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3476943-1 11/26/19 18:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.589	94.2	10.0-160	
Acrylonitrile	0.625	0.674	108	45.0-153	
Benzene	0.125	0.141	113	70.0-123	
Bromobenzene	0.125	0.127	102	73.0-121	
Bromodichloromethane	0.125	0.133	106	73.0-121	

1 Cp
2 Tc
3 Ss
4 Cn
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Laboratory Control Sample (LCS)

(LCS) R3476943-1 11/26/19 18:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.103	82.4	64.0-132	
Bromomethane	0.125	0.153	122	56.0-147	
n-Butylbenzene	0.125	0.167	134	68.0-135	
sec-Butylbenzene	0.125	0.149	119	74.0-130	
tert-Butylbenzene	0.125	0.130	104	75.0-127	
Carbon tetrachloride	0.125	0.127	102	66.0-128	
Chlorobenzene	0.125	0.112	89.6	76.0-128	
Chlorodibromomethane	0.125	0.109	87.2	74.0-127	
Chloroethane	0.125	0.161	129	61.0-134	
Chloroform	0.125	0.118	94.4	72.0-123	
Chloromethane	0.125	0.181	145	51.0-138	J4
2-Chlorotoluene	0.125	0.146	117	75.0-124	
4-Chlorotoluene	0.125	0.148	118	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.128	102	59.0-130	
1,2-Dibromoethane	0.125	0.102	81.6	74.0-128	
Dibromomethane	0.125	0.110	88.0	75.0-122	
1,2-Dichlorobenzene	0.125	0.116	92.8	76.0-124	
1,3-Dichlorobenzene	0.125	0.134	107	76.0-125	
1,4-Dichlorobenzene	0.125	0.120	96.0	77.0-121	
Dichlorodifluoromethane	0.125	0.164	131	43.0-156	
1,1-Dichloroethane	0.125	0.112	89.6	70.0-127	
1,2-Dichloroethane	0.125	0.123	98.4	65.0-131	
1,1-Dichloroethene	0.125	0.134	107	65.0-131	
cis-1,2-Dichloroethene	0.125	0.130	104	73.0-125	
trans-1,2-Dichloroethene	0.125	0.136	109	71.0-125	
1,2-Dichloropropane	0.125	0.122	97.6	74.0-125	
1,1-Dichloropropene	0.125	0.123	98.4	73.0-125	
1,3-Dichloropropane	0.125	0.120	96.0	80.0-125	
cis-1,3-Dichloropropene	0.125	0.119	95.2	76.0-127	
trans-1,3-Dichloropropene	0.125	0.120	96.0	73.0-127	
2,2-Dichloropropane	0.125	0.170	136	59.0-135	J4
Di-isopropyl ether	0.125	0.134	107	60.0-136	
Ethylbenzene	0.125	0.108	86.4	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.128	102	57.0-150	
Isopropylbenzene	0.125	0.116	92.8	72.0-127	
p-Isopropyltoluene	0.125	0.137	110	72.0-133	
2-Butanone (MEK)	0.625	0.567	90.7	30.0-160	
Methylene Chloride	0.125	0.119	95.2	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.689	110	56.0-143	
Methyl tert-butyl ether	0.125	0.128	102	66.0-132	

1 Cp
2 Tc
3 Ss
4 Cn
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6 Sr
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8 Gl
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Laboratory Control Sample (LCS)

(LCS) R3476943-1 11/26/19 18:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.115	92.0	59.0-130	
n-Propylbenzene	0.125	0.159	127	74.0-126	J4
Styrene	0.125	0.0985	78.8	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.121	96.8	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.165	132	68.0-128	J4
Tetrachloroethene	0.125	0.115	92.0	70.0-136	
Toluene	0.125	0.123	98.4	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.127	102	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.122	97.6	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.117	93.6	62.0-137	
1,1,1-Trichloroethane	0.125	0.152	122	69.0-126	
1,1,2-Trichloroethane	0.125	0.122	97.6	78.0-123	
Trichloroethene	0.125	0.121	96.8	76.0-126	
Trichlorofluoromethane	0.125	0.124	99.2	61.0-142	
1,2,3-Trichloropropane	0.125	0.145	116	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.121	96.8	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.133	106	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.136	109	73.0-127	
Vinyl chloride	0.125	0.164	131	63.0-134	
Xylenes, Total	0.375	0.336	89.6	72.0-127	
(S) Toluene-d8			*99.3*	*75.0-131*	
(S) 4-Bromofluorobenzene			*91.5*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*105*	*70.0-130*	

L1161905-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161905-03 11/27/19 02:10 • (MS) R3476943-3 11/27/19 02:29 • (MSD) R3476943-4 11/27/19 02:48

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	10.8	ND	13.6	12.6	126	117	20	10.0-160			8.00	40
Acrylonitrile	10.8	ND	10.3	10.1	95.9	93.9	20	10.0-160			2.05	40
Benzene	2.16	ND	2.18	2.55	101	118	20	10.0-149			15.8	37
Bromobenzene	2.16	ND	2.12	2.33	98.4	108	20	10.0-156			9.42	38
Bromodichloromethane	2.16	ND	2.06	2.12	95.7	98.4	20	10.0-143			2.79	37
Bromoform	2.16	ND	1.61	1.99	74.6	92.4	20	10.0-146			21.4	36
Bromomethane	2.16	ND	2.41	2.99	112	139	20	10.0-149			21.6	38
n-Butylbenzene	2.16	ND	3.11	3.96	144	184	20	10.0-160		J5	24.1	40
sec-Butylbenzene	2.16	0.875	3.05	3.59	101	126	20	10.0-159			16.1	39
tert-Butylbenzene	2.16	0.329	2.29	2.70	91.2	110	20	10.0-156			16.3	39

L1161905-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161905-03 11/27/19 02:10 • (MS) R3476943-3 11/27/19 02:29 • (MSD) R3476943-4 11/27/19 02:48

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 %
Carbon tetrachloride	2.16	ND	1.74	2.13	80.5	98.9	20	10.0-145			20.5	37
Chlorobenzene	2.16	ND	1.67	2.22	77.3	103	20	10.0-152			28.7	39
Chlorodibromomethane	2.16	ND	1.67	2.16	77.3	100	20	10.0-146			25.6	37
Chloroethane	2.16	ND	2.66	3.31	123	154	20	10.0-146		J5	21.9	40
Chloroform	2.16	ND	1.97	2.26	91.4	105	20	10.0-146			13.8	37
Chloromethane	2.16	ND	2.53	3.29	117	152	20	10.0-159			26.1	37
2-Chlorotoluene	2.16	ND	2.49	3.02	116	140	20	10.0-159			19.0	38
4-Chlorotoluene	2.16	ND	2.41	2.69	112	125	20	10.0-155			11.0	39
1,2-Dibromo-3-Chloropropane	2.16	ND	2.46	2.87	114	133	20	10.0-151			15.3	39
1,2-Dibromoethane	2.16	ND	1.57	2.05	73.0	95.1	20	10.0-148			26.4	34
Dibromomethane	2.16	ND	2.19	2.05	102	95.1	20	10.0-147			6.59	35
1,2-Dichlorobenzene	2.16	ND	2.04	2.31	94.6	107	20	10.0-155			12.3	37
1,3-Dichlorobenzene	2.16	ND	2.16	2.48	100	115	20	10.0-153			14.1	38
1,4-Dichlorobenzene	2.16	ND	2.02	2.26	93.5	105	20	10.0-151			11.4	38
Dichlorodifluoromethane	2.16	ND	2.11	3.05	97.8	142	20	10.0-160		J3	36.6	35
1,1-Dichloroethane	2.16	ND	1.81	2.10	83.8	97.3	20	10.0-147			14.9	37
1,2-Dichloroethane	2.16	ND	2.04	1.97	94.6	91.4	20	10.0-148			3.49	35
1,1-Dichloroethene	2.16	ND	1.92	2.48	89.2	115	20	10.0-155			25.4	37
cis-1,2-Dichloroethene	2.16	ND	2.04	2.38	94.6	110	20	10.0-149			15.3	37
trans-1,2-Dichloroethene	2.16	ND	2.18	2.63	101	122	20	10.0-150			18.9	37
1,2-Dichloropropane	2.16	ND	2.00	2.22	93.0	103	20	10.0-148			10.5	37
1,1-Dichloropropene	2.16	ND	1.72	2.18	80.0	101	20	10.0-153			23.3	35
1,3-Dichloropropane	2.16	ND	1.83	2.40	84.9	111	20	10.0-154			27.0	35
cis-1,3-Dichloropropene	2.16	ND	1.90	2.12	88.1	98.4	20	10.0-151			11.0	37
trans-1,3-Dichloropropene	2.16	ND	1.72	2.28	80.0	106	20	10.0-148			27.9	37
2,2-Dichloropropane	2.16	ND	2.17	2.62	101	122	20	10.0-138			19.0	36
Di-isopropyl ether	2.16	ND	2.45	2.52	114	117	20	10.0-147			2.82	36
Ethylbenzene	2.16	0.0801	1.56	2.21	68.7	99.0	20	10.0-160			34.6	38
Hexachloro-1,3-butadiene	2.16	ND	3.01	3.96	139	184	20	10.0-160		J5	27.4	40
Isopropylbenzene	2.16	0.568	2.13	2.82	72.5	104	20	10.0-155			27.8	38
p-Isopropyltoluene	2.16	0.677	3.12	3.76	113	143	20	10.0-160			18.6	40
2-Butanone (MEK)	10.8	ND	11.3	14.3	104	133	20	10.0-160			24.0	40
Methylene Chloride	2.16	ND	2.05	2.32	95.1	108	20	10.0-141			12.3	37
4-Methyl-2-pentanone (MIBK)	10.8	ND	22.6	26.0	210	241	20	10.0-160	J5	J5	13.9	35
Methyl tert-butyl ether	2.16	ND	2.50	2.29	116	106	20	11.0-147			8.74	35
Naphthalene	2.16	ND	2.84	3.60	132	167	20	10.0-160		J5	23.5	36
n-Propylbenzene	2.16	1.34	3.60	4.04	105	125	20	10.0-158			11.6	38
Styrene	2.16	ND	1.53	1.97	70.8	91.4	20	10.0-160			25.3	40
1,1,1,2-Tetrachloroethane	2.16	ND	1.78	2.31	82.7	107	20	10.0-149			25.6	39

L1161905-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161905-03 11/27/19 02:10 • (MS) R3476943-3 11/27/19 02:29 • (MSD) R3476943-4 11/27/19 02:48

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
1,1,2,2-Tetrachloroethane	2.16	ND	7.84	8.22	364	382	20	10.0-160	J5	J5	4.79	35
Tetrachloroethene	2.16	ND	1.50	2.20	69.7	102	20	10.0-156			37.7	39
Toluene	2.16	ND	1.74	2.41	80.5	112	20	10.0-156			32.6	38
1,1,2-Trichlorotrifluoroethane	2.16	ND	1.75	2.28	81.1	106	20	10.0-160			26.6	36
1,2,3-Trichlorobenzene	2.16	ND	2.89	3.67	134	170	20	10.0-160		J5	23.8	40
1,2,4-Trichlorobenzene	2.16	ND	2.64	3.54	123	164	20	10.0-160		J5	29.0	40
1,1,1-Trichloroethane	2.16	ND	2.19	2.64	102	123	20	10.0-144			18.8	35
1,1,2-Trichloroethane	2.16	ND	3.77	4.59	175	213	20	10.0-160	J5	J5	19.5	35
Trichloroethene	2.16	ND	1.81	2.24	83.8	104	20	10.0-156			21.3	38
Trichlorofluoromethane	2.16	ND	1.84	2.52	85.4	117	20	10.0-160			31.0	40
1,2,3-Trichloropropane	2.16	ND	2.03	2.11	94.1	97.8	20	10.0-156			3.94	35
1,2,3-Trimethylbenzene	2.16	0.951	2.82	3.30	86.7	109	20	10.0-160			15.6	36
1,2,4-Trimethylbenzene	2.16	3.47	5.13	5.71	76.8	104	20	10.0-160			10.8	36
1,3,5-Trimethylbenzene	2.16	2.07	3.82	4.31	81.1	104	20	10.0-160			12.0	38
Vinyl chloride	2.16	ND	2.12	2.89	98.4	134	20	10.0-160			30.7	37
Xylenes, Total	6.47	ND	4.83	6.52	74.8	101	20	10.0-160			29.7	38
(S) Toluene-d8					*93.8*	*111*		*75.0-131*				
(S) 4-Bromofluorobenzene					*103*	*133*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*94.9*	*85.1*		*70.0-130*				

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

Method Blank (MB)

(MB) R3473994-1 11/19/19 15:24

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	*78.4*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3473994-2 11/19/19 15:38

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	36.5	73.0	50.0-150	
(S) o-Terphenyl			*91.9*	*18.0-148*	

L1161924-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161924-08 11/19/19 16:57 • (MS) R3473994-3 11/19/19 17:10 • (MSD) R3473994-4 11/19/19 17:23

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)	52.3	38.5	84.1	82.0	87.2	83.2	1	50.0-150			2.52	20
(S) o-Terphenyl					*97.3*	*102*		*18.0-148*				

WG1382641

QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT L1161924-21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40

Method Blank (MB)

(MB) R3474061-1 11/20/19 01:43

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	*60.5*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3474061-2 11/20/19 01:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	33.4	66.8	50.0-150	
(S) o-Terphenyl			*75.2*	*18.0-148*	

Method Blank (MB)

(MB) R3473995-1 11/19/19 15:51

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	*51.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3473995-2 11/19/19 16:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	28.7	57.4	50.0-150	
(S) o-Terphenyl			*77.6*	*18.0-148*	

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

Method Blank (MB)

(MB) R3474946-1 11/21/19 21:19

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	*101*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3474946-2 11/21/19 21:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	49.0	98.0	50.0-150	
(S) o-Terphenyl			*90.7*	*18.0-148*	

Method Blank (MB)

(MB) R3474588-1 11/20/19 19:38

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
2,4-D	U		0.00702	0.0700
Dalapon	U		0.0113	0.0700
2,4-DB	U		0.0297	0.0700
Dicamba	U		0.0157	0.0700
Dichloroprop	U		0.0245	0.0700
Dinoseb	U		0.00697	0.0700
MCPA	U		0.443	6.50
MCPP	U		0.367	6.50
2,4,5-T	U		0.00852	0.0700
2,4,5-TP (Silvex)	U		0.0107	0.0700
(S) 2,4-Dichlorophenyl Acetic Acid	*89.8*			*22.0-132*

Laboratory Control Sample (LCS)

(LCS) R3474588-2 11/20/19 19:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
2,4-D	0.167	0.161	96.4	40.0-120	
Dalapon	0.167	0.122	73.1	15.0-120	
2,4-DB	0.167	0.106	63.5	25.0-143	
Dicamba	0.167	0.145	86.8	43.0-120	
Dichloroprop	0.167	0.161	96.4	32.0-129	
Dinoseb	0.167	0.0313	18.7	10.0-120	
MCPA	1.67	1.19	71.3	31.0-121	
MCPP	1.67	2.74	164	28.0-133	J4
2,4,5-T	0.167	0.132	79.0	41.0-120	
2,4,5-TP (Silvex)	0.167	0.149	89.2	42.0-120	
(S) 2,4-Dichlorophenyl Acetic Acid			*95.8*	*22.0-132*	

L1161273-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161273-02 11/20/19 20:05 • (MS) R3474588-3 11/20/19 20:18 • (MSD) R3474588-4 11/20/19 20:32

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 %
2,4-D	0.200	U	0.145	0.174	72.5	86.8	1	10.0-160			18.0	24
Dalapon	0.200	U	0.118	0.132	58.9	65.9	1	10.0-121			11.1	27
2,4-DB	0.200	U	0.0900	0.107	44.9	53.4	1	10.0-160			17.2	22

L1161273-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161273-02 11/20/19 20:05 • (MS) R3474588-3 11/20/19 20:18 • (MSD) R3474588-4 11/20/19 20:32

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Dicamba	0.200	U	0.130	0.158	64.7	79.0	1	10.0-154			20.0	21
Dichloroprop	0.200	U	0.133	0.175	66.5	87.4	1	10.0-158		J3	27.2	20
Dinoseb	0.200	U	0.0121	0.0289	6.05	14.4	1	10.0-120	J6	J3	81.9	40
MCPA	2.00	U	2.89	3.09	144	154	1	10.0-160			6.43	40
MCPP	2.00	U	3.99	5.99	199	299	1	10.0-160	J5	E J3 J5	40.2	40
2,4,5-T	0.200	U	0.111	0.140	55.4	70.1	1	10.0-157		J3	23.4	20
2,4,5-TP (Silvex)	0.200	U	0.125	0.161	62.3	80.2	1	10.0-156		J3	25.2	20
(S) 2,4-Dichlorophenyl Acetic Acid					*65.9*	*103*		*22.0-132*				

Method Blank (MB)

(MB) R3475582-1 11/23/19 17:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
2,4-D	U		0.00702	0.0700
Dalapon	U		0.0113	0.0700
2,4-DB	U		0.0297	0.0700
Dicamba	U		0.0157	0.0700
Dichloroprop	U		0.0245	0.0700
Dinoseb	U		0.00697	0.0700
MCPA	U		0.443	6.50
MCPP	U		0.367	6.50
2,4,5-T	U		0.00852	0.0700
2,4,5-TP (Silvex)	U		0.0107	0.0700
(S) 2,4-Dichlorophenyl Acetic Acid	*88.6*			*22.0-132*

Laboratory Control Sample (LCS)

(LCS) R3475582-2 11/23/19 17:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
2,4-D	0.167	0.110	65.9	40.0-120	
Dalapon	0.167	0.0783	46.9	15.0-120	
2,4-DB	0.167	0.0915	54.8	25.0-143	
Dicamba	0.167	0.116	69.5	43.0-120	
Dichloroprop	0.167	0.114	68.3	32.0-129	
Dinoseb	0.167	0.0163	9.76	10.0-120	J4
MCPA	1.67	1.93	116	31.0-121	
MCPP	1.67	1.89	113	28.0-133	
2,4,5-T	0.167	0.117	70.1	41.0-120	
2,4,5-TP (Silvex)	0.167	0.122	73.1	42.0-120	
(S) 2,4-Dichlorophenyl Acetic Acid			*70.1*	*22.0-132*	

L1161886-57 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161886-57 11/23/19 18:40 • (MS) R3475582-3 11/23/19 18:54 • (MSD) R3475582-4 11/23/19 19:08

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,4-D	0.167	ND	0.137	0.147	82.0	88.0	1	10.0-160			7.04	24
Dalapon	0.167	ND	0.112	0.112	67.1	67.1	1	10.0-121			0.000	27
2,4-DB	0.167	ND	0.111	0.113	66.5	67.7	1	10.0-160			1.79	22
Dicamba	0.167	ND	0.140	0.145	83.8	86.8	1	10.0-154			3.51	21

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

L1161886-57 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161886-57 11/23/19 18:40 • (MS) R3475582-3 11/23/19 18:54 • (MSD) R3475582-4 11/23/19 19:08

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Dichloroprop	0.167	ND	0.135	0.141	80.8	84.4	1	10.0-158			4.35	20
Dinoseb	0.167	ND	0.0225	0.0160	13.5	9.58	1	10.0-120		J6	33.8	40
MCPA	1.67	ND	2.19	1.21	131	72.5	1	10.0-160		J3	57.6	40
MCPP	1.67	ND	2.96	2.22	177	133	1	10.0-160	J5		28.6	40
2,4,5-T	0.167	ND	0.140	0.143	83.8	85.6	1	10.0-157			2.12	20
2,4,5-TP (Silvex)	0.167	ND	0.145	0.147	86.8	88.0	1	10.0-156			1.37	20
(S) 2,4-Dichlorophenyl Acetic Acid					*86.2*	*89.8*		*22.0-132*				

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

Method Blank (MB)

(MB) R3473734-1 11/19/19 10:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Azinphos-Methyl	U		0.00378	0.100
Bolstar (Sulprofos)	U		0.00554	0.100
Chlorpyrifos	U		0.00923	0.100
Coumaphos	U		0.00680	0.100
Demeton,-O and -S	U		0.00339	0.0700
Diazinon	U		0.00447	0.100
Dichlorvos	U		0.00969	0.100
Dimethoate	U		0.0198	0.100
Disulfoton	U		0.00498	0.100
EPN	U		0.00512	0.100
Ethoprop	U		0.00465	0.100
Ethyl Parathion	U		0.00571	0.100
Fensulfothion	U		0.0169	0.100
Fenthion	U		0.00608	0.100
Malathion	U		0.00700	0.100
Merphos	U		0.00539	0.100
Methyl parathion	U		0.00669	0.100
Mevinphos	U		0.0102	0.100
Naled	U		0.00418	0.100
Phorate	U		0.00471	0.100
Ronnel	U		0.00437	0.100
Stirophos	U		0.00537	0.100
Sulfotep	U		0.00386	0.100
TEPP	U		0.157	1.00
Tokuthion (Prothothiofos)	U		0.00604	0.100
Trichloronate	U		0.00664	0.100
(S) Triphenyl Phosphate	*81.4*			*36.0-121*

Laboratory Control Sample (LCS)

(LCS) R3473734-2 11/19/19 11:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Azinphos-Methyl	0.333	0.279	83.8	58.0-125	
Bolstar (Sulprofos)	0.333	0.301	90.4	64.0-120	
Chlorpyrifos	0.333	0.338	102	62.0-120	
Coumaphos	0.333	0.322	96.7	60.0-120	
Demeton,-O and -S	0.167	0.153	91.6	59.0-120	
Diazinon	0.333	0.244	73.3	49.0-120	

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

Laboratory Control Sample (LCS)

(LCS) R3473734-2 11/19/19 11:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dichlorvos	0.333	0.282	84.7	37.0-120	
Dimethoate	0.333	0.334	100	46.0-127	
Disulfoton	0.333	0.343	103	60.0-121	
EPN	0.333	0.419	126	60.0-121	J4
Ethoprop	0.333	0.313	94.0	59.0-120	
Ethyl Parathion	0.333	0.401	120	62.0-120	
Fensulfothion	0.333	0.335	101	58.0-123	
Fenthion	0.333	0.294	88.3	61.0-121	
Malathion	0.333	0.304	91.3	59.0-120	
Merphos	0.333	0.603	181	59.0-120	J4
Methyl parathion	0.333	0.382	115	63.0-120	
Mevinphos	0.333	0.282	84.7	50.0-120	
Naled	0.333	0.0432	13.0	10.0-125	
Phorate	0.333	0.321	96.4	60.0-120	
Ronnel	0.333	0.333	100	62.0-120	
Stirophos	0.333	0.292	87.7	62.0-120	
Sulfotep	0.333	0.338	102	62.0-122	
TEPP	3.33	0.729	21.9	10.0-135	
Tokuthion (Prothothiofos)	0.333	0.337	101	63.0-120	
Trichloronate	0.333	0.319	95.8	62.0-120	
(S) Triphenyl Phosphate			*80.5*	*36.0-121*	

L1161386-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161386-01 11/19/19 13:20 • (MS) R3473734-3 11/19/19 13:52 • (MSD) R3473734-4 11/19/19 14:24

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 %
Azinphos-Methyl	0.431	ND	0.378	0.401	87.7	93.1	1	10.0-160			5.98	22
Bolstar (Sulprofos)	0.431	ND	0.342	0.358	79.3	83.2	1	10.0-151			4.81	20
Chlorpyrifos	0.431	ND	0.361	0.377	83.8	87.4	1	12.0-149			4.21	20
Coumaphos	0.431	ND	0.426	0.444	98.8	103	1	10.0-160			4.17	22
Demeton,-O and -S	0.216	ND	0.180	0.197	83.2	91.0	1	10.0-160			8.93	23
Diazinon	0.431	ND	0.390	0.395	90.4	91.6	1	11.0-157			1.32	20
Dichlorvos	0.431	ND	0.374	0.408	86.8	94.6	1	10.0-160			8.61	24
Dimethoate	0.431	ND	0.390	0.413	90.4	95.8	1	10.0-150			5.81	27
Disulfoton	0.431	ND	0.375	0.405	87.1	94.0	1	12.0-155			7.63	20
EPN	0.431	ND	0.577	0.610	134	141	1	10.0-159			5.45	20
Ethoprop	0.431	ND	0.346	0.365	80.2	84.7	1	11.0-156			5.46	20
Ethyl Parathion	0.431	ND	0.443	0.470	103	109	1	10.0-147			5.96	20

L1161386-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161386-01 11/19/19 13:20 • (MS) R3473734-3 11/19/19 13:52 • (MSD) R3473734-4 11/19/19 14:24

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 %
Fensulfothion	0.431	ND	0.440	0.461	102	107	1	10.0-157			4.60	27
Fenthion	0.431	ND	0.307	0.314	71.2	73.0	1	13.0-155			2.50	20
Malathion	0.431	ND	0.318	0.329	73.9	76.3	1	13.0-137			3.20	21
Merphos	0.431	ND	0.699	0.734	162	170	1	10.0-147	J5	J5	4.88	26
Methyl parathion	0.431	ND	0.441	0.452	102	105	1	10.0-150			2.32	21
Mevinphos	0.431	ND	0.351	0.382	81.4	88.6	1	10.0-158			8.48	24
Naled	0.431	ND	0.0579	0.0559	13.4	13.0	1	10.0-137			3.41	40
Phorate	0.431	ND	0.339	0.360	78.7	83.5	1	13.0-154			5.93	20
Ronnel	0.431	ND	0.361	0.379	83.8	88.0	1	14.0-149			4.90	20
Stirophos	0.431	ND	0.320	0.348	74.2	80.8	1	10.0-150			8.53	20
Sulfotep	0.431	ND	0.362	0.386	84.1	89.5	1	10.0-160			6.23	20
TEPP	4.31	ND	3.62	3.86	84.1	89.5	1	10.0-142			6.23	28
Tokuthion (Prothothiofos)	0.431	ND	0.361	0.379	83.8	88.0	1	12.0-153			4.90	20
Trichloronate	0.431	ND	0.351	0.351	81.4	81.4	1	12.0-152			0.000	20
(S) Triphenyl Phosphate					*76.3*	*83.5*		*36.0-121*				

Method Blank (MB)

(MB) R3473689-1 11/19/19 11:24

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00135	0.0200
Alpha BHC	U		0.00136	0.0200
Beta BHC	U		0.00160	0.0200
Delta BHC	U		0.00143	0.0200
Gamma BHC	U		0.00145	0.0200
4,4-DDD	U		0.00156	0.0200
4,4-DDE	U		0.00154	0.0200
4,4-DDT	U		0.00200	0.0200
Dieldrin	U		0.00152	0.0200
Endosulfan I	U		0.00149	0.0200
Endosulfan II	U		0.00160	0.0200
Endosulfan sulfate	U		0.00151	0.0200
Endrin	U		0.00157	0.0200
Endrin aldehyde	U		0.00129	0.0200
Endrin ketone	U		0.00165	0.0200
Heptachlor	U		0.00154	0.0200
Heptachlor epoxide	U		0.00161	0.0200
Hexachlorobenzene	U		0.00124	0.0200
Methoxychlor	U		0.00178	0.0200
Chlordane	U		0.0390	0.200
Toxaphene	U		0.0360	0.400
(S) Decachlorobiphenyl	*153*	J1		*10.0-135*
(S) Tetrachloro-m-xylene	*110*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3473689-2 11/19/19 11:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0556	83.5	34.0-136	
Alpha BHC	0.0666	0.0541	81.2	34.0-139	
Beta BHC	0.0666	0.0483	72.5	34.0-133	
Delta BHC	0.0666	0.0533	80.0	34.0-135	
Gamma BHC	0.0666	0.0517	77.6	34.0-136	
4,4-DDD	0.0666	0.0524	78.7	33.0-141	
4,4-DDE	0.0666	0.0552	82.9	34.0-134	
4,4-DDT	0.0666	0.0511	76.7	30.0-143	
Dieldrin	0.0666	0.0558	83.8	35.0-137	
Endosulfan I	0.0666	0.0550	82.6	34.0-134	

WG1382839

Pesticides (GC) by Method 8081

Laboratory Control Sample (LCS)

(LCS) R3473689-2 11/19/19 11:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0559	83.9	35.0-132	
Endosulfan sulfate	0.0666	0.0581	87.2	35.0-132	
Endrin	0.0666	0.0546	82.0	34.0-137	
Endrin aldehyde	0.0666	0.0488	73.3	23.0-121	
Endrin ketone	0.0666	0.0651	97.7	35.0-144	
Heptachlor	0.0666	0.0533	80.0	36.0-141	
Heptachlor epoxide	0.0666	0.0580	87.1	36.0-134	
Hexachlorobenzene	0.0666	0.0475	71.3	33.0-129	
Methoxychlor	0.0666	0.0510	76.6	28.0-150	
(S) Decachlorobiphenyl			*140*	*10.0-135*	J1
(S) Tetrachloro-m-xylene			*98.8*	*10.0-139*	

L1161837-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161837-07 11/19/19 11:49 • (MS) R3473689-3 11/19/19 13:11 • (MSD) R3473689-4 11/19/19 14:01

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aldrin	0.0666	ND	0.0695	0.0677	104	102	1	20.0-135			2.62	37
Alpha BHC	0.0666	ND	0.0673	0.0689	101	103	1	27.0-140			2.35	35
Beta BHC	0.0666	ND	0.0609	0.0607	91.4	91.1	1	23.0-141			0.329	37
Delta BHC	0.0666	ND	0.0684	0.0680	103	102	1	21.0-138			0.587	35
Gamma BHC	0.0666	ND	0.0648	0.0656	97.3	98.5	1	27.0-137			1.23	36
4,4-DDD	0.0666	ND	0.0686	0.0666	103	100	1	15.0-152			2.96	39
4,4-DDE	0.0666	ND	0.0696	0.0675	105	101	1	10.0-152			3.06	40
4,4-DDT	0.0666	ND	0.0664	0.0606	99.7	91.0	1	10.0-151			9.13	40
Dieldrin	0.0666	ND	0.0706	0.0682	106	102	1	17.0-145			3.46	37
Endosulfan I	0.0666	ND	0.0686	0.0658	103	98.8	1	20.0-137			4.17	36
Endosulfan II	0.0666	ND	0.0700	0.0657	105	98.6	1	15.0-141			6.34	37
Endosulfan sulfate	0.0666	ND	0.0750	0.0710	113	107	1	15.0-143			5.48	38
Endrin	0.0666	ND	0.0691	0.0658	104	98.8	1	19.0-143			4.89	37
Endrin aldehyde	0.0666	ND	0.0661	0.0635	99.2	95.3	1	10.0-139			4.01	40
Endrin ketone	0.0666	ND	0.0818	0.0754	123	113	1	17.0-149			8.14	38
Heptachlor	0.0666	ND	0.0670	0.0659	101	98.9	1	22.0-138			1.66	37
Heptachlor epoxide	0.0666	ND	0.0714	0.0692	107	104	1	22.0-138			3.13	36
Hexachlorobenzene	0.0666	ND	0.0573	0.0592	86.0	88.9	1	25.0-126			3.26	35
Methoxychlor	0.0666	ND	0.0663	0.0630	99.5	94.6	1	10.0-159			5.10	40
(S) Decachlorobiphenyl					*153*	*132*		*10.0-135*	J1			
(S) Tetrachloro-m-xylene					*109*	*104*		*10.0-139*				

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.

GLOSSARY OF TERMS

Qualifier	Description
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.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
N	The analyte is tentatively identified and the associated numerical value may not be consistent with the actual concentration present in the sample.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P	RPD between the primary and confirmatory analysis exceeded 40%.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

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

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1,6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T104704245-18-15
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

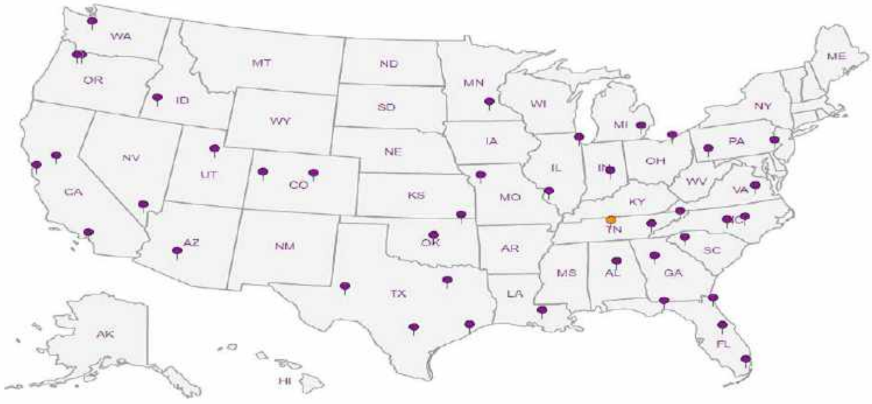
A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 18

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 # L1161924
D212

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: 134 - Mark W. Beasley
PB: 11/13/19 MWB
Shipped Via: **FedEX Priority**

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**
City/State Collected: Federal Way, WA
Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**
Client Project # **R13411.07**
Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump
Site/Facility ID #
P.O. # **8657**

Collected by (signature):
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

Immediately Packed on Ice N___ Y X

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-15 (0-1)	Grab	SS	0-1	11/14/19	1145	~~3~~2	X	X	X		X							-01
SB-15 (1-2)	Grab	SS	1-2	11/14/19	1146	3											Hold	
SB-15 (2-3)	Grab	SS	2-3	11/14/19	1147	3	X	X	X		X							02
SB-15 (3-4)	Grab	SS	3-4	11/14/19	1148	3											Hold	
SB-15 (6-8)	Grab	SS	6-8	11/14/19	1149	3											Hold	
SB-15 (10-12)	Grab	SS	10-12	11/14/19	1150	3	X	X	X		X							03
SB-15A (0-1)	Grab	SS	0-1	11/14/19	1125	3											Hold	
SB-15A (1-2)	Grab	SS	1-2	11/14/19	1126	3											Hold	
SB-15A (2-3)	Grab	SS	2-3	11/14/19	1127	3											Hold	
SB-15A (3-4)	Grab	SS	3-4	11/14/19	1128	3											Hold	

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

Remarks: 4510 1662 0396/0411/0536/0514/ 0488/0400/ 0503/0422/0444/0433/0477/0525/0466/0455
pH ______ Temp ______
Flow ______ Other ______

Samples returned via: ___ UPS X FedEx ___ Courier ________

Tracking # 4686 6470 7042

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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCl] / MeoH TBR	
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp 4.1=.1 °C 0.2-.1=0.1 Bottles Received: 223	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00	11-131 Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 2 of 18

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:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

SDG # L1161924

Table #

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB: 11/13/19 MB

Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-15A(6-8)	Grab	SS	6-8	11/14/19	1129	3						Hold	
SB-15A(10-12)	Grab	SS	10-12	11/14/19	1130	3						Hold	
SB-15B(0-1)	Grab	SS	0-1	11/14/19	1310	3						Hold	
SB-15B(1-2)	Grab	SS	1-2	11/14/19	1311	3						Hold	
SB-15B(2-3)	Grab	SS	2-3	11/14/19	1312	3						Hold	
SB-15B(3-4)	Grab	SS	3-4	11/14/19	1313	3						Hold	
SB-15B(6-8)	Grab	SS	6-8	11/14/19	1314	3						Hold	
SB-15B(14-15)	Grab	SS	14-15	11/14/19	1315	3						Hold	
SB-15C(0-1)	Grab	SS	0-1	11/14/19	1400	3						Hold	
SB-15C(1-2)	Grab	SS	1-2	11/14/19	1401	3						Hold	

* 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: 11/15/19	Time: 1230	Received by: (Signature)
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: [✓ Yes] / No
5
[✓ HCL] / MeoH
TBR

Temp: °C
0.2-1=0.1

Bottles Received: 223

Date: 11-16-19

Time: 9:00

If preservation required by Login: Date/Time

11-130

Condition: NCF / [✓ OK]

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 3 of 18

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: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

SDG # L1161924

Table #

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB: 11/13/19

Collected by (signature):

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

Immediately Packed on Ice N ___ Y ✓

Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-15C(2-3)	Grab	SS	2-3	11/14/19	1402	3						Hold	
SB-15C(3-4)	Grab	SS	3-4	11/14/19	1403	3						Hold	
SB-15C(6-8)	Grab	SS	6-8	11/14/19	1404	3						Hold	
SB-15C(10-12)	Grab	SS	10-12	11/14/19	1405	3						Hold	
SB-15D(0-1)	Grab	SS	0-1	11/14/19	1320	3						Hold	
SB-15D(1-2)	Grab	SS	1-2	11/14/19	1321	3						Hold	
SB-15D(2-3)	Grab	SS	2-3	11/14/19	1322	3						Hold	
SB-15D(3-4)	Grab	SS	3-4	11/14/19	1323	3						Hold	
SB-15D(6-8)	Grab	SS	6-8	11/14/19	1324	3						Hold	
SB-15D(14-15)	Grab	SS	14-15	11/14/19	1325	3						Hold	

* 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: 11/15/19
Time: 1230
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
5
[✓ HCL] / MeoH
TBR

Relinquished by : (Signature)
Date: 11-15
Time: 1200
Received by: (Signature)

Temp: [illegible] °C
0.2-1=0.1
Bottles Received: 223

If preservation required by Login: Date/Time

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

Date: 11-16-19
Time: 9:00

11-129

Condition: NCF / [✓ OK]

TGE Resources **8048 Northcourt Road** **Houston, TX 77040**	Billing Information: **Accounts Payable** **8048 Northcourt Road** **Houston, TX 77040**	Pres Chk
Report to: **Kristi Barnette**	Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**	
Project Description: **Future Federal Way Hospital**	City/State Collected: Federal Way, WA	Please Circle: [✓ PT] MT CT ET
Phone: **713-744-5800** Fax: **713-744-5888**	Client Project # **R13411.07**	Lab Project # **TGERESHTX-R13411**
Collected by (print): Tim Crump	Site/Facility ID #	P.O. # **8657**
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

Chain of Custody Page 4 of 18

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

SDG # L1161924

Table #

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB: 11/13/19 mw
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-17B (0-1)	Grab	SS	0-1	11/14/19	1430	3						Held	
SB-17B (1-2)	Grab	SS	1-2	11/14/19	1431	3						Held	
SB-17B (2-3)	Grab	SS	2-3	11/14/19	1432	3						Held	
SB-17B (3-4)	Grab	SS	3-4	11/14/19	1433	3						Held	
SB-17B (6-8)	Grab	SS	6-8	11/14/19	1434	3						Held	
SB-17B (14-15)	Grab	SS	14-15	11/14/19	1435	3						Held	
SB-17E (9-10)	Grab	SS	9-10	11/14/19	1500	3	X	X	X		X		04
SB-17E (14-15)	Grab	SS	14-15	11/14/19	1505	3	X	X	X		X		05
SB-17F (6-8)	Grab	SS	6-8	11/14/19	1548	3						Held	
SB-17F (10-11)	Grab	SS	10-11	11/14/19	1547	3	X	X	X		X		06

* 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: 11/15/19	Time: 1230	Received by: (Signature)
Relinquished by : (Signature)	Date: 11-15	Time: 170	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: [✓ Yes] / No
5
[✓ HCL] / MeoH
TBR

Temp: [illegible] °C
0.2-1=0.1
Bottles Received: 228

If preservation required by Login: Date/Time

Date: 11-16-19
Time: 9:00

11-128

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 5 of 18

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:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

SDG # L1161924

Table #

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #
8657

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Priority**

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-17F (18-20)	Grab	SS	18-20	11/14/19	1545	3	X	X	X		X		07
SB-17F (24-25)	Grab	SS	24-25	11/14/19	1546	3	X	X	X		X		08
SB-18 (0-1)	Grab	SS	0-1	11/14/19	0755	3	X	X	X		X		09
SB-18 (1-2)	Grab	SS	1-2	11/14/19	0756	3						Held	
SB-18 (2-3)	Grab	SS	2-3	11/14/19	0757	3	X	X	X		X		10
SB-18 (3-4)	Grab	SS	3-4	11/14/19	0758	3						Held	
SB-18 (4-6)	Grab	SS	4-6	11/14/19	0759	3	X	X	X		X		11
SB-18 (6-8)	Grab	SS	6-8	11/14/19	0800	3						Held	
SB-18 (9-11)	Grab	SS	9-11	11/14/19	0801	3						Held	
SB-18 (12-14)	Grab	SS	12-14	11/14/19	0802	3						Held	

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5	
Relinquished by : (Signature)	Date: 11-15	Time: 1700	Received by: (Signature)	Temp: °C 0.2-.1=0.1	Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

11-127

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 6 of 18

Pace Analytical®
National Center for Testing & Innovation

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

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

SDG # L1161924

Table #

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-19 (0-1)	Grab	SS	0-1	11/14/19	0853	3	X	X	X		X							12
SB-19 (1-2)	Grab	SS	1-2	11/14/19	0854	3											Hold	
SB-19 (2-3)	Grab	SS	2-3	11/14/19	0855	3	X	X	X		X							13
SB-19 (3-4)	Grab	SS	3-4	11/14/19	0856	3											Hold	
SB-19 (4-6)	Grab	SS	4-6	11/14/19	0857	3	X	X	X		X							14
SB-19 (6-8)	Grab	SS	6-8	11/14/19	0858	3											Hold	
SB-19 (9-11)	Grab	SS	9-11	11/14/19	0859	3											Hold	
SB-19 (12-14)	Grab	SS	12-14	11/14/19	0900	3											Hold	
SB-20 (0-1)	Grab	SS	0-1	11/14/19	0933	3											Hold	
SB-20 (1-2)	Grab	SS	1-2	11/14/19	0934	3											Hold	

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCl] / MeoH TBR	
Relinquished by : (Signature)	Date: 11/15	Time: 1700	Received by: (Signature)	Temp °C 0.2-.1=0.1	Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

Ho

11-126

Condition: CF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 7 of 18

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N ___ Y ✓

SDG # L1161924

Table #

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-20(2-3)	Grab	SS	2-3	11/14/19	0935	3	X	X	X		X		15
SB-20 (3-4)	Grab	SS	3-4	11/14/19	0936	3						Hold	
SB-20 (4-6)	Grab	SS	4-6	11/14/19	0937	3	X	X	X		X		16
SB-20 (6-8)	Grab	SS	6-8	11/14/19	0938	3						Hold	
SB-20 (10-11)	Grab	SS	10-11	11/14/19	0939	3	X	X	X		X		17
SB-20(12-14)	Grab	SS	12-14	11/14/19	0940	3						Hold	
SB-21 (0-1)	Grab	SS	0-1	11/14/19	1005	3						Hold	
SB-21 (1-2)	Grab	SS	1-2	11/14/19	1006	3						Hold	
SB-21 (2-3)	Grab	SS	2-3	11/14/19	1007	3	X	X	X		X		18
SB-21 (3-4)	Grab	SS	3-4	11/14/19	1008	3						Hold	

* 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: 11/15/19	Time: 1258	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 11/15	Time: 1700	Received by: (Signature)	Temp: AEn °C 0.2-1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold: 11-125

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 8 of 18

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

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

SDG # L1161924

Table #

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-21(4-6)	Grab	SS	4-6	11/14/19	1009	3											Held	
SB-21 (6-8)	Grab	SS	6-8	11/14/19	1010	3	X	X	X		X							19
SB-21 (9-11)	Grab	SS	9-11	11/14/19	1011	3	X	X	X		X							20
SB-21 (12-14)	Grab	SS	12-14	11/14/19	1012	3											Held	
SB-22 (0-1)	Grab	SS	0-1	11/14/19	0950	3	X	X	X		X							21
SB-22 (1-2)	Grab	SS	1-2	11/14/19	0951	3											Held	
SB-22(2-3)	Grab	SS	2-3	11/14/19	0952	3	X	X	X		X							22
SB-22(3-4)	Grab	SS	3-4	11/14/19	0953	3											Held	
SB-22(4-6)	Grab	SS	4-6	11/14/19	0954	3	X	X	X		X							23
SB-22(6-8)	Grab	SS	6-8	11/14/19	0955	3											Held	

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp: thr °C 0.2-.1=0.1 Bottles Received: 223	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00	Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 9 of 18

Pace Analytical®
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Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

SDG # L1161924

Table #

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

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

Quote #

Date Results Needed

Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-22 (9-11)	Grab	SS	9-11	11/14/19	0956	3											Hold	
SB-22 (12-14)	Grab	SS	12-14	11/14/19	0957	3											Hold	
SB-23 (0-1)	Grab	SS	0-1	11/14/19	1115	3	X	X	X		X							24
SB-23 (1-2)	Grab	SS	1-2	11/14/19	1116	3											Hold	
SB-23 (2-3)	Grab	SS	2-3	11/14/19	1117	3											Hold	
SB-23 (3-4)	Grab	SS	3-4	11/14/19	1118	3	X	X	X		X							25
SB-23 (4-6)	Grab	SS	4-6	11/14/19	1119	3	X	X	X		X							26
SB-23 (6-8)	Grab	SS	6-8	11/14/19	1120	3											Hold	
SB-23 (9-11)	Grab	SS	9-11	11/14/19	1121	3											Hold	
SB-23 (12-14)	Grab	SS	12-14	11/14/19	1122	3											Hold	

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 11-15	Time: [illegible]	Received by: (Signature)	Temp: Afm 2.2-1=2.1 °C Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 10 of 18

Pace Analytical® National Center for Testing & Innovation

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Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

SDG # L1161924

Table #

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Acctnum: **TGERESHTX**

Collected by (signature):

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: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Priority**

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-24 (0-1)	Grab	SS	0-1	11/14/19	1158	3	X	X	X		X							27
SB-24 (1-2)	Grab	SS	1-2	11/14/19	1159	3											Hold	
SB-24 (2-3)	Grab	SS	2-3	11/14/19	1200	3	X	X	X		X							28
SB-24 (3-4)	Grab	SS	3-4	11/14/19	1201	3											Hold	
SB-24 (4-6)	Grab	SS	4-6	11/14/19	1202	3	X	X	X		X							29
SB-24 (6-8)	Grab	SS	6-8	11/14/19	1203	3											Hold	
SB-24 (9-11)	Grab	SS	9-11	11/14/19	1204	3											Hold	
SB-24 (12-14)	Grab	SS	12-14	11/14/19	1205	3											Hold	
SB-25 (0-1)	Grab	SS	0-1	11/14/19	0952	3											Hold	
SB-25 (1-2)	Grab	SS	1-2	11/14/19	0953	3	X	X	X		X							30

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCl] / MeoH TBR	
Relinquished by : (Signature)	Date: 11-15-19	Time:	Received by: (Signature)	Temp: AB-°C 0.2-.1=0.1	Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

Chain of Custody Page 11 of 18

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TGE Resources

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Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Report to:
Kristi Barnette

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Site/Facility ID #

P.O. # **8657**

Quote #

Collected by (print): Tim Crump

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

SDG # L1161924

Table #

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-25(2-3)	Grab	SS	2-3	11/14/19	0954	3						Hold	
SB-25(3-4)	Grab	SS	3-4	11/14/19	0955	3	X	X	X		X		31
SB-25(4-6)	Grab	SS	4-6	11/14/19	0956	3						Hold	
SB-25(6-8)	Grab	SS	6-8	11/14/19	0957	3	X	X	X		X		32
SB-25(8-9)	Grab	SS	8-9	11/14/19	0958	3	X	X	X		X		33
SB-25(9-10)	Grab	SS	9-10	11/14/19	0959	3						Hold	
SB-25(10-11)	Grab	SS	10-11	11/14/19	1000	3	X	X	X		X		34
SB-25(11-12)	Grab	SS	11-12	11/14/19	1001	3						Hold	
SB-25(14-15)	Grab	SS	14-15	11/14/19	1002	3						Hold	
SB-25(16-17)	Grab	SS	16-17	11/14/19	1003	3	X	X	X		X		35

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)
Relinquished by : (Signature)	Date: [illegible]	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: [✓ Yes] / No
[✓ HCL] / MeoH
TBR
5

Temp: °C
0.2-.1=0.1

Bottles Received: 223

Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

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Billing Information:
Accounts Payable
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Houston, TX 77040

Pres Chk

Chain of Custody Page 12 of 18

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Phone: 800-767-5859
Fax: 615-758-5859

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

SDG # L1161924

Table #

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Priority**

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-25 (17-18)	Grab	SS	17-18	11/14/19	1004	3						Hold	
SB-25 (19-20)	Grab	SS	19-20	11/14/19	1005	3	X	X	X		X		36
SB-26 (0-1)	Grab	SS	0-1	11/14/19	0917	3	X	X	X		X		37
SB-26 (1-2)	Grab	SS	1-2	11/14/19	0918	3						Hold	
SB-26 (2-3)	Grab	SS	2-3	11/14/19	0919	3	X	X	X		X		38
SB-26 (3-4)	Grab	SS	3-4	11/14/19	0920	3						Hold	
SB-26 (4-6)	Grab	SS	4-6	11/14/19	0921	3	X	X	X		X		39
SB-26 (6-8)	Grab	SS	6-8	11/14/19	0922	3						Hold	
SB-26 (8-9)	Grab	SS	8-9	11/14/19	0923	3	X	X	X		X		40
SB-26 (9-10)	Grab	SS	9-10	11/14/19	0924	3						Hold	

* 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 X 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: 11/15/19	Time: 1330	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR 5	
Relinquished by : (Signature)	Date: 11-15	Time: 1900	Received by: (Signature)	Temp: [illegible] °C 0,2-1=0,1	Bottles Received: 123
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

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Billing Information:
Accounts Payable
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Pres Chk

Chain of Custody Page 13 of 18

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Fax: 615-758-5859

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #: **R13411.07**

Lab Project #: **TGERESHTX-R13411**

SDG #: L1161924

Table #:

Collected by (print): Tim Crump

Site/Facility ID #:

P.O. #: **8657**

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Priority**

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	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-26(10-11)	Grab	SS	10-11	11/14/19	0925	3	X	X	X		X		41
SB-26(11-12)	Grab	SS	11-12	11/14/19	0926	3						Hold	
SB-26(14-15)	Grab	SS	14-15	11/14/19	0927	3						Hold	
SB-26(16-17)	Grab	SS	16-17	11/14/19	0928	3	X	X	X		X		42
SB-26(17-18)	Grab	SS	17-18	11/14/19	0929	3						Hold	
SB-26(19-20)	Grab	SS	19-20	11/14/19	0930	3	X	X	X		X		43
SB-27(0-1)	Grab	SS	0-1	11/14/19	0840	3						Hold	
SB-27(1-2)	Grab	SS	1-2	11/14/19	0841	3	X	X	X		X		44
SB-27(2-3)	Grab	SS	2-3	11/14/19	0842	3						Hold	
SB-27(3-4)	Grab	SS	3-4	11/14/19	0843	3	X	X	X		X		45

* 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: 11/15/19	Time: 1250	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 11-15	Time: 170	Received by: (Signature)	Temp: Alm °C 0.2-1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

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Billing Information:

Accounts Payable
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Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 14 of 18

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Phone: 800-767-5859
Fax: 615-758-5859

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

SDG # L1161924

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Table #

Acctnum: **TGERESHTX**

Collected by (signature):

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: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Priority**

Immediately Packed on Ice N ___ [✓ Y]

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-27(4-6)	Grab	SS	4-6	11/14/19	0844	3											Hold	
SB-27(6-8)	Grab	SS	6-8	11/14/19	0845	3	X	X	X		X							46
SB-27(8-9)	Grab	SS	8-9	11/14/19	0846	3	X	X	X		X							47
SB-27(9-10)	Grab	SS	9-10	11/14/19	0847	3											Hold	
SB-27(10-11)	Grab	SS	10-11	11/14/19	0848	3	X	X	X		X							48
SB-27(11-12)	Grab	SS	11-12	11/14/19	0849	3											Hold	
SB-27(14-15)	Grab	SS	14-15	11/14/19	0850	3											Hold	
SB-27(16-17)	Grab	SS	16-17	11/14/19	0851	3	X	X	X		X							49
SB-27(17-18)	Grab	SS	17-18	11/14/19	0852	3											Hold	
SB-27(19-20)	Grab	SS	19-20	11/14/19	0853	3	X	X	X		X							56

* 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)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11/15/19	Time: 1230	Received by: (Signature)	Temp: Acn °C 0.2-1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

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Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 15 of 18

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Fax: 615-758-5859

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

SDG # L1161924

Table #

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #
8657

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Priority**

Collected by (signature):

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

Immediately Packed on Ice N___ Y✓

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-28 (0-1)	Grab	SS	0-1	11/14/19	0746	3	X	X	X		X		51
SB-28 (1-2)	Grab	SS	1-2	11/14/19	0747	3						Hold	
SB-28 (2-3)	Grab	SS	2-3	11/14/19	0748	3	X	X	X		X		52
SB-28 (3-4)	Grab	SS	3-4	11/14/19	0749	3						Hold	
SB-28 (4-6)	Grab	SS	4-6	11/14/19	0750	3	X	X	X		X		53
SB-28 (6-8)	Grab	SS	6-8	11/14/19	0751	3						Hold	
SB-28 (8-9)	Grab	SS	8-9	11/14/19	0752	3	X	X	X		X		54
SB-28 (9-10)	Grab	SS	9-10	11/14/19	0753	3						Hold	
SB-28 (10-11)	Grab	SS	10-11	11/14/19	0754	3						Hold	
SB-28 (11-12)	Grab	SS	11-12	11/14/19	0755	3	X	X	X		X		55

* 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: 11/15/19	Time: 1250	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 11-15	Time: 1700	Received by: (Signature)	Temp: °C 0.2-.1=0.1 Bottles Received: 223	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00	Hold: Condition: NCF / [✓ OK]

TGE Resources

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Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 16 of 18

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Report to:
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Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #: **R13411.07**

Lab Project #: **TGERESHTX-R13411**

SDG # L1161924

Table #

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #: **8657**

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Priority**

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

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-28(14-15)	Grab	SS	14-15	11/14/19	0756	3						Hold	
SB-28(16-17)	Grab	SS	16-17	11/14/19	0757	3	X	X	X		X		56
SB-28(17-18)	Grab	SS	17-18	11/14/19	0758	3						Hold	
SB-28(19-20)	Grab	SS	19-20	11/14/19	0759	3	X	X	X		X		57
SB-29(0-1)	Grab	SS	0-1	11/14/19	1040	3						Hold	
SB-29(1-2)	Grab	SS	1-2	11/14/19	1041	~~3~~ 2	X	X	X		X		58
SB-29(2-3)	Grab	SS	2-3	11/14/19	1042	3						Hold	
SB-29(3-4)	Grab	SS	3-4	11/14/19	1043	3	X	X	X		X		59
SB-29(4-6)	Grab	SS	4-6	11/14/19	1044	3						Hold	
SB-29(6-8)	Grab	SS	6-8	11/14/19	1045	3	X	X	X		X		60

* 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 X 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: 11/15/19
Time: 1230
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
5
[✓ HCL] / MeoH
TBR

Relinquished by : (Signature)
Date: 11/15
Time: 1[illegible]
Received by: (Signature)

Temp: Am °C
0.2-.1=0.1
Bottles Received: 223

If preservation required by Login: Date/Time

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

Date: 11-16-19
Time: 9:00

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #
8657

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 17 of 18

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 # L1161924

Table #

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739846**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-29 (8-9)	Grab	SS	8-9	11/14/19	1046	3											Hold	
SB-29 (9-10)	Grab	SS	9-10	11/14/19	1047	3	X	X	X		X							61
SB-29 (10-11)	Grab	SS	10-11	11/14/19	1048	3											Hold	
SB-29 (11-12)	Grab	SS	11-12	11/14/19	1049	3	X	X	X		X							62
SB-29 (14-15)	Grab	SS	14-15	11/14/19	1050	3											Hold	
SB-29 (16-17)	Grab	SS	16-17	11/14/19	1051	3	X	X	X		X							-63
SB-29 (17-18)	Grab	SS	17-18	11/14/19	1052	3											Hold	
SB-29 (19-20)	Grab	SS	19-20	11/14/19	1053	3	X	X	X		X							-64
SB-30 (0-0.5)	Grab	SS	0-0.5	11/14/19	1335	~~3~~ 4	X	X	X	X	X							65
SB-30 (0.5-1)	Grab	SS	0.5-1	11/14/19	1336	~~3~~ 4	X	X	X	X	X							66

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11/15	Time: 1700	Received by: (Signature)	Temp: Am °C 0.2-1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 18 of 18

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:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] / MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

SDG # L1161924

Table #

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N ___ Y X

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739846**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-30(1-1.5)	Grab	**SS**	1-1.5	11/14/19	1337	~~3~~ 4	X	X	X	X	X							67
SB-30(1.5-2)	Grab	**SS**	1.5-2	11/14/19	1338	~~3~~ 4	X	X	X	X	X							68
SB-30(3-3.5)	Grab	**SS**	3-3.5	11/14/19	1339	~~3~~ 4											Hold	
SB-30(4.5-5)	Grab	**SS**	4.5-5	11/14/19	1340	~~3~~ 4											Hold	
SB-31(0-0.5)	Grab	**SS**	0-0.5	11/14/19	1430	~~3~~ 4	X	X	X	X	X							69
SB-31(0.5-1)	Grab	**SS**	0.5-1	11/14/19	1431	~~3~~ 4	X	X	X	X	X							70
SB-31(1-1.5)	Grab	**SS**	1-1.5	11/14/19	1432	~~3~~ 4	X	X	X	X	X							71
SB-31(1.5-2)	Grab	**SS**	1.5-2	11/14/19	1433	~~3~~ 4	X	X	X	X	X							72
SB-31(3-3.5)	Grab	**SS**	3-3.5	11/14/19	1434	~~3~~ 4	X	X	X	X	X						Hold	
SB-31(4.5-5)	Grab	**SS**	4.5-5	11/14/19	1435	~~3~~ 4											Hold	

* 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 X 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: 11/15/19
Time: 1230
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
5
[✓ HCL] / MeoH
TBR

Relinquished by : (Signature)
Date: 11/15
Time:
Received by: (Signature)

Temp: A62 °C
0.2-.1=0.1
Bottles Received: 223

If preservation required by Login: Date/Time

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

Date: 11-16-19
Time: 9:00

Hold:

Condition: NCF / [✓ OK]

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

March 11, 2020

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

TGE Resources

Sample Delivery Group:	L1165576
Samples Received:	11/15/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SB-15(0-1) L1165576-01 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 11:45	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384982	1	11/22/19 16:29	11/22/19 16:46	JWW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	10	11/28/19 00:53	11/28/19 06:46	AO	Mt. Juliet, TN

SB-15(2-3) L1165576-02 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 11:47	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384982	1	11/22/19 16:29	11/22/19 16:46	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:45	11/20/19 00:31	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388701	1	11/29/19 10:47	12/03/19 02:27	TRB	Mt. Juliet, TN

SB-15(10-12) L1165576-03 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 11:50	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384982	1	11/22/19 16:29	11/22/19 16:46	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382657	1	11/18/19 17:45	11/20/19 00:34	JDG	Mt. Juliet, TN

SB-17F(24-25) L1165576-04 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 15:46	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1382679	1	11/19/19 06:38	12/01/19 21:41	CCE	Mt. Juliet, TN
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	JWW	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1389442	1	12/01/19 14:41	12/01/19 21:41	ANP	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:16	CCE	Mt. Juliet, TN

SB-20(2-3) L1165576-05 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:35	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	JWW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	2	11/28/19 00:53	11/28/19 05:30	AO	Mt. Juliet, TN

SB-20(4-6) L1165576-06 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 09:37	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	JWW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	10	11/28/19 00:53	11/28/19 06:27	AO	Mt. Juliet, TN

SB-21(2-3) L1165576-07 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:07	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1382679	1	11/19/19 06:38	12/01/19 21:42	CCE	Mt. Juliet, TN
Total Solids by Method 2540 G-2011	WG1384985	1	11/22/19 15:49	11/22/19 16:02	JWW	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1389442	1	12/01/19 14:41	12/01/19 21:42	ANP	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382679	1	11/19/19 06:38	11/20/19 14:44	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1388494	25	11/14/19 10:07	11/28/19 00:06	BMB	Mt. Juliet, TN

SB-21(2-3) L1165576-07 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 10:07	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	10	11/28/19 00:53	11/28/19 07:05	AO	Mt. Juliet, TN

SB-30(0-0.5) L1165576-08 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 13:35	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1382684	1	11/20/19 05:49	12/01/19 21:44	CCE	Mt. Juliet, TN
Total Solids by Method 2540 G-2011	WG1384993	1	11/22/19 19:23	11/22/19 19:33	JWW	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1389442	1	12/01/19 14:41	12/01/19 21:44	ANP	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1382684	1	11/20/19 05:49	11/21/19 17:13	CCE	Mt. Juliet, TN

SB-16 (2-3) L1165576-09 Solid

Collected by	Collected date/time	Received date/time
	11/13/19 12:32	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	JWW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1388494	25	11/13/19 12:32	11/27/19 23:04	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	2	11/28/19 00:53	11/28/19 05:49	AO	Mt. Juliet, TN

SB-17A (12-13) L1165576-10 Solid

Collected by	Collected date/time	Received date/time
	11/13/19 15:02	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1383087	1	11/19/19 15:24	12/01/19 21:45	CCE	Mt. Juliet, TN
Total Solids by Method 2540 G-2011	WG1384253	1	11/21/19 10:23	11/21/19 10:33	JWW	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1389442	1	12/01/19 14:41	12/01/19 21:45	ANP	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1383087	1	11/19/19 15:24	11/20/19 13:34	CCE	Mt. Juliet, TN

SB-17C (9-10) L1165576-11 Solid

Collected by	Collected date/time	Received date/time
	11/13/19 14:04	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384253	1	11/21/19 10:23	11/21/19 10:33	JWW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	1	11/28/19 00:53	11/28/19 03:35	AO	Mt. Juliet, TN

SB-17C (14-15) L1165576-12 Solid

Collected by	Collected date/time	Received date/time
	11/13/19 14:05	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384253	1	11/21/19 10:23	11/21/19 10:33	JWW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	1	11/28/19 00:53	11/28/19 02:19	AO	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.

Mark W. Beasley
Project Manager

Report Revision History

Level II Report - Version 1: 12/04/19 14:46

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1165576-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11 and 12
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1382657, WG1383087, WG1382679, WG1382684, WG1384252, WG1384253, WG1384993, WG1384985, WG1384983, WG1384982, WG1388494, WG1388431, WG1389442 and WG1388701

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			1
		Were MS/MSD RPDs within laboratory QC limits?		X			2
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1165576-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11 and 12
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1382657, WG1383087, WG1382679, WG1382684, WG1384252, WG1384253, WG1384993, WG1384985, WG1384983, WG1384982, WG1388494, WG1388431, WG1389442 and WG1388701

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			3
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1165576-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11 and 12
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1382657, WG1383087, WG1382679, WG1382684, WG1384252, WG1384253, WG1384993, WG1384985, WG1384983, WG1384982, WG1388494, WG1388431, WG1389442 and WG1388701

ER #[1]	**Description**
1	3060A/7196A WG1389442 Chromium,Hexavalent: Percent Recovery is outside of established control limits. 8270E WG1388431 Benzidine, 3,3-Dichlorobenzidine: Percent Recovery is outside of established control limits. 6010D WG1382657 Zinc: Percent Recovery is outside of established control limits. 6010D WG1382679 Chromium: Percent Recovery is outside of established control limits.
2	8270E WG1388431 Hexachlorobenzene, Pyrene: Relative Percent Difference is outside of established control limits.
3	3060A/7196A WG1389442 Chromium,Hexavalent: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits. 6010D WG1382679 Chromium: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits. 6010D WG1383087 Chromium: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

SB-15(0-1)
Collected date/time: 11/14/19 11:45

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.9		1	11/22/2019 16:46	WG1384982

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0676	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Acenaphthylene	U		0.0707	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Anthracene	U		0.0666	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Benzidine	U		0.671	0.333	3.51	10	11/28/2019 06:46	WG1388431
Benzo(a)anthracene	U		0.0451	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Benzo(b)fluoranthene	U		0.0732	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Benzo(k)fluoranthene	U		0.0613	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Benzo(g,h,i)perylene	U		0.0759	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Benzo(a)pyrene	U		0.0577	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Bis(2-chlorethoxy)methane	U		0.0811	0.333	3.51	10	11/28/2019 06:46	WG1388431
Bis(2-chloroethyl)ether	U		0.0944	0.333	3.51	10	11/28/2019 06:46	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.0800	0.333	3.51	10	11/28/2019 06:46	WG1388431
4-Bromophenyl-phenylether	U		0.120	0.333	3.51	10	11/28/2019 06:46	WG1388431
2-Chloronaphthalene	U		0.0673	0.0333	0.351	10	11/28/2019 06:46	WG1388431
4-Chlorophenyl-phenylether	U		0.0660	0.333	3.51	10	11/28/2019 06:46	WG1388431
Chrysene	U		0.0585	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Dibenz(a,h)anthracene	U		0.0865	0.0333	0.351	10	11/28/2019 06:46	WG1388431
1,2-Dichlorobenzene	U		0.0970	0.333	3.51	10	11/28/2019 06:46	WG1388431
1,3-Dichlorobenzene	U		0.105	0.333	3.51	10	11/28/2019 06:46	WG1388431
1,4-Dichlorobenzene	U		0.105	0.333	3.51	10	11/28/2019 06:46	WG1388431
3,3-Dichlorobenzidine	U		0.836	0.333	3.51	10	11/28/2019 06:46	WG1388431
2,4-Dinitrotoluene	U		0.0639	0.333	3.51	10	11/28/2019 06:46	WG1388431
2,6-Dinitrotoluene	U		0.0776	0.333	3.51	10	11/28/2019 06:46	WG1388431
Fluoranthene	U		0.0522	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Fluorene	U		0.0718	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Hexachlorobenzene	U		0.0902	0.333	3.51	10	11/28/2019 06:46	WG1388431
Hexachloro-1,3-butadiene	U		0.105	0.333	3.51	10	11/28/2019 06:46	WG1388431
Hexachlorocyclopentadiene	U		0.618	0.333	3.51	10	11/28/2019 06:46	WG1388431
Hexachloroethane	U		0.141	0.333	3.51	10	11/28/2019 06:46	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.0813	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Isophorone	U		0.0550	0.333	3.51	10	11/28/2019 06:46	WG1388431
Naphthalene	U		0.0936	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Nitrobenzene	U		0.0732	0.333	3.51	10	11/28/2019 06:46	WG1388431
n-Nitrosodimethylamine	U		0.681	0.333	3.51	10	11/28/2019 06:46	WG1388431
n-Nitrosodiphenylamine	U		0.948	0.333	3.51	10	11/28/2019 06:46	WG1388431
n-Nitrosodi-n-propylamine	U		0.0954	0.333	3.51	10	11/28/2019 06:46	WG1388431
Phenanthrene	U		0.0556	0.0333	0.351	10	11/28/2019 06:46	WG1388431
Pyridine	U		0.661	0.333	3.51	10	11/28/2019 06:46	WG1388431
Benzylbutyl phthalate	U		0.108	0.333	3.51	10	11/28/2019 06:46	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.126	0.333	3.51	10	11/28/2019 06:46	WG1388431
Di-n-butyl phthalate	U		0.115	0.333	3.51	10	11/28/2019 06:46	WG1388431
Diethyl phthalate	U		0.0728	0.333	3.51	10	11/28/2019 06:46	WG1388431
Dimethyl phthalate	U		0.0569	0.333	3.51	10	11/28/2019 06:46	WG1388431
Di-n-octyl phthalate	U		0.0955	0.333	3.51	10	11/28/2019 06:46	WG1388431
Pyrene	U		0.130	0.0333	0.351	10	11/28/2019 06:46	WG1388431
1,2,4-Trichlorobenzene	U		0.0923	0.333	3.51	10	11/28/2019 06:46	WG1388431
4-Chloro-3-methylphenol	U		0.0502	0.333	3.51	10	11/28/2019 06:46	WG1388431
2-Chlorophenol	U		0.0875	0.333	3.51	10	11/28/2019 06:46	WG1388431
2,4-Dichlorophenol	U		0.0786	0.333	3.51	10	11/28/2019 06:46	WG1388431
2,4-Dimethylphenol	U		0.496	0.333	3.51	10	11/28/2019 06:46	WG1388431

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
4,6-Dinitro-2-methylphenol	U		1.31	0.333	3.51	10	11/28/2019 06:46	WG1388431
2,4-Dinitrophenol	U		1.03	0.333	3.51	10	11/28/2019 06:46	WG1388431
2-Methylphenol	U		0.104	0.333	3.51	10	11/28/2019 06:46	WG1388431
3&4-Methyl Phenol	U		0.0825	0.333	3.51	10	11/28/2019 06:46	WG1388431
2-Nitrophenol	U		0.137	0.333	3.51	10	11/28/2019 06:46	WG1388431
4-Nitrophenol	U		0.553	0.333	3.51	10	11/28/2019 06:46	WG1388431
Pentachlorophenol	U		0.506	0.333	3.51	10	11/28/2019 06:46	WG1388431
Phenol	U		0.0732	0.333	3.51	10	11/28/2019 06:46	WG1388431
2,4,5-Trichlorophenol	U		0.110	0.333	3.51	10	11/28/2019 06:46	WG1388431
2,4,6-Trichlorophenol	U		0.0820	0.333	3.51	10	11/28/2019 06:46	WG1388431
(S) 2-Fluorophenol	*79.0*				*12.0-120*		*11/28/2019 06:46*	WG1388431
(S) Phenol-d5	*72.4*				*10.0-120*		*11/28/2019 06:46*	WG1388431
(S) Nitrobenzene-d5	*68.5*				*10.0-122*		*11/28/2019 06:46*	WG1388431
(S) 2-Fluorobiphenyl	*65.6*				*15.0-120*		*11/28/2019 06:46*	WG1388431
(S) 2,4,6-Tribromophenol	*85.6*				*10.0-127*		*11/28/2019 06:46*	WG1388431
(S) p-Terphenyl-d14	*80.8*				*10.0-120*		*11/28/2019 06:46*	WG1388431

Sample Narrative:

L1165576-01 WG1388431: Dilution due to matrix.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.9		1	11/22/2019 16:46	WG1384982

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.26		0.518	2.00	2.25	1	11/20/2019 00:31	WG1382657
Copper	18.2		0.597	2.00	2.25	1	12/03/2019 02:27	WG1388701
Nickel	28.9		0.551	2.00	2.25	1	11/20/2019 00:31	WG1382657
Zinc	37.6		0.664	5.00	5.63	1	11/20/2019 00:31	WG1382657

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.7		1	11/22/2019 16:46	WG1384982

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.99	J	0.486	2.00	2.11	1	11/20/2019 00:34	WG1382657

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

Calculated Results

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	98.1		0.146	1.00	1.05	1	12/01/2019 21:41	WG1382679

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.6		1	11/22/2019 16:23	WG1384983

Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	U		0.669	2.00	2.09	1	12/01/2019 21:41	WG1389442

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium	98.1		0.146	1.00	1.05	1	11/20/2019 14:16	WG1382679

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.2		1	11/22/2019 16:23	WG1384983

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0142	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Acenaphthylene	U		0.0149	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Anthracene	U		0.0140	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Benzidine	U		0.141	0.333	0.738	2	11/28/2019 05:30	WG1388431
Benzo(a)anthracene	U		0.00949	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Benzo(b)fluoranthene	U		0.0154	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Benzo(k)fluoranthene	U		0.0129	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Benzo(g,h,i)perylene	U		0.0160	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Benzo(a)pyrene	U		0.0122	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Bis(2-chlorethoxy)methane	U		0.0171	0.333	0.738	2	11/28/2019 05:30	WG1388431
Bis(2-chloroethyl)ether	U		0.0199	0.333	0.738	2	11/28/2019 05:30	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.0169	0.333	0.738	2	11/28/2019 05:30	WG1388431
4-Bromophenyl-phenylether	U		0.0253	0.333	0.738	2	11/28/2019 05:30	WG1388431
2-Chloronaphthalene	U		0.0142	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
4-Chlorophenyl-phenylether	U		0.0139	0.333	0.738	2	11/28/2019 05:30	WG1388431
Chrysene	U		0.0123	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Dibenz(a,h)anthracene	U		0.0182	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
1,2-Dichlorobenzene	U		0.0204	0.333	0.738	2	11/28/2019 05:30	WG1388431
1,3-Dichlorobenzene	U		0.0222	0.333	0.738	2	11/28/2019 05:30	WG1388431
1,4-Dichlorobenzene	U		0.0222	0.333	0.738	2	11/28/2019 05:30	WG1388431
3,3-Dichlorobenzidine	U		0.176	0.333	0.738	2	11/28/2019 05:30	WG1388431
2,4-Dinitrotoluene	U		0.0135	0.333	0.738	2	11/28/2019 05:30	WG1388431
2,6-Dinitrotoluene	U		0.0163	0.333	0.738	2	11/28/2019 05:30	WG1388431
Fluoranthene	0.0123	J	0.0110	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Fluorene	0.215		0.0151	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Hexachlorobenzene	U		0.0190	0.333	0.738	2	11/28/2019 05:30	WG1388431
Hexachloro-1,3-butadiene	U		0.0222	0.333	0.738	2	11/28/2019 05:30	WG1388431
Hexachlorocyclopentadiene	U		0.130	0.333	0.738	2	11/28/2019 05:30	WG1388431
Hexachloroethane	U		0.0297	0.333	0.738	2	11/28/2019 05:30	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.0171	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Isophorone	U		0.0116	0.333	0.738	2	11/28/2019 05:30	WG1388431
Naphthalene	0.186		0.0197	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Nitrobenzene	U		0.0154	0.333	0.738	2	11/28/2019 05:30	WG1388431
n-Nitrosodimethylamine	U		0.143	0.333	0.738	2	11/28/2019 05:30	WG1388431
n-Nitrosodiphenylamine	U		0.200	0.333	0.738	2	11/28/2019 05:30	WG1388431
n-Nitrosodi-n-propylamine	U		0.0201	0.333	0.738	2	11/28/2019 05:30	WG1388431
Phenanthrene	0.371		0.0117	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
Pyridine	U		0.139	0.333	0.738	2	11/28/2019 05:30	WG1388431
Benzylbutyl phthalate	U		0.0228	0.333	0.738	2	11/28/2019 05:30	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.0266	0.333	0.738	2	11/28/2019 05:30	WG1388431
Di-n-butyl phthalate	U		0.0242	0.333	0.738	2	11/28/2019 05:30	WG1388431
Diethyl phthalate	U		0.0153	0.333	0.738	2	11/28/2019 05:30	WG1388431
Dimethyl phthalate	U		0.0120	0.333	0.738	2	11/28/2019 05:30	WG1388431
Di-n-octyl phthalate	U		0.0201	0.333	0.738	2	11/28/2019 05:30	WG1388431
Pyrene	U		0.0273	0.0333	0.0738	2	11/28/2019 05:30	WG1388431
1,2,4-Trichlorobenzene	U		0.0194	0.333	0.738	2	11/28/2019 05:30	WG1388431
4-Chloro-3-methylphenol	U		0.0106	0.333	0.738	2	11/28/2019 05:30	WG1388431
2-Chlorophenol	U		0.0184	0.333	0.738	2	11/28/2019 05:30	WG1388431
2,4-Dichlorophenol	U		0.0165	0.333	0.738	2	11/28/2019 05:30	WG1388431
2,4-Dimethylphenol	U		0.104	0.333	0.738	2	11/28/2019 05:30	WG1388431

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
4,6-Dinitro-2-methylphenol	U		0.275	0.333	0.738	2	11/28/2019 05:30	WG1388431
2,4-Dinitrophenol	U		0.217	0.333	0.738	2	11/28/2019 05:30	WG1388431
2-Methylphenol	U		0.0219	0.333	0.738	2	11/28/2019 05:30	WG1388431
3&4-Methyl Phenol	U		0.0174	0.333	0.738	2	11/28/2019 05:30	WG1388431
2-Nitrophenol	U		0.0288	0.333	0.738	2	11/28/2019 05:30	WG1388431
4-Nitrophenol	U		0.116	0.333	0.738	2	11/28/2019 05:30	WG1388431
Pentachlorophenol	U		0.106	0.333	0.738	2	11/28/2019 05:30	WG1388431
Phenol	U		0.0154	0.333	0.738	2	11/28/2019 05:30	WG1388431
2,4,5-Trichlorophenol	U		0.0231	0.333	0.738	2	11/28/2019 05:30	WG1388431
2,4,6-Trichlorophenol	U		0.0173	0.333	0.738	2	11/28/2019 05:30	WG1388431
(S) 2-Fluorophenol	*81.7*				*12.0-120*		*11/28/2019 05:30*	WG1388431
(S) Phenol-d5	*75.9*				*10.0-120*		*11/28/2019 05:30*	WG1388431
(S) Nitrobenzene-d5	*82.3*				*10.0-122*		*11/28/2019 05:30*	WG1388431
(S) 2-Fluorobiphenyl	*68.2*				*15.0-120*		*11/28/2019 05:30*	WG1388431
(S) 2,4,6-Tribromophenol	*97.3*				*10.0-127*		*11/28/2019 05:30*	WG1388431
(S) p-Terphenyl-d14	*79.6*				*10.0-120*		*11/28/2019 05:30*	WG1388431

Sample Narrative:

L1165576-05 WG1388431: Dilution due to matrix impact during extract concentration procedure

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.2		1	11/22/2019 16:23	WG1384983

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0720	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Acenaphthylene	U		0.0753	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Anthracene	U		0.0709	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Benzidine	U		0.714	0.333	3.73	10	11/28/2019 06:27	WG1388431
Benzo(a)anthracene	U		0.0480	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Benzo(b)fluoranthene	U		0.0779	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Benzo(k)fluoranthene	U		0.0653	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Benzo(g,h,i)perylene	U		0.0809	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Benzo(a)pyrene	U		0.0615	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Bis(2-chlorethoxy)methane	U		0.0864	0.333	3.73	10	11/28/2019 06:27	WG1388431
Bis(2-chloroethyl)ether	U		0.100	0.333	3.73	10	11/28/2019 06:27	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.0852	0.333	3.73	10	11/28/2019 06:27	WG1388431
4-Bromophenyl-phenylether	U		0.128	0.333	3.73	10	11/28/2019 06:27	WG1388431
2-Chloronaphthalene	U		0.0717	0.0333	0.373	10	11/28/2019 06:27	WG1388431
4-Chlorophenyl-phenylether	U		0.0703	0.333	3.73	10	11/28/2019 06:27	WG1388431
Chrysene	U		0.0622	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Dibenz(a,h)anthracene	U		0.0921	0.0333	0.373	10	11/28/2019 06:27	WG1388431
1,2-Dichlorobenzene	U		0.103	0.333	3.73	10	11/28/2019 06:27	WG1388431
1,3-Dichlorobenzene	U		0.112	0.333	3.73	10	11/28/2019 06:27	WG1388431
1,4-Dichlorobenzene	U		0.112	0.333	3.73	10	11/28/2019 06:27	WG1388431
3,3-Dichlorobenzidine	U		0.890	0.333	3.73	10	11/28/2019 06:27	WG1388431
2,4-Dinitrotoluene	U		0.0681	0.333	3.73	10	11/28/2019 06:27	WG1388431
2,6-Dinitrotoluene	U		0.0827	0.333	3.73	10	11/28/2019 06:27	WG1388431
Fluoranthene	U		0.0556	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Fluorene	0.0980	J	0.0765	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Hexachlorobenzene	U		0.0960	0.333	3.73	10	11/28/2019 06:27	WG1388431
Hexachloro-1,3-butadiene	U		0.112	0.333	3.73	10	11/28/2019 06:27	WG1388431
Hexachlorocyclopentadiene	U		0.658	0.333	3.73	10	11/28/2019 06:27	WG1388431
Hexachloroethane	U		0.150	0.333	3.73	10	11/28/2019 06:27	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.0866	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Isophorone	U		0.0585	0.333	3.73	10	11/28/2019 06:27	WG1388431
Naphthalene	0.173	J	0.0997	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Nitrobenzene	U		0.0779	0.333	3.73	10	11/28/2019 06:27	WG1388431
n-Nitrosodimethylamine	U		0.726	0.333	3.73	10	11/28/2019 06:27	WG1388431
n-Nitrosodiphenylamine	U		1.01	0.333	3.73	10	11/28/2019 06:27	WG1388431
n-Nitrosodi-n-propylamine	U		0.102	0.333	3.73	10	11/28/2019 06:27	WG1388431
Phenanthrene	0.154	J	0.0592	0.0333	0.373	10	11/28/2019 06:27	WG1388431
Pyridine	U		0.704	0.333	3.73	10	11/28/2019 06:27	WG1388431
Benzylbutyl phthalate	U		0.116	0.333	3.73	10	11/28/2019 06:27	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.135	0.333	3.73	10	11/28/2019 06:27	WG1388431
Di-n-butyl phthalate	U		0.122	0.333	3.73	10	11/28/2019 06:27	WG1388431
Diethyl phthalate	U		0.0775	0.333	3.73	10	11/28/2019 06:27	WG1388431
Dimethyl phthalate	U		0.0606	0.333	3.73	10	11/28/2019 06:27	WG1388431
Di-n-octyl phthalate	U		0.102	0.333	3.73	10	11/28/2019 06:27	WG1388431
Pyrene	U		0.138	0.0333	0.373	10	11/28/2019 06:27	WG1388431
1,2,4-Trichlorobenzene	U		0.0982	0.333	3.73	10	11/28/2019 06:27	WG1388431
4-Chloro-3-methylphenol	U		0.0535	0.333	3.73	10	11/28/2019 06:27	WG1388431
2-Chlorophenol	U		0.0932	0.333	3.73	10	11/28/2019 06:27	WG1388431
2,4-Dichlorophenol	U		0.0837	0.333	3.73	10	11/28/2019 06:27	WG1388431
2,4-Dimethylphenol	U		0.528	0.333	3.73	10	11/28/2019 06:27	WG1388431

SB-20(4-6)

Collected date/time: 11/14/19 09:37

SAMPLE RESULTS - 06

L1165576

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
4,6-Dinitro-2-methylphenol	U		1.39	0.333	3.73	10	11/28/2019 06:27	WG1388431
2,4-Dinitrophenol	U		1.10	0.333	3.73	10	11/28/2019 06:27	WG1388431
2-Methylphenol	U		0.111	0.333	3.73	10	11/28/2019 06:27	WG1388431
3&4-Methyl Phenol	U		0.0878	0.333	3.73	10	11/28/2019 06:27	WG1388431
2-Nitrophenol	U		0.146	0.333	3.73	10	11/28/2019 06:27	WG1388431
4-Nitrophenol	U		0.589	0.333	3.73	10	11/28/2019 06:27	WG1388431
Pentachlorophenol	U		0.538	0.333	3.73	10	11/28/2019 06:27	WG1388431
Phenol	U		0.0779	0.333	3.73	10	11/28/2019 06:27	WG1388431
2,4,5-Trichlorophenol	U		0.117	0.333	3.73	10	11/28/2019 06:27	WG1388431
2,4,6-Trichlorophenol	U		0.0874	0.333	3.73	10	11/28/2019 06:27	WG1388431
(S) 2-Fluorophenol	*67.0*				*12.0-120*		*11/28/2019 06:27*	WG1388431
(S) Phenol-d5	*62.1*				*10.0-120*		*11/28/2019 06:27*	WG1388431
(S) Nitrobenzene-d5	*55.7*				*10.0-122*		*11/28/2019 06:27*	WG1388431
(S) 2-Fluorobiphenyl	*57.3*				*15.0-120*		*11/28/2019 06:27*	WG1388431
(S) 2,4,6-Tribromophenol	*86.8*				*10.0-127*		*11/28/2019 06:27*	WG1388431
(S) p-Terphenyl-d14	*77.2*				*10.0-120*		*11/28/2019 06:27*	WG1388431

Sample Narrative:

L1165576-06 WG1388431: Dilution due to matrix.

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

Calculated Results

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	166		0.164	1.00	1.17	1	12/01/2019 21:42	WG1382679

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.4		1	11/22/2019 16:02	WG1384985

Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	16.5		0.749	2.00	2.34	1	12/01/2019 21:42	WG1389442

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium	182		0.164	1.00	1.17	1	11/20/2019 14:44	WG1382679

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	8.83	B	0.992	0.100	2.93	25	11/28/2019 00:06	WG1388494
(S) a,a,a-Trifluorotoluene(FID)	*97.3*				*77.0-120*		*11/28/2019 00:06*	WG1388494

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0751	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Acenaphthylene	U		0.0785	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Anthracene	U		0.0740	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Benzidine	U		0.746	0.333	3.90	10	11/28/2019 07:05	WG1388431
Benzo(a)anthracene	U		0.0501	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Benzo(b)fluoranthene	U		0.0814	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Benzo(k)fluoranthene	U		0.0681	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Benzo(g,h,i)perylene	U		0.0844	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Benzo(a)pyrene	U		0.0641	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Bis(2-chlorethoxy)methane	U		0.0901	0.333	3.90	10	11/28/2019 07:05	WG1388431
Bis(2-chloroethyl)ether	U		0.105	0.333	3.90	10	11/28/2019 07:05	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.0890	0.333	3.90	10	11/28/2019 07:05	WG1388431
4-Bromophenyl-phenylether	U		0.133	0.333	3.90	10	11/28/2019 07:05	WG1388431
2-Chloronaphthalene	U		0.0748	0.0333	0.390	10	11/28/2019 07:05	WG1388431
4-Chlorophenyl-phenylether	U		0.0734	0.333	3.90	10	11/28/2019 07:05	WG1388431
Chrysene	U		0.0650	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Dibenz(a,h)anthracene	U		0.0961	0.0333	0.390	10	11/28/2019 07:05	WG1388431
1,2-Dichlorobenzene	U		0.108	0.333	3.90	10	11/28/2019 07:05	WG1388431
1,3-Dichlorobenzene	U		0.117	0.333	3.90	10	11/28/2019 07:05	WG1388431
1,4-Dichlorobenzene	U		0.117	0.333	3.90	10	11/28/2019 07:05	WG1388431
3,3-Dichlorobenzidine	U		0.929	0.333	3.90	10	11/28/2019 07:05	WG1388431
2,4-Dinitrotoluene	U		0.0711	0.333	3.90	10	11/28/2019 07:05	WG1388431
2,6-Dinitrotoluene	U		0.0863	0.333	3.90	10	11/28/2019 07:05	WG1388431
Fluoranthene	U		0.0581	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Fluorene	U		0.0798	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Hexachlorobenzene	U		0.100	0.333	3.90	10	11/28/2019 07:05	WG1388431
Hexachloro-1,3-butadiene	U		0.117	0.333	3.90	10	11/28/2019 07:05	WG1388431

SB-21(2-3)

Collected date/time: 11/14/19 10:07

SAMPLE RESULTS - 07

L1165576

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachlorocyclopentadiene	U		0.687	0.333	3.90	10	11/28/2019 07:05	WG1388431
Hexachloroethane	U		0.157	0.333	3.90	10	11/28/2019 07:05	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.0904	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Isophorone	U		0.0611	0.333	3.90	10	11/28/2019 07:05	WG1388431
Naphthalene	U		0.104	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Nitrobenzene	U		0.0814	0.333	3.90	10	11/28/2019 07:05	WG1388431
n-Nitrosodimethylamine	U		0.757	0.333	3.90	10	11/28/2019 07:05	WG1388431
n-Nitrosodiphenylamine	U		1.05	0.333	3.90	10	11/28/2019 07:05	WG1388431
n-Nitrosodi-n-propylamine	U		0.106	0.333	3.90	10	11/28/2019 07:05	WG1388431
Phenanthrene	U		0.0618	0.0333	0.390	10	11/28/2019 07:05	WG1388431
Pyridine	U		0.735	0.333	3.90	10	11/28/2019 07:05	WG1388431
Benzylbutyl phthalate	U		0.121	0.333	3.90	10	11/28/2019 07:05	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.140	0.333	3.90	10	11/28/2019 07:05	WG1388431
Di-n-butyl phthalate	U		0.128	0.333	3.90	10	11/28/2019 07:05	WG1388431
Diethyl phthalate	U		0.0809	0.333	3.90	10	11/28/2019 07:05	WG1388431
Dimethyl phthalate	U		0.0632	0.333	3.90	10	11/28/2019 07:05	WG1388431
Di-n-octyl phthalate	U		0.106	0.333	3.90	10	11/28/2019 07:05	WG1388431
Pyrene	U		0.144	0.0333	0.390	10	11/28/2019 07:05	WG1388431
1,2,4-Trichlorobenzene	U		0.103	0.333	3.90	10	11/28/2019 07:05	WG1388431
4-Chloro-3-methylphenol	U		0.0558	0.333	3.90	10	11/28/2019 07:05	WG1388431
2-Chlorophenol	U		0.0973	0.333	3.90	10	11/28/2019 07:05	WG1388431
2,4-Dichlorophenol	U		0.0873	0.333	3.90	10	11/28/2019 07:05	WG1388431
2,4-Dimethylphenol	U		0.551	0.333	3.90	10	11/28/2019 07:05	WG1388431
4,6-Dinitro-2-methylphenol	U		1.45	0.333	3.90	10	11/28/2019 07:05	WG1388431
2,4-Dinitrophenol	U		1.15	0.333	3.90	10	11/28/2019 07:05	WG1388431
2-Methylphenol	U		0.115	0.333	3.90	10	11/28/2019 07:05	WG1388431
3&4-Methyl Phenol	U		0.0917	0.333	3.90	10	11/28/2019 07:05	WG1388431
2-Nitrophenol	U		0.152	0.333	3.90	10	11/28/2019 07:05	WG1388431
4-Nitrophenol	U		0.615	0.333	3.90	10	11/28/2019 07:05	WG1388431
Pentachlorophenol	U		0.562	0.333	3.90	10	11/28/2019 07:05	WG1388431
Phenol	U		0.0814	0.333	3.90	10	11/28/2019 07:05	WG1388431
2,4,5-Trichlorophenol	U		0.122	0.333	3.90	10	11/28/2019 07:05	WG1388431
2,4,6-Trichlorophenol	U		0.0912	0.333	3.90	10	11/28/2019 07:05	WG1388431
(S) 2-Fluorophenol	*64.1*				*12.0-120*		*11/28/2019 07:05*	WG1388431
(S) Phenol-d5	*60.9*				*10.0-120*		*11/28/2019 07:05*	WG1388431
(S) Nitrobenzene-d5	*53.4*				*10.0-122*		*11/28/2019 07:05*	WG1388431
(S) 2-Fluorobiphenyl	*51.2*				*15.0-120*		*11/28/2019 07:05*	WG1388431
(S) 2,4,6-Tribromophenol	*65.9*				*10.0-127*		*11/28/2019 07:05*	WG1388431
(S) p-Terphenyl-d14	*59.7*				*10.0-120*		*11/28/2019 07:05*	WG1388431

Sample Narrative:

L1165576-07 WG1388431: Dilution due to matrix.

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

Calculated Results

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	43.9		0.149	1.00	1.06	1	12/01/2019 21:44	WG1382684

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.9		1	11/22/2019 19:33	WG1384993

Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	U		0.681	2.00	2.13	1	12/01/2019 21:44	WG1389442

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium	43.9		0.149	1.00	1.06	1	11/21/2019 17:13	WG1382684

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.1		1	11/21/2019 09:26	WG1384252

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.18	B J	0.941	0.100	2.77	25	11/27/2019 23:04	WG1388494
(S) a,a,a-Trifluorotoluene(FID)	*98.8*				*77.0-120*		*11/27/2019 23:04*	WG1388494

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0143	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Acenaphthylene	U		0.0149	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Anthracene	U		0.0140	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Benzidine	U		0.141	0.333	0.739	2	11/28/2019 05:49	WG1388431
Benzo(a)anthracene	U		0.00950	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Benzo(b)fluoranthene	U		0.0154	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Benzo(k)fluoranthene	U		0.0129	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Benzo(g,h,i)perylene	U		0.0160	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Benzo(a)pyrene	U		0.0122	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Bis(2-chlorethoxy)methane	U		0.0171	0.333	0.739	2	11/28/2019 05:49	WG1388431
Bis(2-chloroethyl)ether	U		0.0199	0.333	0.739	2	11/28/2019 05:49	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.0169	0.333	0.739	2	11/28/2019 05:49	WG1388431
4-Bromophenyl-phenylether	U		0.0253	0.333	0.739	2	11/28/2019 05:49	WG1388431
2-Chloronaphthalene	U		0.0142	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
4-Chlorophenyl-phenylether	U		0.0139	0.333	0.739	2	11/28/2019 05:49	WG1388431
Chrysene	U		0.0123	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Dibenz(a,h)anthracene	U		0.0182	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
1,2-Dichlorobenzene	U		0.0204	0.333	0.739	2	11/28/2019 05:49	WG1388431
1,3-Dichlorobenzene	U		0.0222	0.333	0.739	2	11/28/2019 05:49	WG1388431
1,4-Dichlorobenzene	U		0.0222	0.333	0.739	2	11/28/2019 05:49	WG1388431
3,3-Dichlorobenzidine	U		0.176	0.333	0.739	2	11/28/2019 05:49	WG1388431
2,4-Dinitrotoluene	U		0.0135	0.333	0.739	2	11/28/2019 05:49	WG1388431
2,6-Dinitrotoluene	U		0.0164	0.333	0.739	2	11/28/2019 05:49	WG1388431
Fluoranthene	U		0.0110	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Fluorene	U		0.0151	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Hexachlorobenzene	U		0.0190	0.333	0.739	2	11/28/2019 05:49	WG1388431
Hexachloro-1,3-butadiene	U		0.0222	0.333	0.739	2	11/28/2019 05:49	WG1388431
Hexachlorocyclopentadiene	U		0.130	0.333	0.739	2	11/28/2019 05:49	WG1388431
Hexachloroethane	U		0.0297	0.333	0.739	2	11/28/2019 05:49	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.0171	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Isophorone	U		0.0116	0.333	0.739	2	11/28/2019 05:49	WG1388431
Naphthalene	U		0.0197	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Nitrobenzene	U		0.0154	0.333	0.739	2	11/28/2019 05:49	WG1388431
n-Nitrosodimethylamine	U		0.144	0.333	0.739	2	11/28/2019 05:49	WG1388431
n-Nitrosodiphenylamine	U		0.200	0.333	0.739	2	11/28/2019 05:49	WG1388431
n-Nitrosodi-n-propylamine	U		0.0201	0.333	0.739	2	11/28/2019 05:49	WG1388431
Phenanthrene	U		0.0117	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
Pyridine	U		0.139	0.333	0.739	2	11/28/2019 05:49	WG1388431
Benzylbutyl phthalate	U		0.0229	0.333	0.739	2	11/28/2019 05:49	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.0266	0.333	0.739	2	11/28/2019 05:49	WG1388431
Di-n-butyl phthalate	U		0.0242	0.333	0.739	2	11/28/2019 05:49	WG1388431
Diethyl phthalate	U		0.0153	0.333	0.739	2	11/28/2019 05:49	WG1388431
Dimethyl phthalate	U		0.0120	0.333	0.739	2	11/28/2019 05:49	WG1388431
Di-n-octyl phthalate	U		0.0201	0.333	0.739	2	11/28/2019 05:49	WG1388431

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Pyrene	U		0.0273	0.0333	0.0739	2	11/28/2019 05:49	WG1388431
1,2,4-Trichlorobenzene	U		0.0194	0.333	0.739	2	11/28/2019 05:49	WG1388431
4-Chloro-3-methylphenol	U		0.0106	0.333	0.739	2	11/28/2019 05:49	WG1388431
2-Chlorophenol	U		0.0184	0.333	0.739	2	11/28/2019 05:49	WG1388431
2,4-Dichlorophenol	U		0.0166	0.333	0.739	2	11/28/2019 05:49	WG1388431
2,4-Dimethylphenol	U		0.105	0.333	0.739	2	11/28/2019 05:49	WG1388431
4,6-Dinitro-2-methylphenol	U		0.275	0.333	0.739	2	11/28/2019 05:49	WG1388431
2,4-Dinitrophenol	U		0.218	0.333	0.739	2	11/28/2019 05:49	WG1388431
2-Methylphenol	U		0.0219	0.333	0.739	2	11/28/2019 05:49	WG1388431
3&4-Methyl Phenol	U		0.0174	0.333	0.739	2	11/28/2019 05:49	WG1388431
2-Nitrophenol	U		0.0289	0.333	0.739	2	11/28/2019 05:49	WG1388431
4-Nitrophenol	U		0.117	0.333	0.739	2	11/28/2019 05:49	WG1388431
Pentachlorophenol	U		0.107	0.333	0.739	2	11/28/2019 05:49	WG1388431
Phenol	U		0.0154	0.333	0.739	2	11/28/2019 05:49	WG1388431
2,4,5-Trichlorophenol	U		0.0231	0.333	0.739	2	11/28/2019 05:49	WG1388431
2,4,6-Trichlorophenol	U		0.0173	0.333	0.739	2	11/28/2019 05:49	WG1388431
(S) 2-Fluorophenol	*81.1*				*12.0-120*		*11/28/2019 05:49*	WG1388431
(S) Phenol-d5	*74.9*				*10.0-120*		*11/28/2019 05:49*	WG1388431
(S) Nitrobenzene-d5	*67.7*				*10.0-122*		*11/28/2019 05:49*	WG1388431
(S) 2-Fluorobiphenyl	*65.9*				*15.0-120*		*11/28/2019 05:49*	WG1388431
(S) 2,4,6-Tribromophenol	*93.0*				*10.0-127*		*11/28/2019 05:49*	WG1388431
(S) p-Terphenyl-d14	*78.9*				*10.0-120*		*11/28/2019 05:49*	WG1388431

Sample Narrative:

L1165576-09 WG1388431: Dilution due to matrix impact during extract concentration procedure

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

SB-17A (12-13)
Collected date/time: 11/13/19 15:02

SAMPLE RESULTS - 10

L1165576

Calculated Results

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chromium,Trivalent	50.4		0.155	1.00	1.11	1	12/01/2019 21:45	WG1383087

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	90.1		1	11/21/2019 10:33	WG1384253

Wet Chemistry by Method 3060A/7196A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chromium,Hexavalent	U		0.710	2.00	2.22	1	12/01/2019 21:45	WG1389442

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chromium	50.4		0.155	1.00	1.11	1	11/20/2019 13:34	WG1383087

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

SB-17C (9-10)

Collected date/time: 11/13/19 14:04

SAMPLE RESULTS - 11

L1165576

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.9		1	11/21/2019 10:33	WG1384253

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00748	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Acenaphthylene	U		0.00781	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Anthracene	U		0.00736	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Benzidine	U	J6	0.0742	0.333	0.388	1	11/28/2019 03:35	WG1388431
Benzo(a)anthracene	U		0.00498	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Benzo(b)fluoranthene	U		0.00809	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Benzo(k)fluoranthene	U		0.00678	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Benzo(g,h,i)perylene	U		0.00839	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Benzo(a)pyrene	U		0.00638	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Bis(2-chlorethoxy)methane	U		0.00897	0.333	0.388	1	11/28/2019 03:35	WG1388431
Bis(2-chloroethyl)ether	U		0.0104	0.333	0.388	1	11/28/2019 03:35	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.00885	0.333	0.388	1	11/28/2019 03:35	WG1388431
4-Bromophenyl-phenylether	U		0.0133	0.333	0.388	1	11/28/2019 03:35	WG1388431
2-Chloronaphthalene	U		0.00744	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
4-Chlorophenyl-phenylether	U		0.00730	0.333	0.388	1	11/28/2019 03:35	WG1388431
Chrysene	U		0.00646	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Dibenz(a,h)anthracene	U		0.00956	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
1,2-Dichlorobenzene	U		0.0107	0.333	0.388	1	11/28/2019 03:35	WG1388431
1,3-Dichlorobenzene	U		0.0116	0.333	0.388	1	11/28/2019 03:35	WG1388431
1,4-Dichlorobenzene	U		0.0116	0.333	0.388	1	11/28/2019 03:35	WG1388431
3,3-Dichlorobenzidine	U	J6	0.0924	0.333	0.388	1	11/28/2019 03:35	WG1388431
2,4-Dinitrotoluene	U		0.00707	0.333	0.388	1	11/28/2019 03:35	WG1388431
2,6-Dinitrotoluene	U		0.00858	0.333	0.388	1	11/28/2019 03:35	WG1388431
Fluoranthene	U		0.00578	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Fluorene	U		0.00794	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Hexachlorobenzene	U	J3	0.00997	0.333	0.388	1	11/28/2019 03:35	WG1388431
Hexachloro-1,3-butadiene	U		0.0116	0.333	0.388	1	11/28/2019 03:35	WG1388431
Hexachlorocyclopentadiene	U		0.0683	0.333	0.388	1	11/28/2019 03:35	WG1388431
Hexachloroethane	U		0.0156	0.333	0.388	1	11/28/2019 03:35	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.00899	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Isophorone	U		0.00608	0.333	0.388	1	11/28/2019 03:35	WG1388431
Naphthalene	U		0.0104	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Nitrobenzene	U		0.00809	0.333	0.388	1	11/28/2019 03:35	WG1388431
n-Nitrosodimethylamine	U		0.0753	0.333	0.388	1	11/28/2019 03:35	WG1388431
n-Nitrosodiphenylamine	U		0.105	0.333	0.388	1	11/28/2019 03:35	WG1388431
n-Nitrosodi-n-propylamine	U		0.0105	0.333	0.388	1	11/28/2019 03:35	WG1388431
Phenanthrene	0.00959	J	0.00615	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
Pyridine	U		0.0731	0.333	0.388	1	11/28/2019 03:35	WG1388431
Benzylbutyl phthalate	U		0.0120	0.333	0.388	1	11/28/2019 03:35	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.0140	0.333	0.388	1	11/28/2019 03:35	WG1388431
Di-n-butyl phthalate	U		0.0127	0.333	0.388	1	11/28/2019 03:35	WG1388431
Diethyl phthalate	U		0.00805	0.333	0.388	1	11/28/2019 03:35	WG1388431
Dimethyl phthalate	U		0.00629	0.333	0.388	1	11/28/2019 03:35	WG1388431
Di-n-octyl phthalate	0.0392	J	0.0106	0.333	0.388	1	11/28/2019 03:35	WG1388431
Pyrene	U	J3	0.0143	0.0333	0.0388	1	11/28/2019 03:35	WG1388431
1,2,4-Trichlorobenzene	U		0.0102	0.333	0.388	1	11/28/2019 03:35	WG1388431
4-Chloro-3-methylphenol	U		0.00555	0.333	0.388	1	11/28/2019 03:35	WG1388431
2-Chlorophenol	U		0.00968	0.333	0.388	1	11/28/2019 03:35	WG1388431
2,4-Dichlorophenol	U		0.00869	0.333	0.388	1	11/28/2019 03:35	WG1388431
2,4-Dimethylphenol	U		0.0548	0.333	0.388	1	11/28/2019 03:35	WG1388431

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
4,6-Dinitro-2-methylphenol	U		0.144	0.333	0.388	1	11/28/2019 03:35	WG1388431
2,4-Dinitrophenol	U		0.114	0.333	0.388	1	11/28/2019 03:35	WG1388431
2-Methylphenol	U		0.0115	0.333	0.388	1	11/28/2019 03:35	WG1388431
3&4-Methyl Phenol	0.0254	J	0.00912	0.333	0.388	1	11/28/2019 03:35	WG1388431
2-Nitrophenol	U		0.0151	0.333	0.388	1	11/28/2019 03:35	WG1388431
4-Nitrophenol	U		0.0611	0.333	0.388	1	11/28/2019 03:35	WG1388431
Pentachlorophenol	U		0.0559	0.333	0.388	1	11/28/2019 03:35	WG1388431
Phenol	U		0.00809	0.333	0.388	1	11/28/2019 03:35	WG1388431
2,4,5-Trichlorophenol	U		0.0121	0.333	0.388	1	11/28/2019 03:35	WG1388431
2,4,6-Trichlorophenol	U		0.00907	0.333	0.388	1	11/28/2019 03:35	WG1388431
(S) 2-Fluorophenol	*62.2*				*12.0-120*		*11/28/2019 03:35*	WG1388431
(S) Phenol-d5	*59.3*				*10.0-120*		*11/28/2019 03:35*	WG1388431
(S) Nitrobenzene-d5	*49.4*				*10.0-122*		*11/28/2019 03:35*	WG1388431
(S) 2-Fluorobiphenyl	*47.9*				*15.0-120*		*11/28/2019 03:35*	WG1388431
(S) 2,4,6-Tribromophenol	*68.5*				*10.0-127*		*11/28/2019 03:35*	WG1388431
(S) p-Terphenyl-d14	*50.3*				*10.0-120*		*11/28/2019 03:35*	WG1388431

SB-17C (14-15)

Collected date/time: 11/13/19 14:05

SAMPLE RESULTS - 12

L1165576

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.3		1	11/21/2019 10:33	WG1384253

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00719	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Acenaphthylene	U		0.00751	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Anthracene	U		0.00707	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Benzidine	U		0.0713	0.333	0.373	1	11/28/2019 02:19	WG1388431
Benzo(a)anthracene	U		0.00479	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Benzo(b)fluoranthene	U		0.00778	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Benzo(k)fluoranthene	U		0.00652	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Benzo(g,h,i)perylene	U		0.00807	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Benzo(a)pyrene	U		0.00613	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Bis(2-chlorethoxy)methane	U		0.00862	0.333	0.373	1	11/28/2019 02:19	WG1388431
Bis(2-chloroethyl)ether	U		0.0100	0.333	0.373	1	11/28/2019 02:19	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.00851	0.333	0.373	1	11/28/2019 02:19	WG1388431
4-Bromophenyl-phenylether	U		0.0128	0.333	0.373	1	11/28/2019 02:19	WG1388431
2-Chloronaphthalene	U		0.00715	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
4-Chlorophenyl-phenylether	U		0.00702	0.333	0.373	1	11/28/2019 02:19	WG1388431
Chrysene	U		0.00621	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Dibenz(a,h)anthracene	U		0.00919	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
1,2-Dichlorobenzene	U		0.0103	0.333	0.373	1	11/28/2019 02:19	WG1388431
1,3-Dichlorobenzene	U		0.0112	0.333	0.373	1	11/28/2019 02:19	WG1388431
1,4-Dichlorobenzene	U		0.0112	0.333	0.373	1	11/28/2019 02:19	WG1388431
3,3-Dichlorobenzidine	U		0.0889	0.333	0.373	1	11/28/2019 02:19	WG1388431
2,4-Dinitrotoluene	U		0.00680	0.333	0.373	1	11/28/2019 02:19	WG1388431
2,6-Dinitrotoluene	U		0.00825	0.333	0.373	1	11/28/2019 02:19	WG1388431
Fluoranthene	U		0.00555	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Fluorene	U		0.00763	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Hexachlorobenzene	U		0.00958	0.333	0.373	1	11/28/2019 02:19	WG1388431
Hexachloro-1,3-butadiene	U		0.0112	0.333	0.373	1	11/28/2019 02:19	WG1388431
Hexachlorocyclopentadiene	U		0.0657	0.333	0.373	1	11/28/2019 02:19	WG1388431
Hexachloroethane	U		0.0150	0.333	0.373	1	11/28/2019 02:19	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.00864	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Isophorone	U		0.00584	0.333	0.373	1	11/28/2019 02:19	WG1388431
Naphthalene	U		0.00995	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Nitrobenzene	U		0.00778	0.333	0.373	1	11/28/2019 02:19	WG1388431
n-Nitrosodimethylamine	U		0.0724	0.333	0.373	1	11/28/2019 02:19	WG1388431
n-Nitrosodiphenylamine	U		0.101	0.333	0.373	1	11/28/2019 02:19	WG1388431
n-Nitrosodi-n-propylamine	U		0.0101	0.333	0.373	1	11/28/2019 02:19	WG1388431
Phenanthrene	U		0.00591	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
Pyridine	U		0.0703	0.333	0.373	1	11/28/2019 02:19	WG1388431
Benzylbutyl phthalate	U		0.0115	0.333	0.373	1	11/28/2019 02:19	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.0134	0.333	0.373	1	11/28/2019 02:19	WG1388431
Di-n-butyl phthalate	U		0.0122	0.333	0.373	1	11/28/2019 02:19	WG1388431
Diethyl phthalate	U		0.00774	0.333	0.373	1	11/28/2019 02:19	WG1388431
Dimethyl phthalate	U		0.00605	0.333	0.373	1	11/28/2019 02:19	WG1388431
Di-n-octyl phthalate	0.0128	J	0.0102	0.333	0.373	1	11/28/2019 02:19	WG1388431
Pyrene	U		0.0138	0.0333	0.0373	1	11/28/2019 02:19	WG1388431
1,2,4-Trichlorobenzene	U		0.00981	0.333	0.373	1	11/28/2019 02:19	WG1388431
4-Chloro-3-methylphenol	U		0.00534	0.333	0.373	1	11/28/2019 02:19	WG1388431
2-Chlorophenol	U		0.00930	0.333	0.373	1	11/28/2019 02:19	WG1388431
2,4-Dichlorophenol	U		0.00835	0.333	0.373	1	11/28/2019 02:19	WG1388431
2,4-Dimethylphenol	U		0.0527	0.333	0.373	1	11/28/2019 02:19	WG1388431

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
4,6-Dinitro-2-methylphenol	U		0.139	0.333	0.373	1	11/28/2019 02:19	WG1388431
2,4-Dinitrophenol	U		0.110	0.333	0.373	1	11/28/2019 02:19	WG1388431
2-Methylphenol	U		0.0110	0.333	0.373	1	11/28/2019 02:19	WG1388431
3&4-Methyl Phenol	U		0.00877	0.333	0.373	1	11/28/2019 02:19	WG1388431
2-Nitrophenol	U		0.0146	0.333	0.373	1	11/28/2019 02:19	WG1388431
4-Nitrophenol	U		0.0588	0.333	0.373	1	11/28/2019 02:19	WG1388431
Pentachlorophenol	U		0.0537	0.333	0.373	1	11/28/2019 02:19	WG1388431
Phenol	U		0.00778	0.333	0.373	1	11/28/2019 02:19	WG1388431
2,4,5-Trichlorophenol	U		0.0116	0.333	0.373	1	11/28/2019 02:19	WG1388431
2,4,6-Trichlorophenol	U		0.00872	0.333	0.373	1	11/28/2019 02:19	WG1388431
(S) 2-Fluorophenol	*62.8*				*12.0-120*		*11/28/2019 02:19*	WG1388431
(S) Phenol-d5	*60.0*				*10.0-120*		*11/28/2019 02:19*	WG1388431
(S) Nitrobenzene-d5	*40.8*				*10.0-122*		*11/28/2019 02:19*	WG1388431
(S) 2-Fluorobiphenyl	*51.4*				*15.0-120*		*11/28/2019 02:19*	WG1388431
(S) 2,4,6-Tribromophenol	*83.2*				*10.0-127*		*11/28/2019 02:19*	WG1388431
(S) p-Terphenyl-d14	*63.1*				*10.0-120*		*11/28/2019 02:19*	WG1388431

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

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

Method Blank (MB)

(MB) R3474870-1 11/21/19 09:26

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00100			

L1161400-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1161400-11 11/21/19 09:26 • (DUP) R3474870-3 11/21/19 09:26

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	93.4	93.0	1	0.407		10

Laboratory Control Sample (LCS)

(LCS) R3474870-2 11/21/19 09:26

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3474969-1 11/21/19 10:33

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1161400-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1161400-20 11/21/19 10:33 • (DUP) R3474969-3 11/21/19 10:33

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	83.5	83.7	1	0.251		10

Laboratory Control Sample (LCS)

(LCS) R3474969-2 11/21/19 10:33

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) R3475332-1 11/22/19 16:46

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1161924-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-02 11/22/19 16:46 • (DUP) R3475332-3 11/22/19 16:46

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.9	90.2	1	1.52		10

Laboratory Control Sample (LCS)

(LCS) R3475332-2 11/22/19 16:46

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) R3475330-1 11/22/19 16:23

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00500			

L1161924-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-14 11/22/19 16:23 • (DUP) R3475330-3 11/22/19 16:23

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	84.5	82.4	1	2.55		10

Laboratory Control Sample (LCS)

(LCS) R3475330-2 11/22/19 16:23

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	49.9	99.9	85.0-115	

Method Blank (MB)

(MB) R3475326-1 11/22/19 16:02

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00300			

L1161924-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-25 11/22/19 16:02 • (DUP) R3475326-3 11/22/19 16:02

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.7	90.5	1	0.935		10

Laboratory Control Sample (LCS)

(LCS) R3475326-2 11/22/19 16:02

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) R3475273-1 11/22/19 19:33

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1161924-58 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-58 11/22/19 19:33 • (DUP) R3475273-3 11/22/19 19:33

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.3	91.1	1	0.279		10

Laboratory Control Sample (LCS)

(LCS) R3475273-2 11/22/19 19:33

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

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

Method Blank (MB)

(MB) R3477861-1 12/01/19 21:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chromium,Hexavalent	U		0.640	2.00

L1164878-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1164878-02 12/01/19 21:31 • (DUP) R3477861-3 12/01/19 21:32

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chromium,Hexavalent	U	0.000	1	0.000		20

L1165659-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1165659-02 12/01/19 21:48 • (DUP) R3477861-4 12/01/19 21:50

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chromium,Hexavalent	ND	0.000	1	0.000		20

Sample Narrative:

OS: sample is a reducer

Laboratory Control Sample (LCS)

(LCS) R3477861-2 12/01/19 21:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chromium,Hexavalent	24.0	24.6	103	80.0-120	

L1165659-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165659-02 12/01/19 21:48 • (MS) R3477861-5 12/01/19 21:51 • (MSD) R3477861-6 12/01/19 21:52

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chromium,Hexavalent	20.0	ND	8.94	10.4	44.7	51.8	1	75.0-125	J6	J6	14.7	20

Sample Narrative:

OS: sample is a reducer

L1165659-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1165659-02 12/01/19 21:48 • (MS) R3477861-7 12/01/19 21:53

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chromium,Hexavalent	700	ND	618	88.2	50	75.0-125	

Sample Narrative:

OS: sample is a reducer

Method Blank (MB)

(MB) R3473954-1 11/19/19 23:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Nickel	U		0.490	2.00
Zinc	U		0.590	5.00

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

(LCS) R3473954-2 11/19/19 23:46 • (LCSD) R3473954-3 11/19/19 23:48

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 %
Arsenic	100	95.7	91.5	95.7	91.5	80.0-120			4.57	20
Nickel	100	103	97.7	103	97.7	80.0-120			5.18	20
Zinc	100	100	95.3	100	95.3	80.0-120			5.20	20

L1161023-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161023-03 11/19/19 23:51 • (MS) R3473954-6 11/19/19 23:59 • (MSD) R3473954-7 11/20/19 00:02

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 %
Arsenic	106	1.27	90.8	94.0	84.6	87.6	1	75.0-125			3.46	20
Nickel	106	20.9	121	126	94.8	99.3	1	75.0-125			3.89	20
Zinc	106	104	177	202	69.7	93.1	1	75.0-125	J6		13.0	20

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

Method Blank (MB)

(MB) R3474364-1 11/20/19 14:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chromium	U		0.140	1.00

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

(LCS) R3474364-2 11/20/19 14:11 • (LCSD) R3474364-3 11/20/19 14:14

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 %
Chromium	100	107	106	107	106	80.0-120			1.48	20

L1161924-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161924-08 11/20/19 14:16 • (MS) R3474364-6 11/20/19 14:24 • (MSD) R3474364-7 11/20/19 14:26

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 %
Chromium	105	98.1	181	166	78.8	65.0	1	75.0-125		J6	8.37	20

Method Blank (MB)

(MB) R3474838-1 11/21/19 16:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chromium	U		0.140	1.00

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

(LCS) R3474838-2 11/21/19 16:23 • (LCSD) R3474838-3 11/21/19 16:25

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 %
Chromium	100	100	99.7	100	99.7	80.0-120			0.723	20

L1161924-44 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161924-44 11/21/19 16:28 • (MS) R3474838-6 11/21/19 16:35 • (MSD) R3474838-7 11/21/19 16:38

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 %
Chromium	108	24.5	129	131	96.6	98.4	1	75.0-125			1.53	20

Method Blank (MB)

(MB) R3474363-1 11/20/19 12:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chromium	U		0.140	1.00

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

(LCS) R3474363-2 11/20/19 12:51 • (LCSD) R3474363-3 11/20/19 12:53

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 %
Chromium	100	105	106	105	106	80.0-120			0.227	20

L1161400-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161400-10 11/20/19 12:56 • (MS) R3474363-6 11/20/19 13:03 • (MSD) R3474363-7 11/20/19 13:06

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 %
Chromium	116	30.5	151	147	104	101	1	75.0-125			2.99	20

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

Method Blank (MB)

(MB) R3478336-1 12/03/19 01:15

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Copper	U		0.530	2.00

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

(LCS) R3478336-2 12/03/19 01:17 • (LCSD) R3478336-3 12/03/19 01:20

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 %
Copper	100	99.7	101	99.7	101	80.0-120			1.46	20

L1164971-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1164971-02 12/03/19 01:22 • (MS) R3478336-6 12/03/19 01:30 • (MSD) R3478336-7 12/03/19 01:32

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 %
Copper	116	5.38	125	118	103	96.8	1	75.0-125			6.05	20

Method Blank (MB)

(MB) R3477209-2 11/27/19 22:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	0.0347	J	0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3477209-1 11/27/19 21:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.83	106	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*111*	*77.0-120*	

Method Blank (MB)

(MB) R3477330-2 11/28/19 01:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00642	0.0333
Acenaphthylene	U		0.00671	0.0333
Anthracene	U		0.00632	0.0333
Benzidine	U		0.0637	0.333
Benzo(a)anthracene	U		0.00428	0.0333
Benzo(b)fluoranthene	U		0.00695	0.0333
Benzo(k)fluoranthene	U		0.00582	0.0333
Benzo(g,h,i)perylene	U		0.00721	0.0333
Benzo(a)pyrene	U		0.00548	0.0333
Bis(2-chlorethoxy)methane	U		0.00770	0.333
Bis(2-chloroethyl)ether	U		0.00896	0.333
2,2-oxybis(1-chloropropane)	U		0.00760	0.333
4-Bromophenyl-phenylether	U		0.0114	0.333
2-Chloronaphthalene	U		0.00639	0.0333
4-Chlorophenyl-phenylether	U		0.00627	0.333
Chrysene	U		0.00555	0.0333
Dibenz(a,h)anthracene	U		0.00821	0.0333
1,2-Dichlorobenzene	U		0.00921	0.333
1,3-Dichlorobenzene	U		0.0100	0.333
1,4-Dichlorobenzene	U		0.0100	0.333
3,3-Dichlorobenzidine	U		0.0794	0.333
2,4-Dinitrotoluene	U		0.00607	0.333
2,6-Dinitrotoluene	U		0.00737	0.333
Fluoranthene	U		0.00496	0.0333
Fluorene	U		0.00682	0.0333
Hexachlorobenzene	U		0.00856	0.333
Hexachloro-1,3-butadiene	U		0.0100	0.333
Hexachlorocyclopentadiene	U		0.0587	0.333
Hexachloroethane	U		0.0134	0.333
Indeno(1,2,3-cd)pyrene	U		0.00772	0.0333
Isophorone	U		0.00522	0.333
Naphthalene	U		0.00889	0.0333
Nitrobenzene	U		0.00695	0.333
n-Nitrosodimethylamine	U		0.0647	0.333
n-Nitrosodiphenylamine	U		0.0900	0.333
n-Nitrosodi-n-propylamine	U		0.00906	0.333
Phenanthrene	U		0.00528	0.0333
Benzylbutyl phthalate	U		0.0103	0.333
Bis(2-ethylhexyl)phthalate	U		0.0120	0.333
Di-n-butyl phthalate	U		0.0109	0.333

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

Method Blank (MB)

(MB) R3477330-2 11/28/19 01:40

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Diethyl phthalate	U		0.00691	0.333
Dimethyl phthalate	U		0.00540	0.333
Di-n-octyl phthalate	U		0.00907	0.333
Pyrene	U		0.0123	0.0333
Pyridine	U		0.0628	0.333
1,2,4-Trichlorobenzene	U		0.00876	0.333
4-Chloro-3-methylphenol	U		0.00477	0.333
2-Chlorophenol	U		0.00831	0.333
2-Methylphenol	U		0.00986	0.333
3&4-Methyl Phenol	U		0.00783	0.333
2,4-Dichlorophenol	U		0.00746	0.333
2,4-Dimethylphenol	U		0.0471	0.333
4,6-Dinitro-2-methylphenol	U		0.124	0.333
2,4-Dinitrophenol	U		0.0980	0.333
2-Nitrophenol	U		0.0130	0.333
4-Nitrophenol	U		0.0525	0.333
Pentachlorophenol	U		0.0480	0.333
Phenol	U		0.00695	0.333
2,4,5-Trichlorophenol	U		0.0104	0.333
2,4,6-Trichlorophenol	U		0.00779	0.333
(S) Nitrobenzene-d5	*63.7*			*10.0-122*
(S) 2-Fluorobiphenyl	*67.0*			*15.0-120*
(S) p-Terphenyl-d14	*80.8*			*10.0-120*
(S) Phenol-d5	*74.5*			*10.0-120*
(S) 2-Fluorophenol	*82.3*			*12.0-120*
(S) 2,4,6-Tribromophenol	*92.2*			*10.0-127*

Laboratory Control Sample (LCS)

(LCS) R3477330-1 11/28/19 01:21

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Acenaphthene	0.666	0.423	63.5	38.0-120	
Acenaphthylene	0.666	0.462	69.4	40.0-120	
Anthracene	0.666	0.473	71.0	42.0-120	
Benzidine	1.33	0.154	11.6	10.0-120	
Benzo(a)anthracene	0.666	0.532	79.9	44.0-120	
Benzo(b)fluoranthene	0.666	0.493	74.0	43.0-120	
Benzo(k)fluoranthene	0.666	0.471	70.7	44.0-120	

Laboratory Control Sample (LCS)

(LCS) R3477330-1 11/28/19 01:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzo(g,h,i)perylene	0.666	0.458	68.8	43.0-120	
Benzo(a)pyrene	0.666	0.504	75.7	45.0-120	
Bis(2-chlorethoxy)methane	0.666	0.433	65.0	20.0-120	
Bis(2-chloroethyl)ether	0.666	0.516	77.5	16.0-120	
2,2-Oxybis(1-Chloropropane)	0.666	0.440	66.1	23.0-120	
4-Bromophenyl-phenylether	0.666	0.476	71.5	40.0-120	
2-Chloronaphthalene	0.666	0.445	66.8	35.0-120	
4-Chlorophenyl-phenylether	0.666	0.456	68.5	40.0-120	
Chrysene	0.666	0.472	70.9	43.0-120	
Dibenz(a,h)anthracene	0.666	0.448	67.3	44.0-120	
1,2-Dichlorobenzene	0.666	0.428	64.3	32.0-120	
1,3-Dichlorobenzene	0.666	0.410	61.6	30.0-120	
1,4-Dichlorobenzene	0.666	0.407	61.1	31.0-120	
3,3-Dichlorobenzidine	1.33	0.933	70.2	28.0-120	
2,4-Dinitrotoluene	0.666	0.559	83.9	45.0-120	
2,6-Dinitrotoluene	0.666	0.536	80.5	42.0-120	
Fluoranthene	0.666	0.505	75.8	44.0-120	
Fluorene	0.666	0.450	67.6	41.0-120	
Hexachlorobenzene	0.666	0.464	69.7	39.0-120	
Hexachloro-1,3-butadiene	0.666	0.407	61.1	15.0-120	
Hexachlorocyclopentadiene	0.666	0.370	55.6	15.0-120	
Hexachloroethane	0.666	0.425	63.8	17.0-120	
Indeno(1,2,3-cd)pyrene	0.666	0.476	71.5	45.0-120	
Isophorone	0.666	0.420	63.1	23.0-120	
Naphthalene	0.666	0.391	58.7	18.0-120	
Nitrobenzene	0.666	0.435	65.3	17.0-120	
n-Nitrosodimethylamine	0.666	0.438	65.8	10.0-125	
n-Nitrosodiphenylamine	0.666	0.471	70.7	40.0-120	
n-Nitrosodi-n-propylamine	0.666	0.487	73.1	26.0-120	
Phenanthrene	0.666	0.456	68.5	42.0-120	
Benzylbutyl phthalate	0.666	0.637	95.6	40.0-120	
Bis(2-ethylhexyl)phthalate	0.666	0.551	82.7	41.0-120	
Di-n-butyl phthalate	0.666	0.551	82.7	43.0-120	
Diethyl phthalate	0.666	0.512	76.9	43.0-120	
Dimethyl phthalate	0.666	0.475	71.3	43.0-120	
Di-n-octyl phthalate	0.666	0.638	95.8	40.0-120	
Pyrene	0.666	0.499	74.9	41.0-120	
Pyridine	0.666	0.276	41.4	10.0-120	
1,2,4-Trichlorobenzene	0.666	0.394	59.2	17.0-120	
4-Chloro-3-methylphenol	0.666	0.528	79.3	28.0-120	

Laboratory Control Sample (LCS)

(LCS) R3477330-1 11/28/19 01:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Chlorophenol	0.666	0.469	70.4	28.0-120	
2-Methylphenol	0.666	0.527	79.1	35.0-120	
3&4-Methyl Phenol	0.666	0.559	83.9	42.0-120	
2,4-Dichlorophenol	0.666	0.455	68.3	25.0-120	
2,4-Dimethylphenol	0.666	0.452	67.9	15.0-120	
4,6-Dinitro-2-methylphenol	0.666	0.388	58.3	16.0-120	
2,4-Dinitrophenol	0.666	0.261	39.2	10.0-120	
2-Nitrophenol	0.666	0.450	67.6	20.0-120	
4-Nitrophenol	0.666	0.478	71.8	27.0-120	
Pentachlorophenol	0.666	0.428	64.3	29.0-120	
Phenol	0.666	0.475	71.3	28.0-120	
2,4,5-Trichlorophenol	0.666	0.535	80.3	38.0-120	
2,4,6-Trichlorophenol	0.666	0.476	71.5	37.0-120	
(S) Nitrobenzene-d5			*64.9*	*10.0-122*	
(S) 2-Fluorobiphenyl			*67.0*	*15.0-120*	
(S) p-Terphenyl-d14			*77.2*	*10.0-120*	
(S) Phenol-d5			*80.6*	*10.0-120*	
(S) 2-Fluorophenol			*85.7*	*12.0-120*	
(S) 2,4,6-Tribromophenol			*89.2*	*10.0-127*	

L1165576-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165576-11 11/28/19 03:35 • (MS) R3477330-3 11/28/19 03:54 • (MSD) R3477330-4 11/28/19 04:13

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 %
Acenaphthene	0.775	U	0.283	0.360	36.5	46.4	1	18.0-120			23.9	32
Acenaphthylene	0.775	U	0.292	0.371	37.7	47.9	1	25.0-120			23.9	32
Anthracene	0.775	U	0.321	0.404	41.4	52.1	1	22.0-120			22.8	29
Benzidine	1.55	U	ND	ND	0.000	0.000	1	10.0-120	J6	J6	0.000	40
Benzo(a)anthracene	0.775	U	0.348	0.432	44.9	55.7	1	25.0-120			21.5	29
Benzo(b)fluoranthene	0.775	U	0.326	0.405	42.0	52.3	1	19.0-122			21.7	31
Benzo(k)fluoranthene	0.775	U	0.291	0.390	37.5	50.3	1	23.0-120			29.1	30
Benzo(g,h,i)perylene	0.775	U	0.304	0.394	39.2	50.8	1	10.0-120			25.7	33
Benzo(a)pyrene	0.775	U	0.320	0.406	41.3	52.4	1	24.0-120			23.7	30
Bis(2-chlorethoxy)methane	0.775	U	0.562	0.588	72.5	75.8	1	10.0-120			4.45	34
Bis(2-chloroethyl)ether	0.775	U	0.304	0.298	39.2	38.4	1	10.0-120			1.93	40
2,2-Oxybis(1-Chloropropane)	0.775	U	0.242	0.278	31.2	35.9	1	10.0-120			13.9	40
4-Bromophenyl-phenylether	0.775	U	0.324	0.418	41.7	53.9	1	27.0-120			25.4	30
2-Chloronaphthalene	0.775	U	0.272	0.336	35.1	43.4	1	20.0-120			21.0	32

L1165576-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165576-11 11/28/19 03:35 • (MS) R3477330-3 11/28/19 03:54 • (MSD) R3477330-4 11/28/19 04:13

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
4-Chlorophenyl-phenylether	0.775	U	0.305	0.398	39.3	51.4	1	24.0-120			26.5	29
Chrysene	0.775	U	0.300	0.377	38.7	48.6	1	21.0-120			22.7	29
Dibenz(a,h)anthracene	0.775	U	0.306	0.396	39.5	51.1	1	10.0-120			25.5	32
1,2-Dichlorobenzene	0.775	U	0.205	0.247	26.4	31.8	1	10.0-120			18.6	38
1,3-Dichlorobenzene	0.775	U	0.186	0.228	24.0	29.4	1	10.0-120			20.2	40
1,4-Dichlorobenzene	0.775	U	0.184	0.226	23.7	29.1	1	10.0-120			20.5	39
3,3-Dichlorobenzidine	1.55	U	ND	ND	0.000	0.000	1	10.0-120	J6	J6	0.000	34
2,4-Dinitrotoluene	0.775	U	0.332	0.423	42.8	54.5	1	30.0-120			24.1	31
2,6-Dinitrotoluene	0.775	U	0.336	0.424	43.4	54.7	1	25.0-120			23.0	31
Fluoranthene	0.775	U	0.335	0.420	43.2	54.2	1	18.0-126			22.5	32
Fluorene	0.775	U	0.297	0.382	38.3	49.2	1	25.0-120			25.0	30
Hexachlorobenzene	0.775	U	0.318	0.438	41.0	56.5	1	27.0-120		J3	31.7	28
Hexachloro-1,3-butadiene	0.775	U	0.233	0.292	30.0	37.7	1	10.0-120			22.6	38
Hexachlorocyclopentadiene	0.775	U	0.0803	0.107	10.4	13.8	1	10.0-120			28.7	40
Hexachloroethane	0.775	U	0.206	0.242	26.6	31.2	1	10.0-120			16.1	40
Indeno(1,2,3-cd)pyrene	0.775	U	0.326	0.428	42.0	55.3	1	10.0-120			27.2	32
Isophorone	0.775	U	0.487	0.515	62.8	66.4	1	13.0-120			5.58	34
Naphthalene	0.775	U	0.217	0.258	27.9	33.3	1	10.0-120			17.6	35
Nitrobenzene	0.775	U	0.321	0.348	41.4	44.9	1	10.0-120			8.00	36
n-Nitrosodimethylamine	0.775	U	0.255	0.238	32.9	30.6	1	10.0-127			7.09	40
n-Nitrosodiphenylamine	0.775	U	0.331	0.416	42.6	53.6	1	17.0-120			22.8	29
n-Nitrosodi-n-propylamine	0.775	U	0.316	0.304	40.7	39.2	1	10.0-120			3.76	37
Phenanthrene	0.775	0.00959	0.316	0.397	39.5	50.0	1	17.0-120			22.9	31
Benzylbutyl phthalate	0.775	U	0.626	0.682	80.8	88.0	1	23.0-120			8.54	30
Bis(2-ethylhexyl)phthalate	0.775	U	0.640	0.820	82.6	106	1	17.0-126			24.6	30
Di-n-butyl phthalate	0.775	U	0.515	0.560	66.4	72.2	1	30.0-120			8.45	29
Diethyl phthalate	0.775	U	0.331	0.409	42.6	52.7	1	26.0-120			21.1	28
Dimethyl phthalate	0.775	U	0.305	0.378	39.3	48.8	1	25.0-120			21.5	29
Di-n-octyl phthalate	0.775	0.0392	0.427	0.560	50.0	67.2	1	21.0-123			26.9	29
Pyrene	0.775	U	0.284	0.401	36.6	51.7	1	16.0-121		J3	34.0	32
Pyridine	0.775	U	0.225	0.233	29.0	30.0	1	10.0-120			3.56	40
1,2,4-Trichlorobenzene	0.775	U	0.208	0.262	26.9	33.8	1	12.0-120			22.8	37
4-Chloro-3-methylphenol	0.775	U	0.421	0.527	54.4	68.0	1	15.0-120			22.3	30
2-Chlorophenol	0.775	U	0.286	0.306	36.9	39.5	1	15.0-120			6.68	37
2-Methylphenol	0.775	U	0.314	0.345	40.5	44.4	1	11.0-120			9.19	40
3&4-Methyl Phenol	0.775	0.0254	0.385	0.418	46.4	50.6	1	12.0-123			8.12	38
2,4-Dichlorophenol	0.775	U	0.299	0.392	38.6	50.6	1	20.0-120			26.9	31
2,4-Dimethylphenol	0.775	U	0.309	0.374	39.8	48.2	1	10.0-120			19.1	33
4,6-Dinitro-2-methylphenol	0.775	U	0.320	0.389	41.3	50.2	1	10.0-120			19.4	39

L1165576-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165576-11 11/28/19 03:35 • (MS) R3477330-3 11/28/19 03:54 • (MSD) R3477330-4 11/28/19 04:13

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 %
2,4-Dinitrophenol	0.775	U	0.357	0.431	46.1	55.6	1	10.0-121			18.6	40
2-Nitrophenol	0.775	U	0.286	0.333	36.9	42.9	1	12.0-120			15.0	39
4-Nitrophenol	0.775	U	0.343	0.410	44.3	52.9	1	10.0-137			17.6	32
Pentachlorophenol	0.775	U	0.418	0.560	53.9	72.2	1	10.0-160			29.0	31
Phenol	0.775	U	0.330	0.345	42.5	44.4	1	12.0-120			4.49	38
2,4,5-Trichlorophenol	0.775	U	0.382	0.504	49.2	65.0	1	20.0-120			27.6	30
2,4,6-Trichlorophenol	0.775	U	0.346	0.444	44.6	57.2	1	19.0-120			24.8	32
(S) Nitrobenzene-d5					*31.8*	*34.8*		*10.0-122*				
(S) 2-Fluorobiphenyl					*33.0*	*42.0*		*15.0-120*				
(S) p-Terphenyl-d14					*39.6*	*55.6*		*10.0-120*				
(S) Phenol-d5					*44.6*	*47.0*		*10.0-120*				
(S) 2-Fluorophenol					*44.0*	*44.3*		*12.0-120*				
(S) 2,4,6-Tribromophenol					*54.7*	*72.5*		*10.0-127*				

GLOSSARY OF TERMS

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

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

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

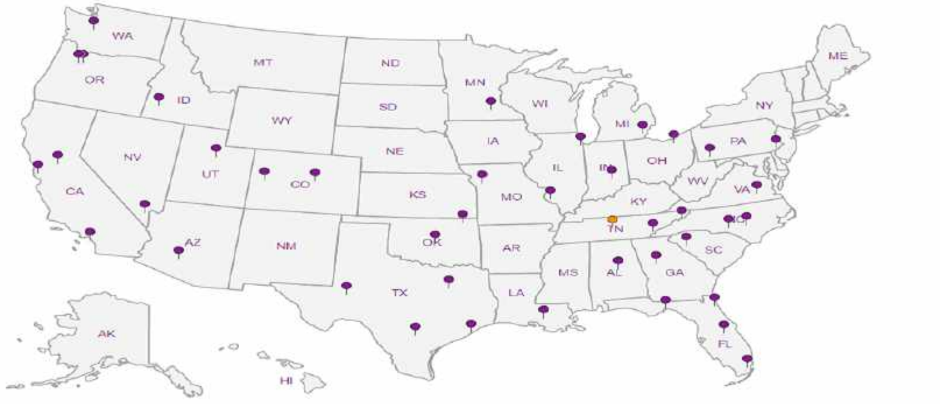
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 1 of 18

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:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

SDG # ~~L1161424~~ AV 11/27/19
D212
L1165576

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB: 11/13/19 MWB

Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-15 (0-1)	Grab	SS	0-1	11/14/19	1145	~~2~~ 2	X	X	X		X							~~01~~ -01
SB-15 (1-2)	Grab	SS	1-2	11/14/19	1146	3											Hold	
SB-15 (2-3)	Grab	SS	2-3	11/14/19	1147	2	X	X	X		X							~~02~~ -02
SB-15 (3-4)	Grab	SS	3-4	11/14/19	1148	3											Hold	
SB-15 (6-8)	Grab	SS	6-8	11/14/19	1149	3											Hold	
SB-15 (10-12)	Grab	SS	10-12	11/14/19	1150	2	X	X	X		X							~~03~~ -03
SB-15A (0-1)	Grab	SS	0-1	11/14/19	1125	3											Hold	
SB-15A (1-2)	Grab	SS	1-2	11/14/19	1126	3											Hold	
SB-15A (2-3)	Grab	SS	2-3	11/14/19	1127	3											Hold	
SB-15A (3-4)	Grab	SS	3-4	11/14/19	1128	3											Hold	

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

Remarks: 4510 1662 0396/0411/0536/0514/0488/0400/0503/0422/0444/0433/0477/0525/0466/0455

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
___ UPS X FedEx ___ Courier ________

Tracking # 4686 6470 7042

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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] No 5 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp AR °C 0.2-1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-131

Condition: NCI / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

Collected by (signature):

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

Immediately Packed on Ice N ___ Y ✓

Chain of Custody Page 5 of 18

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 # L1161924

Table # L1165576

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-17F (18-20)	Grab	SS	18-20	11/14/19	1545	3	X	X	X		X		~~-07~~
SB-17F (24-25)	Grab	SS	24-25	11/14/19	1546	3	X	X	X		X		~~-08~~ -04
SB-18 (0-1)	Grab	SS	0-1	11/14/19	0755	3	X	X	X		X		~~-09~~
SB-18 (1-2)	Grab	SS	1-2	11/14/19	0756	3						Held	
SB-18 (2-3)	Grab	SS	2-3	11/14/19	0757	3	X	X	X		X		~~-10~~
SB-18 (3-4)	Grab	SS	3-4	11/14/19	0758	3						Held	
SB-18 (4-6)	Grab	SS	4-6	11/14/19	0759	3	X	X	X		X		~~-11~~
SB-18 (6-8)	Grab	SS	6-8	11/14/19	0800	3						Held	
SB-18 (9-11)	Grab	SS	9-11	11/14/19	0801	3						Held	
SB-18 (12-14)	Grab	SS	12-14	11/14/19	0802	3						Held	

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] No 5 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 11-15	Time: 1700	Received by: (Signature)	Temp: [illegible] °C 0.2-.1=0.1	Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

11-127

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 7 of 18

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: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

SDG # ~~L1161924~~

Table # L1165576

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Priority**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-20(2-3)	Grab	SS	2-3	11/14/19	0935	3	X	X	X		X							~~16~~ -05
SB-20 (3-4)	Grab	SS	3-4	11/14/19	0936	3											Hold	
SB-20 (4-6)	Grab	SS	4-6	11/14/19	0937	3	X	X	X		X							~~16~~ -06
SB-20 (6-8)	Grab	SS	6-8	11/14/19	0938	3											Hold	
SB-20 (10-11)	Grab	SS	10-11	11/14/19	0939	3	X	X	X		X							~~17~~
SB-20(12-14)	Grab	SS	12-14	11/14/19	0940	3											Hold	
SB-21 (0-1)	Grab	SS	0-1	11/14/19	1005	3											Hold	
SB-21 (1-2)	Grab	SS	1-2	11/14/19	1006	3											Hold	
SB-21 (2-3)	Grab	SS	2-3	11/14/19	1007	3	X	X	X		X							~~18~~ -07
SB-21 (3-4)	Grab	SS	3-4	11/14/19	1008	3											Hold	

* 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 X 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: 11/15/19	Time: 1258	Received by: (Signature)
Relinquished by : (Signature)	Date: 11/15	Time: 1700	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: [✓ Yes] / No 5
[✓ HCL] / MeoH
TBR

Temp: Amb °C 0.2-1=0.1 Bottles Received: 223

Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold: 11-125

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #
8657

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

Chain of Custody Page 17 of 18

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 # L1161924

Table # L1165576

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739846**
PM: 134 - Mark W. Beasley
PB:

Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-29 (8-9)	Grab	SS	8-9	11/14/19	1046	3											Hold	
SB-29 (9-10)	Grab	SS	9-10	11/14/19	1047	3	X	X	X		X							~~61~~
SB-29 (10-11)	Grab	SS	10-11	11/14/19	1048	3											Hold	
SB-29 (11-12)	Grab	SS	11-12	11/14/19	1049	3	X	X	X		X							~~62~~
SB-29 (14-15)	Grab	SS	14-15	11/14/19	1050	3											Hold	
SB-29 (16-17)	Grab	SS	16-17	11/14/19	1051	3	X	X	X		X							~~63~~
SB-29 (17-18)	Grab	SS	17-18	11/14/19	1052	3											Hold	
SB-29 (19-20)	Grab	SS	19-20	11/14/19	1053	3	X	X	X		X							~~64~~
SB-30 (0-0.5)	Grab	SS	0-0.5	11/14/19	1335	4	X	X	X	X	X							~~65~~ -08
SB-30 (0.5-1)	Grab	SS	0.5-1	11/14/19	1336	4	X	X	X	X	X							~~66~~

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11-15	Time: 720	Received by: (Signature)	Temp: Ar °C 0.2-.1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N___ Y X

Analysis / Container / Preservative

Chain of Custody Page 5 of 10

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 # [illegible]

Table # L1165576

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: 134 - Mark W. Beasley
PB:
Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-16 (2-3)	Grab	SS	2-3	11/13/19	1232	3	X	X	X		X		~~-09~~ -09
SB-16 (3-4)	Grab	SS	3-4	11/13/19	1233	3						Hold	
SB-16 (6-8)	Grab	SS	6-8	11/13/19	1234	3						Hold	
SB-16 (10-12)	Grab	SS	10-12	11/13/19	1235	3	X	X	X		X		-10
SB-16A (0-1)	Grab	SS	0-1	11/13/19	1110	3						Hold	
SB-16A (1-2)	Grab	SS	1-2	11/13/19	1111	3						Hold	
SB-16A (2-3)	Grab	SS	2-3	11/13/19	1112	3						Hold	
SB-16A (3-4)	Grab	SS	3-4	11/13/19	1113	5						Hold	
SB-16A (6-8)	Grab	SS	6-8	11/13/19	1114	3						Hold	
SB-16A (10-12)	Grab	SS	10-12	11/13/19	1115	3						Hold	

* 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: 11/14/19	Time: 1400	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11/14	Time: 0700	Received by: (Signature)	Temp: Am °C alt,2=3 Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Harley	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 8 of 10

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: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

SDG# ~~1111400~~

Table # L1165576

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P739844**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Standard**

Collected by (print): Lian Crump

Collected by (signature):

Immediately Packed on Ice N ____ Y ____

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr				Remarks	Sample # (lab only)
SB-17 (2-3)	Grab	SS	2-3	11/13/19	1522	3									Hold	
SB-17 (3-4)	Grab	SS	3-4	11/13/19	1523	3									Hold	
SB-17 (6-8)	Grab	SS	6-8	11/13/19	1524	3	X	X	X		X					-12-
SB-17 (14-15)	Grab	SS	14-15	11/13/19	1525	3	X	X	X		X					-13-
SB-17A (0-1)	Grab	SS	0-1	11/13/19	1457	3									Hold	
SB-17A (1-2)	Grab	SS	1-2	11/13/19	1458	3									Hold	
SB-17A (2-3)	Grab	SS	2-3	11/13/19	1459	3									Hold	
SB-17A (3-4)	Grab	SS	3-4	11/13/19	1500	3									Hold	
SB-17A (7-8)	Grab	SS	7-8	11/13/19	1501	3	X	X	X		X					-14-
SB-17A (12-13)	Grab	SS	12-13	11/13/19	1502	3	X	X	X		X					-15-

-10

* 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: 11/14/19	Time:	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No S [✓ HCl] / MeoH TBR	
Relinquished by : (Signature)	Date: 11-14	Time: 1700	Received by: (Signature)	Temp: 1.5 °C 0.1+1.4=1.5	Bottles Received: 286
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/19	Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 9 of 10

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 # H617700

Table # L1155 26

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-17C(0-1)	Grab	SS	0-1	11/13/19	1400	3											Hold	
SB-17C(1-2)	Grab	SS	1-2	11/13/19	1401	3											Hold	
SB-17C(2-3)	Grab	SS	2-3	11/13/19	1402	3	X	X	X		X							16
SB-17C(6-7)	Grab	SS	6-7	11/13/19	1403	3											Hold	
SB-17C(9-10)	Grab	SS	9-10	11/13/19	1404	3	X	X	X		X							~~17~~ -11
SB-17C(14-15)	Grab	SS	14-15	11/13/19	1405	3	X	X	X		X							~~18~~ +12
SB-17D(0-1)	Grab	SS	0-1	11/13/19	1420	3											Hold	
SB-17D(1-2)	Grab	SS	1-2	11/13/19	1421	3											Hold	
SB-17D(2-3)	Grab	SS	2-3	11/13/19	1422	3											Hold	
SB-17D(3-4)	Grab	SS	3-4	11/13/19	1423	3											Hold	

* 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: 11/14/19	Time:	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR S 8
Relinquished by : (Signature)	Date: 11-14	Time: 1720	Received by: (Signature)	Temp: [illegible] °C 0.1+.2=.3 Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

From: Mark Beasley
Sent: Wednesday, November 27, 2019 4:42 PM
To: Project Service; Sample Storage; Extractions
Cc: Chris Johnson
Subject: L1161400 & L1161924 *TGRESHTX* relog ****Samples will go out of hold tonight/tomorrow****

Importance: High

Relog the following:

L1161924-01	SV8270, transfer TS
L1161924-02	ASICP, transfer TS
L1161924-03	ASICP, transfer TS
L1161924-08	CRICP (transfer results), CR3, CR6, transfer TS
L1161924-15	SV8270, transfer TS
L1161924-16	SV8270, transfer TS
L1161924-18	CRICP (transfer results), CR3, CR6, NWTPHGX, SV8270, transfer TS
L1161924-65	CRICP (transfer results), CR3, CR6, transfer TS

L1161400-09	NWTPHGX, SV8270, transfer TS
L1161400-15	CRICP (transfer results), CR3, CR6, transfer TS
L1161400-17	SV8270, transfer TS
L1161400-18	SV8270, transfer TS

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Wednesday, November 27, 2019 4:11 PM
To: Mark Beasley
Subject: Request Additional Federal Way Analysis and/or Extraction
Importance: High

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please run the following analysis under an expedited 2 day TAT. **Please forward back table below with pricing filled in so that a PO can be submitted.**

TGE Sample ID	Lab Sample ID	Analysis	Price (2 day TAT)
SB15 (0 – 1)	L1161924-01	SVOCs	262.50
SB15 (0 – 1)	L1161924-01	Total solids	7.50
SB15 (2-3)	L1161924-02	Total solids	7.50
SB15 (2-3)	L1161924-02	arsenic	??

SB15 (10-12)	L1161924-03	Total solids	7.50
SB15 (10-12)	L1161924-03	arsenic	??
SB15A (0-1)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	Extract only
SB15A (2-3)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB15B (0-1)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB15B (2-3)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB15C (0-1)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB15C (2-3)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB15D (0-1)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB15D (2-3)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB16D(2-3)	L1161400-09	Total solids	7.50
	L1161400-09	GRO	67.50
	Not Assigned	SVOCs	262.50
SB16D(3-4)	Not Assigned	Total solids	7.50
	Not Assigned	GRO	67.50
	Not Assigned	SVOCs	262.50
SB17(1-2)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
SB17(2-3)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
	Not assigned	Total Solids	7.50
SB17(3-4)	Not assigned	Total Solids	7.50
	Not assigned	NW ORO	67.50

	Not assigned	SVOCs	262.50
SB17A (12-13)	L1161400-15	Total solids	7.50
	L1161400-15	CR+3 and CR+6	??
SB17B(1-2)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
SB17B(2-3)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
SB17B(3-4)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
SB17C (9-10)	L1161400-17	Total solids	7.50
	L1161400-17	SVOCs	262.50
SB17C(14-15)	L1161400-18	Total solids	7.50
	L1161400-18	SVOCs	262.50
SB17D(0-1)	Not assigned	Total solids	7.50
	Not assigned	arsenic	??
SB17D(1-2)	Not assigned	Total solids	7.50
	Not assigned	arsenic	??
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
SB17D(2-3)	Not assigned	Total solids	7.50
SB17D(2-3)	Not assigned	arsenic	??
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
SB17D(3-4)	Not assigned	Total solids	7.50
SB17D(3-4)	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
	Not assigned	NW GRO	??
SB17F(6-8)	Not assigned	Total solids	7.50
SB17F(6-8)	Not assigned	GRO	??
	Not assigned	SVOCs	262.50
SB17F (24-25)	L1161924-08	Total solids	7.50
SB17F (24-25)	L1161924-08	CR+3 and CR+6	??
SB18(2-3)	Not assigned	Total solids	7.50
SB18(2-3)	Not assigned	GRO	67.50
	Not assigned	SVOCs	262.50
SB18(4-6)	Not assigned	Total solids	7.50
SB18(4-6)	Not assigned	GRO	67.50
	Not assigned	SVOCs	262.50
SB20 (2-3)	L1161924-15	Total solids	7.50
SB20 (2-3)	L1161924-15	SVOCs	262.50
SB20(4-6)	L1161924-16	Total solids	7.50
SB20(4-6)	L1161924-16	SVOCs	262.50
SB21(2-3)	L1161924-18	Total solids	7.50
SB21(2-3)	L1161924-18	GRO	67.50
	L1161924-18	SVOCs	262.50
	L1161924-18	CR+3 and CR+6	??

SB21(4-6)	Not assigned	Total solids	7.50
SB21(4-6)	Not assigned	GRO	67.50
	Not assigned	SVOCs	262.50
SB22(2-3)	Not assigned	Total solids	7.50
SB22(2-3)	Not assigned	GRO	67.50
	Not assigned	SVOCs	262.50
SB22(4-6)	Not assigned	Total solids	7.50
SB22(4-6)	Not assigned	GRO	67.50
	Not assigned	SVOCs	262.50
SB23(6-8)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
SB23(9-11))	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
SB23(12-14)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
SB25(2-3)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB25(9-10)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB25(14-15)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB25(19-20)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB26(14-15)	Not assigned	Total solids	7.50
	Not assigned	lead	??
SB27(2-3)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB27(4-6)	Not assigned	Total solids	7.50
	Not assigned	Lead	??

SB27(9-10)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB27(14-15)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB27(19-20)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB30(0-0.5)	L1161924-65	CR+3 and CR+6	??
SB30(3-3.5)	Not assigned	Total solids	7.50
	Not assigned	dieldrin	??
	Not assigned	Arsenic	??
	Not assigned	Lead	??
	Not assigned	Total chromium	??
SB30(4.5-5)	Not assigned	Total solids	7.50
	Not assigned	dieldrin	??
	Not assigned	Arsenic	??
	Not assigned	Lead	??
	Not assigned	Total chromium	??
SB31(3-3.5)	Not assigned	Total solids	7.50
	Not assigned	dieldrin	??
	Not assigned	Arsenic	??
SB31(4-4.5)	Not assigned	Total solids	7.50
	Not assigned	dieldrin	??
	Not assigned	Arsenic	??

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGERESOURCES,INC.

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

WBENC & SBA Certified Woman Owned Small Business
DUNS# 929574051

CAGE Code 08PQ6

certified
WBENC
WOMEN'S BUSINESS ENTERPRISE

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Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

March 11, 2020

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

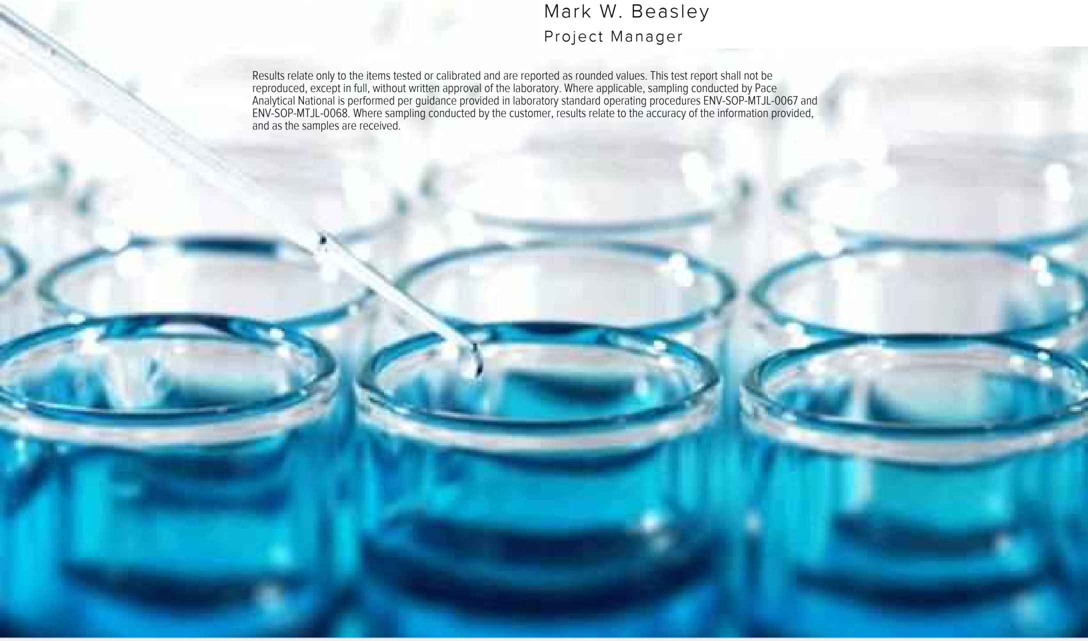
TGE Resources

Sample Delivery Group:	L1165628
Samples Received:	11/15/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital

Report To:
Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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1 Cp
2 Tc
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5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB-15A (0-1) L1165628-01 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 11:25	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	RA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	50	11/27/19 22:42	11/29/19 13:38	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	10	11/28/19 00:53	11/28/19 08:03	AO	Mt. Juliet, TN

SB-15A (2-3) L1165628-02 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 11:27	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	RA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	10	11/27/19 22:42	11/29/19 17:15	JDG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	5	11/27/19 22:42	11/29/19 12:47	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	1	11/28/19 00:53	11/28/19 03:16	AO	Mt. Juliet, TN

SB-15B (0-1) L1165628-03 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:10	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	RA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	10	11/27/19 22:42	11/29/19 16:24	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	10	11/28/19 00:53	11/28/19 08:22	AO	Mt. Juliet, TN

SB-15B (2-3) L1165628-04 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:12	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	RA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	1	11/27/19 22:42	11/29/19 11:31	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	1	11/28/19 00:53	11/28/19 01:59	AO	Mt. Juliet, TN

SB-15C (0-1) L1165628-05 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 14:00	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	RA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	50	11/27/19 22:42	11/29/19 14:03	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	10	11/28/19 00:53	11/28/19 07:24	AO	Mt. Juliet, TN

SB-15C (2-3) L1165628-06 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 14:02	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	RA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	50	11/27/19 22:42	12/02/19 16:08	KME	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388433	20	11/28/19 01:13	11/28/19 07:04	AO	Mt. Juliet, TN

SB-15D (0-1) L1165628-07 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:20	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	RA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	50	11/27/19 22:42	11/29/19 13:13	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388433	10	11/28/19 01:13	11/28/19 06:06	AO	Mt. Juliet, TN

SB-15D (2-3) L1165628-08 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:22	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389702	1	12/03/19 11:22	12/03/19 11:32	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	10	11/27/19 22:42	11/29/19 15:33	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388433	5	11/28/19 01:13	11/28/19 04:29	AO	Mt. Juliet, TN

SB-16D (3-4) L1165628-09 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 13:26	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1388889	1	11/29/19 21:23	11/29/19 21:37	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1388494	25	11/13/19 13:26	11/27/19 23:25	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	1	11/28/19 00:53	11/28/19 04:32	AO	Mt. Juliet, TN

SB-17 (1-2) L1165628-10 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 15:21	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1388889	1	11/29/19 21:23	11/29/19 21:37	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	5	11/27/19 22:42	11/29/19 14:16	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	2	11/28/19 00:53	11/28/19 06:08	AO	Mt. Juliet, TN

SB-17 (2-3) L1165628-11 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 15:22	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1388889	1	11/29/19 21:23	11/29/19 21:37	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	1	11/27/19 22:42	11/29/19 17:02	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	1	11/28/19 00:53	11/28/19 04:51	AO	Mt. Juliet, TN

SB-17 (3-4) L1165628-12 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 15:23	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1388889	1	11/29/19 21:23	11/29/19 21:37	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	50	11/27/19 22:42	12/02/19 15:55	KME	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	10	11/28/19 00:53	11/28/19 07:43	AO	Mt. Juliet, TN

SB-17B (1-2) L1165628-13 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 14:31	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389702	1	12/03/19 11:22	12/03/19 11:32	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	5	11/27/19 22:42	11/29/19 13:25	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388433	1	11/28/19 01:13	11/28/19 02:52	AO	Mt. Juliet, TN

SB-17B (2-3) L1165628-14 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 14:32	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389702	1	12/03/19 11:22	12/03/19 11:32	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	1	11/27/19 22:42	11/29/19 15:58	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388433	2	11/28/19 01:13	11/28/19 03:11	AO	Mt. Juliet, TN

SB-17B (3-4) L1165628-15 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 14:33	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389702	1	12/03/19 11:22	12/03/19 11:32	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	1	11/27/19 22:42	11/29/19 12:09	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388433	5	11/28/19 01:13	11/28/19 04:09	AO	Mt. Juliet, TN

SB-17F (6-8) L1165628-16 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 15:48	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389702	1	12/03/19 11:22	12/03/19 11:32	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1388494	25	11/14/19 15:48	11/28/19 00:27	BMB	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388433	20	11/28/19 01:13	11/28/19 06:44	AO	Mt. Juliet, TN

SB-17D (0-1) L1165628-17 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 14:20	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1388889	1	11/29/19 21:23	11/29/19 21:37	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 21:50	CCE	Mt. Juliet, TN

SB-17D (1-2) L1165628-18 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 14:21	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1388889	1	11/29/19 21:23	11/29/19 21:37	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 21:53	CCE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	10	11/27/19 22:42	12/02/19 18:15	KME	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	1	11/28/19 00:53	11/28/19 05:11	AO	Mt. Juliet, TN

SB-17D (2-3) L1165628-19 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 14:22	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1388891	1	11/29/19 22:23	11/29/19 22:47	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 21:55	CCE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	1	11/27/19 22:42	11/29/19 15:46	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	1	11/28/19 00:53	11/28/19 02:38	AO	Mt. Juliet, TN

SB-17D (3-4) L1165628-20 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 14:23	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1388891	1	11/29/19 22:23	11/29/19 22:47	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1388494	29.8	11/13/19 14:23	11/27/19 23:46	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	1	11/27/19 22:42	11/29/19 12:34	FM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388431	1	11/28/19 00:53	11/28/19 02:57	AO	Mt. Juliet, TN

SB-18 (2-3) L1165628-21 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 07:57	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	JWW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1388494	25	11/14/19 07:57	11/28/19 00:48	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388517	10	11/27/19 23:24	12/01/19 14:04	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388433	10	11/28/19 01:13	11/28/19 05:08	AO	Mt. Juliet, TN

SB-18 (4-6) L1165628-22 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 07:59	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	JWW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1388494	25	11/14/19 07:59	11/28/19 01:08	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388517	10	11/27/19 23:24	12/01/19 13:37	JDG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388433	20	11/28/19 01:13	11/28/19 06:25	AO	Mt. Juliet, TN

SB-21 (4-6) L1165628-23 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 10:09	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389702	1	12/03/19 11:22	12/03/19 11:32	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1388494	25	11/14/19 10:09	11/28/19 01:29	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1389942	20	12/03/19 07:35	12/04/19 01:36	KME	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388433	10	11/28/19 01:13	11/28/19 05:27	AO	Mt. Juliet, TN

SB-22 (2-3) L1165628-24 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 09:52	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389702	1	12/03/19 11:22	12/03/19 11:32	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1388494	35	11/14/19 09:52	11/28/19 01:49	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388517	10	11/27/19 23:24	11/30/19 05:32	SHG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388433	10	11/28/19 01:13	11/28/19 04:48	AO	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 09:54	11/16/19 09:00

SB-22 (4-6) L1165628-25 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389702	1	12/03/19 11:22	12/03/19 11:32	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1388494	25	11/14/19 09:54	11/28/19 02:10	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388517	10	11/27/19 23:24	11/30/19 05:45	SHG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1388433	10	11/28/19 01:13	11/28/19 05:46	AO	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 11:20	11/16/19 09:00

SB-23 (6-8) L1165628-26 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389702	1	12/03/19 11:22	12/03/19 11:32	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	1	11/27/19 22:42	11/29/19 16:37	FM	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 11:21	11/16/19 09:00

SB-23 (9-11) L1165628-27 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389702	1	12/03/19 11:22	12/03/19 11:32	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	10	11/27/19 22:42	11/29/19 16:11	FM	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 11:22	11/16/19 09:00

SB-23 (12-14) L1165628-28 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389703	1	12/03/19 11:08	12/03/19 11:19	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1388434	1	11/27/19 22:42	11/29/19 16:49	FM	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 09:54	11/16/19 09:00

SB-25 (2-3) L1165628-29 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389703	1	12/03/19 11:08	12/03/19 11:19	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 21:58	CCE	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 09:59	11/16/19 09:00

SB-25 (9-10) L1165628-30 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389703	1	12/03/19 11:08	12/03/19 11:19	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 22:00	CCE	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 10:02	11/16/19 09:00

SB-25 (14-15) L1165628-31 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389703	1	12/03/19 11:08	12/03/19 11:19	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 22:03	CCE	Mt. Juliet, TN

SB-25 (19-20) L1165628-32 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 10:05	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384986	1	11/22/19 15:27	11/22/19 15:46	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 22:05	CCE	Mt. Juliet, TN

SB-26 (14-15) L1165628-33 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 09:27	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389703	1	12/03/19 11:08	12/03/19 11:19	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 22:08	CCE	Mt. Juliet, TN

SB-27 (2-3) L1165628-34 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 08:42	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389703	1	12/03/19 11:08	12/03/19 11:19	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 21:25	CCE	Mt. Juliet, TN

SB-27 (4-6) L1165628-35 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 08:44	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389703	1	12/03/19 11:08	12/03/19 11:19	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 22:11	CCE	Mt. Juliet, TN

SB-27 (9-10) L1165628-36 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 08:47	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389703	1	12/03/19 11:08	12/03/19 11:19	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 22:18	CCE	Mt. Juliet, TN

SB-27 (14-15) L1165628-37 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 08:50	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389703	1	12/03/19 11:08	12/03/19 11:19	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 22:21	CCE	Mt. Juliet, TN

SB-27 (19-20) L1165628-38 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 08:53	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384990	1	11/22/19 14:50	11/22/19 15:04	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 22:23	CCE	Mt. Juliet, TN

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

SB-30 (3-3.5) L1165628-39 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:39	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389703	1	12/03/19 11:08	12/03/19 11:19	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 22:26	CCE	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1388462	1	11/28/19 01:18	12/02/19 16:12	LEL	Mt. Juliet, TN

SB-30 (4.5-5) L1165628-40 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:40	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389704	1	12/03/19 10:45	12/03/19 11:07	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 22:29	CCE	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1388462	1	11/28/19 01:18	12/01/19 15:39	LEL	Mt. Juliet, TN

L L1165628-41 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 14:34	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389704	1	12/03/19 10:45	12/03/19 11:07	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 22:31	JDG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1388462	1	11/28/19 01:18	12/01/19 15:54	LEL	Mt. Juliet, TN

SB-31 (4-4.5) L1165628-42 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 14:35	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389704	1	12/03/19 10:45	12/03/19 11:07	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1388691	1	11/29/19 10:52	12/01/19 22:34	JDG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1388462	1	11/28/19 01:18	12/02/19 13:05	LEL	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.

Mark W. Beasley
Project Manager

Report Revision History

Level II Report - Version 1: 12/04/19 15:35

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1165628-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41 and 42
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384252, WG1384990, WG1384986, WG1388433, WG1388494, WG1388431, WG1388434, WG1388517, WG1388889, WG1388891, WG1388691, WG1388462, WG1389942, WG1389700, WG1389704, WG1389703 and WG1389702

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?		X			3
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1165628-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41 and 42
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384252, WG1384990, WG1384986, WG1388433, WG1388494, WG1388431, WG1388434, WG1388517, WG1388889, WG1388891, WG1388691, WG1388462, WG1389942, WG1389700, WG1389704, WG1389703 and WG1389702

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1165628-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41 and 42
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384252, WG1384990, WG1384986, WG1388433, WG1388494, WG1388431, WG1388434, WG1388517, WG1388889, WG1388891, WG1388691, WG1388462, WG1389942, WG1389700, WG1389704, WG1389703 and WG1389702

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1165628-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41 and 42
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384252, WG1384990, WG1384986, WG1388433, WG1388494, WG1388431, WG1388434, WG1388517, WG1388889, WG1388891, WG1388691, WG1388462, WG1389942, WG1389700, WG1389704, WG1389703 and WG1389702

ER #[1]	Description
1	NWTPHDX-NO SGT WG1388434 o-Terphenyl L1165628-01, 03, 05, 06, 07 and 12: Percent Recovery is outside of established control limits. NWTPHDX-NO SGT WG1389942 o-Terphenyl L1165628-23: Percent Recovery is outside of established control limits. 8270E WG1388433 2,4,6-Tribromophenol, 2-Fluorobiphenyl, 2-Fluorophenol, Nitrobenzene-d5, p-Terphenyl-d14, Phenol-d5 L1165628-06, 16 and 22: Percent Recovery is outside of established control limits.
2	NWTPHDX-NO SGT WG1388517 Diesel Range Organics (DRO): Percent Recovery is outside of established control limits. 8270E WG1388431 Benzidine, 3,3-Dichlorobenzidine: Percent Recovery is outside of established control limits. 6010D WG1388691 Lead, Zinc: Percent Recovery is outside of established control limits.
3	NWTPHDX-NO SGT WG1388517 Diesel Range Organics (DRO): Relative Percent Difference is outside of established control limits. 8270E WG1388431 Hexachlorobenzene, Pyrene: Relative Percent Difference is outside of established control limits. 8270E WG1388433 Benzidine: Relative Percent Difference is outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.7		1	12/03/2019 09:50	WG1389700

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	2280		70.2	4.00	211	50	11/29/2019 13:38	WG1388434
Residual Range Organics (RRO)	4820		176	10.0	528	50	11/29/2019 13:38	WG1388434
(S) o-Terphenyl	*256*	J7			*18.0-148*		*11/29/2019 13:38*	WG1388434

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0678	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Acenaphthylene	U		0.0708	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Anthracene	U		0.0667	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Benzidine	U		0.672	0.333	3.52	10	11/28/2019 08:03	WG1388431
Benzo(a)anthracene	U		0.0452	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Benzo(b)fluoranthene	U		0.0734	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Benzo(k)fluoranthene	U		0.0614	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Benzo(g,h,i)perylene	U		0.0761	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Benzo(a)pyrene	U		0.0578	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Bis(2-chlorethoxy)methane	U		0.0813	0.333	3.52	10	11/28/2019 08:03	WG1388431
Bis(2-chloroethyl)ether	U		0.0946	0.333	3.52	10	11/28/2019 08:03	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.0802	0.333	3.52	10	11/28/2019 08:03	WG1388431
4-Bromophenyl-phenylether	U		0.120	0.333	3.52	10	11/28/2019 08:03	WG1388431
2-Chloronaphthalene	U		0.0675	0.0333	0.352	10	11/28/2019 08:03	WG1388431
4-Chlorophenyl-phenylether	U		0.0662	0.333	3.52	10	11/28/2019 08:03	WG1388431
Chrysene	U		0.0586	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Dibenz(a,h)anthracene	U		0.0867	0.0333	0.352	10	11/28/2019 08:03	WG1388431
1,2-Dichlorobenzene	U		0.0972	0.333	3.52	10	11/28/2019 08:03	WG1388431
1,3-Dichlorobenzene	U		0.106	0.333	3.52	10	11/28/2019 08:03	WG1388431
1,4-Dichlorobenzene	U		0.106	0.333	3.52	10	11/28/2019 08:03	WG1388431
3,3-Dichlorobenzidine	U		0.838	0.333	3.52	10	11/28/2019 08:03	WG1388431
2,4-Dinitrotoluene	U		0.0641	0.333	3.52	10	11/28/2019 08:03	WG1388431
2,6-Dinitrotoluene	U		0.0778	0.333	3.52	10	11/28/2019 08:03	WG1388431
Fluoranthene	U		0.0524	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Fluorene	U		0.0720	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Hexachlorobenzene	U		0.0904	0.333	3.52	10	11/28/2019 08:03	WG1388431
Hexachloro-1,3-butadiene	U		0.106	0.333	3.52	10	11/28/2019 08:03	WG1388431
Hexachlorocyclopentadiene	U		0.620	0.333	3.52	10	11/28/2019 08:03	WG1388431
Hexachloroethane	U		0.141	0.333	3.52	10	11/28/2019 08:03	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.0815	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Isophorone	U		0.0551	0.333	3.52	10	11/28/2019 08:03	WG1388431
Naphthalene	U		0.0938	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Nitrobenzene	U		0.0734	0.333	3.52	10	11/28/2019 08:03	WG1388431
n-Nitrosodimethylamine	U		0.683	0.333	3.52	10	11/28/2019 08:03	WG1388431
n-Nitrosodiphenylamine	U		0.950	0.333	3.52	10	11/28/2019 08:03	WG1388431
n-Nitrosodi-n-propylamine	U		0.0956	0.333	3.52	10	11/28/2019 08:03	WG1388431
Phenanthrene	U		0.0557	0.0333	0.352	10	11/28/2019 08:03	WG1388431
Pyridine	U		0.663	0.333	3.52	10	11/28/2019 08:03	WG1388431
Benzylbutyl phthalate	U		0.109	0.333	3.52	10	11/28/2019 08:03	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.127	0.333	3.52	10	11/28/2019 08:03	WG1388431
Di-n-butyl phthalate	U		0.115	0.333	3.52	10	11/28/2019 08:03	WG1388431
Diethyl phthalate	U		0.0729	0.333	3.52	10	11/28/2019 08:03	WG1388431
Dimethyl phthalate	U		0.0570	0.333	3.52	10	11/28/2019 08:03	WG1388431

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-octyl phthalate	U		0.0957	0.333	3.52	10	11/28/2019 08:03	WG1388431
Pyrene	U		0.130	0.0333	0.352	10	11/28/2019 08:03	WG1388431
1,2,4-Trichlorobenzene	U		0.0925	0.333	3.52	10	11/28/2019 08:03	WG1388431
4-Chloro-3-methylphenol	U		0.0504	0.333	3.52	10	11/28/2019 08:03	WG1388431
2-Chlorophenol	U		0.0877	0.333	3.52	10	11/28/2019 08:03	WG1388431
2,4-Dichlorophenol	U		0.0787	0.333	3.52	10	11/28/2019 08:03	WG1388431
2,4-Dimethylphenol	U		0.497	0.333	3.52	10	11/28/2019 08:03	WG1388431
4,6-Dinitro-2-methylphenol	U		1.31	0.333	3.52	10	11/28/2019 08:03	WG1388431
2,4-Dinitrophenol	U		1.03	0.333	3.52	10	11/28/2019 08:03	WG1388431
2-Methylphenol	U		0.104	0.333	3.52	10	11/28/2019 08:03	WG1388431
3&4-Methyl Phenol	U		0.0827	0.333	3.52	10	11/28/2019 08:03	WG1388431
2-Nitrophenol	U		0.137	0.333	3.52	10	11/28/2019 08:03	WG1388431
4-Nitrophenol	U		0.554	0.333	3.52	10	11/28/2019 08:03	WG1388431
Pentachlorophenol	U		0.507	0.333	3.52	10	11/28/2019 08:03	WG1388431
Phenol	U		0.0734	0.333	3.52	10	11/28/2019 08:03	WG1388431
2,4,5-Trichlorophenol	U		0.110	0.333	3.52	10	11/28/2019 08:03	WG1388431
2,4,6-Trichlorophenol	U		0.0822	0.333	3.52	10	11/28/2019 08:03	WG1388431
(S) 2-Fluorophenol	*74.0*				*12.0-120*		*11/28/2019 08:03*	WG1388431
(S) Phenol-d5	*67.5*				*10.0-120*		*11/28/2019 08:03*	WG1388431
(S) Nitrobenzene-d5	*59.4*				*10.0-122*		*11/28/2019 08:03*	WG1388431
(S) 2-Fluorobiphenyl	*59.4*				*15.0-120*		*11/28/2019 08:03*	WG1388431
(S) 2,4,6-Tribromophenol	*82.7*				*10.0-127*		*11/28/2019 08:03*	WG1388431
(S) p-Terphenyl-d14	*72.9*				*10.0-120*		*11/28/2019 08:03*	WG1388431

Sample Narrative:

L1165628-01 WG1388431: Dilution due to matrix.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.3		1	12/03/2019 09:50	WG1389700

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	536		7.36	4.00	22.1	5	11/29/2019 12:47	WG1388434
Residual Range Organics (RRO)	1210		36.9	10.0	111	10	11/29/2019 17:15	WG1388434
(S) o-Terphenyl	*91.4*				*18.0-148*		*11/29/2019 12:47*	WG1388434
(S) o-Terphenyl	*110*				*18.0-148*		*11/29/2019 17:15*	WG1388434

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00711	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Acenaphthylene	U		0.00743	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Anthracene	U		0.00700	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Benzidine	U		0.0705	0.333	0.369	1	11/28/2019 03:16	WG1388431
Benzo(a)anthracene	U		0.00474	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Benzo(b)fluoranthene	U		0.00770	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Benzo(k)fluoranthene	U		0.00645	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Benzo(g,h,i)perylene	U		0.00798	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Benzo(a)pyrene	U		0.00607	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Bis(2-chlorethoxy)methane	U		0.00853	0.333	0.369	1	11/28/2019 03:16	WG1388431
Bis(2-chloroethyl)ether	U		0.00992	0.333	0.369	1	11/28/2019 03:16	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.00842	0.333	0.369	1	11/28/2019 03:16	WG1388431
4-Bromophenyl-phenylether	U		0.0126	0.333	0.369	1	11/28/2019 03:16	WG1388431
2-Chloronaphthalene	U		0.00708	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
4-Chlorophenyl-phenylether	U		0.00694	0.333	0.369	1	11/28/2019 03:16	WG1388431
Chrysene	U		0.00615	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Dibenz(a,h)anthracene	U		0.00909	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
1,2-Dichlorobenzene	U		0.0102	0.333	0.369	1	11/28/2019 03:16	WG1388431
1,3-Dichlorobenzene	U		0.0111	0.333	0.369	1	11/28/2019 03:16	WG1388431
1,4-Dichlorobenzene	U		0.0111	0.333	0.369	1	11/28/2019 03:16	WG1388431
3,3-Dichlorobenzidine	U		0.0879	0.333	0.369	1	11/28/2019 03:16	WG1388431
2,4-Dinitrotoluene	U		0.00672	0.333	0.369	1	11/28/2019 03:16	WG1388431
2,6-Dinitrotoluene	U		0.00816	0.333	0.369	1	11/28/2019 03:16	WG1388431
Fluoranthene	U		0.00549	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Fluorene	U		0.00755	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Hexachlorobenzene	U		0.00948	0.333	0.369	1	11/28/2019 03:16	WG1388431
Hexachloro-1,3-butadiene	U		0.0111	0.333	0.369	1	11/28/2019 03:16	WG1388431
Hexachlorocyclopentadiene	U		0.0650	0.333	0.369	1	11/28/2019 03:16	WG1388431
Hexachloroethane	U		0.0148	0.333	0.369	1	11/28/2019 03:16	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.00855	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Isophorone	U		0.00578	0.333	0.369	1	11/28/2019 03:16	WG1388431
Naphthalene	U		0.00984	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Nitrobenzene	U		0.00770	0.333	0.369	1	11/28/2019 03:16	WG1388431
n-Nitrosodimethylamine	U		0.0716	0.333	0.369	1	11/28/2019 03:16	WG1388431
n-Nitrosodiphenylamine	U		0.0997	0.333	0.369	1	11/28/2019 03:16	WG1388431
n-Nitrosodi-n-propylamine	U		0.0100	0.333	0.369	1	11/28/2019 03:16	WG1388431
Phenanthrene	U		0.00585	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
Pyridine	U		0.0695	0.333	0.369	1	11/28/2019 03:16	WG1388431
Benzylbutyl phthalate	U		0.0114	0.333	0.369	1	11/28/2019 03:16	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.0133	0.333	0.369	1	11/28/2019 03:16	WG1388431
Di-n-butyl phthalate	U		0.0121	0.333	0.369	1	11/28/2019 03:16	WG1388431
Diethyl phthalate	U		0.00765	0.333	0.369	1	11/28/2019 03:16	WG1388431

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Dimethyl phthalate	U		0.00598	0.333	0.369	1	11/28/2019 03:16	WG1388431
Di-n-octyl phthalate	U		0.0100	0.333	0.369	1	11/28/2019 03:16	WG1388431
Pyrene	U		0.0136	0.0333	0.0369	1	11/28/2019 03:16	WG1388431
1,2,4-Trichlorobenzene	U		0.00970	0.333	0.369	1	11/28/2019 03:16	WG1388431
4-Chloro-3-methylphenol	U		0.00528	0.333	0.369	1	11/28/2019 03:16	WG1388431
2-Chlorophenol	U		0.00920	0.333	0.369	1	11/28/2019 03:16	WG1388431
2,4-Dichlorophenol	U		0.00826	0.333	0.369	1	11/28/2019 03:16	WG1388431
2,4-Dimethylphenol	U		0.0522	0.333	0.369	1	11/28/2019 03:16	WG1388431
4,6-Dinitro-2-methylphenol	U		0.137	0.333	0.369	1	11/28/2019 03:16	WG1388431
2,4-Dinitrophenol	U		0.109	0.333	0.369	1	11/28/2019 03:16	WG1388431
2-Methylphenol	U		0.0109	0.333	0.369	1	11/28/2019 03:16	WG1388431
3&4-Methyl Phenol	U		0.00867	0.333	0.369	1	11/28/2019 03:16	WG1388431
2-Nitrophenol	U		0.0144	0.333	0.369	1	11/28/2019 03:16	WG1388431
4-Nitrophenol	U		0.0581	0.333	0.369	1	11/28/2019 03:16	WG1388431
Pentachlorophenol	U		0.0532	0.333	0.369	1	11/28/2019 03:16	WG1388431
Phenol	U		0.00770	0.333	0.369	1	11/28/2019 03:16	WG1388431
2,4,5-Trichlorophenol	U		0.0115	0.333	0.369	1	11/28/2019 03:16	WG1388431
2,4,6-Trichlorophenol	U		0.00863	0.333	0.369	1	11/28/2019 03:16	WG1388431
(S) 2-Fluorophenol	*68.8*				*12.0-120*		*11/28/2019 03:16*	WG1388431
(S) Phenol-d5	*65.8*				*10.0-120*		*11/28/2019 03:16*	WG1388431
(S) Nitrobenzene-d5	*55.8*				*10.0-122*		*11/28/2019 03:16*	WG1388431
(S) 2-Fluorobiphenyl	*55.2*				*15.0-120*		*11/28/2019 03:16*	WG1388431
(S) 2,4,6-Tribromophenol	*81.7*				*10.0-127*		*11/28/2019 03:16*	WG1388431
(S) p-Terphenyl-d14	*68.7*				*10.0-120*		*11/28/2019 03:16*	WG1388431

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

SB-15B (0-1)

Collected date/time: 11/14/19 13:10

SAMPLE RESULTS - 03

L1165628

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.0		1	12/03/2019 09:50	WG1389700

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	917		14.0	4.00	42.1	10	11/29/2019 16:24	WG1388434
Residual Range Organics (RRO)	878		35.0	10.0	105	10	11/29/2019 16:24	WG1388434
(S) o-Terphenyl	*225*	J1			*18.0-148*		*11/29/2019 16:24*	WG1388434

Sample Narrative:

L1165628-03 WG1388434: Surrogate failure due to matrix interference

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0676	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Acenaphthylene	U		0.0706	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Anthracene	U		0.0665	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Benzidine	U		0.670	0.333	3.50	10	11/28/2019 08:22	WG1388431
Benzo(a)anthracene	U		0.0450	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Benzo(b)fluoranthene	U		0.0731	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Benzo(k)fluoranthene	U		0.0612	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Benzo(g,h,i)perylene	U		0.0759	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Benzo(a)pyrene	U		0.0577	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Bis(2-chlorethoxy)methane	U		0.0810	0.333	3.50	10	11/28/2019 08:22	WG1388431
Bis(2-chloroethyl)ether	U		0.0943	0.333	3.50	10	11/28/2019 08:22	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.0800	0.333	3.50	10	11/28/2019 08:22	WG1388431
4-Bromophenyl-phenylether	U		0.120	0.333	3.50	10	11/28/2019 08:22	WG1388431
2-Chloronaphthalene	U		0.0672	0.0333	0.350	10	11/28/2019 08:22	WG1388431
4-Chlorophenyl-phenylether	U		0.0660	0.333	3.50	10	11/28/2019 08:22	WG1388431
Chrysene	U		0.0584	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Dibenz(a,h)anthracene	U		0.0864	0.0333	0.350	10	11/28/2019 08:22	WG1388431
1,2-Dichlorobenzene	U		0.0969	0.333	3.50	10	11/28/2019 08:22	WG1388431
1,3-Dichlorobenzene	U		0.105	0.333	3.50	10	11/28/2019 08:22	WG1388431
1,4-Dichlorobenzene	U		0.105	0.333	3.50	10	11/28/2019 08:22	WG1388431
3,3-Dichlorobenzidine	U		0.836	0.333	3.50	10	11/28/2019 08:22	WG1388431
2,4-Dinitrotoluene	U		0.0639	0.333	3.50	10	11/28/2019 08:22	WG1388431
2,6-Dinitrotoluene	U		0.0776	0.333	3.50	10	11/28/2019 08:22	WG1388431
Fluoranthene	U		0.0522	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Fluorene	U		0.0718	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Hexachlorobenzene	U		0.0901	0.333	3.50	10	11/28/2019 08:22	WG1388431
Hexachloro-1,3-butadiene	U		0.105	0.333	3.50	10	11/28/2019 08:22	WG1388431
Hexachlorocyclopentadiene	U		0.618	0.333	3.50	10	11/28/2019 08:22	WG1388431
Hexachloroethane	U		0.141	0.333	3.50	10	11/28/2019 08:22	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.0812	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Isophorone	U		0.0549	0.333	3.50	10	11/28/2019 08:22	WG1388431
Naphthalene	U		0.0935	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Nitrobenzene	U		0.0731	0.333	3.50	10	11/28/2019 08:22	WG1388431
n-Nitrosodimethylamine	U		0.681	0.333	3.50	10	11/28/2019 08:22	WG1388431
n-Nitrosodiphenylamine	U		0.947	0.333	3.50	10	11/28/2019 08:22	WG1388431
n-Nitrosodi-n-propylamine	U		0.0953	0.333	3.50	10	11/28/2019 08:22	WG1388431
Phenanthrene	U		0.0556	0.0333	0.350	10	11/28/2019 08:22	WG1388431
Pyridine	U		0.661	0.333	3.50	10	11/28/2019 08:22	WG1388431
Benzylbutyl phthalate	U		0.108	0.333	3.50	10	11/28/2019 08:22	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.126	0.333	3.50	10	11/28/2019 08:22	WG1388431

SB-15B (0-1)

Collected date/time: 11/14/19 13:10

SAMPLE RESULTS - 03

L1165628

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-butyl phthalate	U		0.115	0.333	3.50	10	11/28/2019 08:22	WG1388431
Diethyl phthalate	U		0.0727	0.333	3.50	10	11/28/2019 08:22	WG1388431
Dimethyl phthalate	U		0.0568	0.333	3.50	10	11/28/2019 08:22	WG1388431
Di-n-octyl phthalate	U		0.0954	0.333	3.50	10	11/28/2019 08:22	WG1388431
Pyrene	U		0.129	0.0333	0.350	10	11/28/2019 08:22	WG1388431
1,2,4-Trichlorobenzene	U		0.0922	0.333	3.50	10	11/28/2019 08:22	WG1388431
4-Chloro-3-methylphenol	U		0.0502	0.333	3.50	10	11/28/2019 08:22	WG1388431
2-Chlorophenol	U		0.0874	0.333	3.50	10	11/28/2019 08:22	WG1388431
2,4-Dichlorophenol	U		0.0785	0.333	3.50	10	11/28/2019 08:22	WG1388431
2,4-Dimethylphenol	U		0.496	0.333	3.50	10	11/28/2019 08:22	WG1388431
4,6-Dinitro-2-methylphenol	U		1.30	0.333	3.50	10	11/28/2019 08:22	WG1388431
2,4-Dinitrophenol	U		1.03	0.333	3.50	10	11/28/2019 08:22	WG1388431
2-Methylphenol	U		0.104	0.333	3.50	10	11/28/2019 08:22	WG1388431
3&4-Methyl Phenol	U		0.0824	0.333	3.50	10	11/28/2019 08:22	WG1388431
2-Nitrophenol	U		0.137	0.333	3.50	10	11/28/2019 08:22	WG1388431
4-Nitrophenol	U		0.552	0.333	3.50	10	11/28/2019 08:22	WG1388431
Pentachlorophenol	U		0.505	0.333	3.50	10	11/28/2019 08:22	WG1388431
Phenol	U		0.0731	0.333	3.50	10	11/28/2019 08:22	WG1388431
2,4,5-Trichlorophenol	U		0.109	0.333	3.50	10	11/28/2019 08:22	WG1388431
2,4,6-Trichlorophenol	U		0.0820	0.333	3.50	10	11/28/2019 08:22	WG1388431
(S) 2-Fluorophenol	*70.1*				*12.0-120*		*11/28/2019 08:22*	WG1388431
(S) Phenol-d5	*66.6*				*10.0-120*		*11/28/2019 08:22*	WG1388431
(S) Nitrobenzene-d5	*60.4*				*10.0-122*		*11/28/2019 08:22*	WG1388431
(S) 2-Fluorobiphenyl	*58.2*				*15.0-120*		*11/28/2019 08:22*	WG1388431
(S) 2,4,6-Tribromophenol	*82.3*				*10.0-127*		*11/28/2019 08:22*	WG1388431
(S) p-Terphenyl-d14	*76.5*				*10.0-120*		*11/28/2019 08:22*	WG1388431

Sample Narrative:

L1165628-03 WG1388431: Dilution due to matrix.

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	94.3		1	12/03/2019 09:50	WG1389700

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	9.17		1.41	4.00	4.24	1	11/29/2019 11:31	WG1388434
Residual Range Organics (RRO)	20.1		3.53	10.0	10.6	1	11/29/2019 11:31	WG1388434
(S) o-Terphenyl	*59.7*				*18.0-148*		*11/29/2019 11:31*	WG1388434

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acenaphthene	U		0.00681	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Acenaphthylene	U		0.00711	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Anthracene	U		0.00670	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Benzidine	U		0.0675	0.333	0.353	1	11/28/2019 01:59	WG1388431
Benzo(a)anthracene	U		0.00454	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Benzo(b)fluoranthene	U		0.00737	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Benzo(k)fluoranthene	U		0.00617	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Benzo(g,h,i)perylene	U		0.00764	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Benzo(a)pyrene	U		0.00581	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Bis(2-chlorethoxy)methane	U		0.00816	0.333	0.353	1	11/28/2019 01:59	WG1388431
Bis(2-chloroethyl)ether	U		0.00950	0.333	0.353	1	11/28/2019 01:59	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.00806	0.333	0.353	1	11/28/2019 01:59	WG1388431
4-Bromophenyl-phenylether	U		0.0121	0.333	0.353	1	11/28/2019 01:59	WG1388431
2-Chloronaphthalene	U		0.00677	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
4-Chlorophenyl-phenylether	U		0.00665	0.333	0.353	1	11/28/2019 01:59	WG1388431
Chrysene	U		0.00588	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Dibenz(a,h)anthracene	U		0.00870	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
1,2-Dichlorobenzene	U		0.00976	0.333	0.353	1	11/28/2019 01:59	WG1388431
1,3-Dichlorobenzene	U		0.0106	0.333	0.353	1	11/28/2019 01:59	WG1388431
1,4-Dichlorobenzene	U		0.0106	0.333	0.353	1	11/28/2019 01:59	WG1388431
3,3-Dichlorobenzidine	U		0.0842	0.333	0.353	1	11/28/2019 01:59	WG1388431
2,4-Dinitrotoluene	U		0.00644	0.333	0.353	1	11/28/2019 01:59	WG1388431
2,6-Dinitrotoluene	U		0.00781	0.333	0.353	1	11/28/2019 01:59	WG1388431
Fluoranthene	U		0.00526	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Fluorene	U		0.00723	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Hexachlorobenzene	U		0.00908	0.333	0.353	1	11/28/2019 01:59	WG1388431
Hexachloro-1,3-butadiene	U		0.0106	0.333	0.353	1	11/28/2019 01:59	WG1388431
Hexachlorocyclopentadiene	U		0.0622	0.333	0.353	1	11/28/2019 01:59	WG1388431
Hexachloroethane	U		0.0142	0.333	0.353	1	11/28/2019 01:59	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.00818	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Isophorone	U		0.00553	0.333	0.353	1	11/28/2019 01:59	WG1388431
Naphthalene	U		0.00943	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Nitrobenzene	U		0.00737	0.333	0.353	1	11/28/2019 01:59	WG1388431
n-Nitrosodimethylamine	U		0.0686	0.333	0.353	1	11/28/2019 01:59	WG1388431
n-Nitrosodiphenylamine	U		0.0954	0.333	0.353	1	11/28/2019 01:59	WG1388431
n-Nitrosodi-n-propylamine	U		0.00961	0.333	0.353	1	11/28/2019 01:59	WG1388431
Phenanthrene	U		0.00560	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
Pyridine	U		0.0666	0.333	0.353	1	11/28/2019 01:59	WG1388431
Benzylbutyl phthalate	U		0.0109	0.333	0.353	1	11/28/2019 01:59	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.0127	0.333	0.353	1	11/28/2019 01:59	WG1388431
Di-n-butyl phthalate	U		0.0116	0.333	0.353	1	11/28/2019 01:59	WG1388431
Diethyl phthalate	U		0.00733	0.333	0.353	1	11/28/2019 01:59	WG1388431
Dimethyl phthalate	U		0.00573	0.333	0.353	1	11/28/2019 01:59	WG1388431

SB-15B (2-3)

Collected date/time: 11/14/19 13:12

SAMPLE RESULTS - 04

L1165628

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-octyl phthalate	U		0.00962	0.333	0.353	1	11/28/2019 01:59	WG1388431
Pyrene	U		0.0130	0.0333	0.0353	1	11/28/2019 01:59	WG1388431
1,2,4-Trichlorobenzene	U		0.00929	0.333	0.353	1	11/28/2019 01:59	WG1388431
4-Chloro-3-methylphenol	U		0.00506	0.333	0.353	1	11/28/2019 01:59	WG1388431
2-Chlorophenol	U		0.00881	0.333	0.353	1	11/28/2019 01:59	WG1388431
2,4-Dichlorophenol	U		0.00791	0.333	0.353	1	11/28/2019 01:59	WG1388431
2,4-Dimethylphenol	U		0.0499	0.333	0.353	1	11/28/2019 01:59	WG1388431
4,6-Dinitro-2-methylphenol	U		0.131	0.333	0.353	1	11/28/2019 01:59	WG1388431
2,4-Dinitrophenol	U		0.104	0.333	0.353	1	11/28/2019 01:59	WG1388431
2-Methylphenol	U		0.0105	0.333	0.353	1	11/28/2019 01:59	WG1388431
3&4-Methyl Phenol	U		0.00830	0.333	0.353	1	11/28/2019 01:59	WG1388431
2-Nitrophenol	U		0.0138	0.333	0.353	1	11/28/2019 01:59	WG1388431
4-Nitrophenol	U		0.0557	0.333	0.353	1	11/28/2019 01:59	WG1388431
Pentachlorophenol	U		0.0509	0.333	0.353	1	11/28/2019 01:59	WG1388431
Phenol	U		0.00737	0.333	0.353	1	11/28/2019 01:59	WG1388431
2,4,5-Trichlorophenol	U		0.0110	0.333	0.353	1	11/28/2019 01:59	WG1388431
2,4,6-Trichlorophenol	U		0.00826	0.333	0.353	1	11/28/2019 01:59	WG1388431
(S) 2-Fluorophenol	*75.2*				*12.0-120*		*11/28/2019 01:59*	WG1388431
(S) Phenol-d5	*68.9*				*10.0-120*		*11/28/2019 01:59*	WG1388431
(S) Nitrobenzene-d5	*60.9*				*10.0-122*		*11/28/2019 01:59*	WG1388431
(S) 2-Fluorobiphenyl	*56.8*				*15.0-120*		*11/28/2019 01:59*	WG1388431
(S) 2,4,6-Tribromophenol	*74.1*				*10.0-127*		*11/28/2019 01:59*	WG1388431
(S) p-Terphenyl-d14	*64.6*				*10.0-120*		*11/28/2019 01:59*	WG1388431

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

SB-15C (0-1)
Collected date/time: 11/14/19 14:00

SAMPLE RESULTS - 05

L1165628

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.4		1	12/03/2019 09:50	WG1389700

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	91.0	J	70.4	4.00	212	50	11/29/2019 14:03	WG1388434
Residual Range Organics (RRO)	1430		176	10.0	530	50	11/29/2019 14:03	WG1388434
(S) o-Terphenyl	*121*	J7			*18.0-148*		*11/29/2019 14:03*	WG1388434

Sample Narrative:

L1165628-05 WG1388434: Cannot run at lower dilution due to viscosity of extract

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0680	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Acenaphthylene	U		0.0711	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Anthracene	U		0.0669	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Benzidine	U		0.675	0.333	3.53	10	11/28/2019 07:24	WG1388431
Benzo(a)anthracene	U		0.0453	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Benzo(b)fluoranthene	U		0.0736	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Benzo(k)fluoranthene	U		0.0617	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Benzo(g,h,i)perylene	U		0.0764	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Benzo(a)pyrene	U		0.0581	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Bis(2-chlorethoxy)methane	U		0.0816	0.333	3.53	10	11/28/2019 07:24	WG1388431
Bis(2-chloroethyl)ether	U		0.0949	0.333	3.53	10	11/28/2019 07:24	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.0805	0.333	3.53	10	11/28/2019 07:24	WG1388431
4-Bromophenyl-phenylether	U		0.121	0.333	3.53	10	11/28/2019 07:24	WG1388431
2-Chloronaphthalene	U		0.0677	0.0333	0.353	10	11/28/2019 07:24	WG1388431
4-Chlorophenyl-phenylether	U		0.0664	0.333	3.53	10	11/28/2019 07:24	WG1388431
Chrysene	U		0.0588	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Dibenz(a,h)anthracene	U		0.0870	0.0333	0.353	10	11/28/2019 07:24	WG1388431
1,2-Dichlorobenzene	U		0.0976	0.333	3.53	10	11/28/2019 07:24	WG1388431
1,3-Dichlorobenzene	U		0.106	0.333	3.53	10	11/28/2019 07:24	WG1388431
1,4-Dichlorobenzene	U		0.106	0.333	3.53	10	11/28/2019 07:24	WG1388431
3,3-Dichlorobenzidine	U		0.841	0.333	3.53	10	11/28/2019 07:24	WG1388431
2,4-Dinitrotoluene	U		0.0643	0.333	3.53	10	11/28/2019 07:24	WG1388431
2,6-Dinitrotoluene	U		0.0781	0.333	3.53	10	11/28/2019 07:24	WG1388431
Fluoranthene	U		0.0525	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Fluorene	U		0.0722	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Hexachlorobenzene	U		0.0907	0.333	3.53	10	11/28/2019 07:24	WG1388431
Hexachloro-1,3-butadiene	U		0.106	0.333	3.53	10	11/28/2019 07:24	WG1388431
Hexachlorocyclopentadiene	U		0.622	0.333	3.53	10	11/28/2019 07:24	WG1388431
Hexachloroethane	U		0.142	0.333	3.53	10	11/28/2019 07:24	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.0818	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Isophorone	U		0.0553	0.333	3.53	10	11/28/2019 07:24	WG1388431
Naphthalene	U		0.0942	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Nitrobenzene	U		0.0736	0.333	3.53	10	11/28/2019 07:24	WG1388431
n-Nitrosodimethylamine	U		0.685	0.333	3.53	10	11/28/2019 07:24	WG1388431
n-Nitrosodiphenylamine	U		0.953	0.333	3.53	10	11/28/2019 07:24	WG1388431
n-Nitrosodi-n-propylamine	U		0.0960	0.333	3.53	10	11/28/2019 07:24	WG1388431
Phenanthrene	U		0.0559	0.0333	0.353	10	11/28/2019 07:24	WG1388431
Pyridine	U		0.665	0.333	3.53	10	11/28/2019 07:24	WG1388431
Benzylbutyl phthalate	U		0.109	0.333	3.53	10	11/28/2019 07:24	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.127	0.333	3.53	10	11/28/2019 07:24	WG1388431

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-butyl phthalate	U		0.115	0.333	3.53	10	11/28/2019 07:24	WG1388431
Diethyl phthalate	U		0.0732	0.333	3.53	10	11/28/2019 07:24	WG1388431
Dimethyl phthalate	U		0.0572	0.333	3.53	10	11/28/2019 07:24	WG1388431
Di-n-octyl phthalate	U		0.0961	0.333	3.53	10	11/28/2019 07:24	WG1388431
Pyrene	U		0.130	0.0333	0.353	10	11/28/2019 07:24	WG1388431
1,2,4-Trichlorobenzene	U		0.0928	0.333	3.53	10	11/28/2019 07:24	WG1388431
4-Chloro-3-methylphenol	U		0.0505	0.333	3.53	10	11/28/2019 07:24	WG1388431
2-Chlorophenol	U		0.0880	0.333	3.53	10	11/28/2019 07:24	WG1388431
2,4-Dichlorophenol	U		0.0790	0.333	3.53	10	11/28/2019 07:24	WG1388431
2,4-Dimethylphenol	U		0.499	0.333	3.53	10	11/28/2019 07:24	WG1388431
4,6-Dinitro-2-methylphenol	U		1.31	0.333	3.53	10	11/28/2019 07:24	WG1388431
2,4-Dinitrophenol	U		1.04	0.333	3.53	10	11/28/2019 07:24	WG1388431
2-Methylphenol	U		0.104	0.333	3.53	10	11/28/2019 07:24	WG1388431
3&4-Methyl Phenol	U		0.0829	0.333	3.53	10	11/28/2019 07:24	WG1388431
2-Nitrophenol	U		0.138	0.333	3.53	10	11/28/2019 07:24	WG1388431
4-Nitrophenol	U		0.556	0.333	3.53	10	11/28/2019 07:24	WG1388431
Pentachlorophenol	U		0.508	0.333	3.53	10	11/28/2019 07:24	WG1388431
Phenol	U		0.0736	0.333	3.53	10	11/28/2019 07:24	WG1388431
2,4,5-Trichlorophenol	U		0.110	0.333	3.53	10	11/28/2019 07:24	WG1388431
2,4,6-Trichlorophenol	U		0.0825	0.333	3.53	10	11/28/2019 07:24	WG1388431
(S) 2-Fluorophenol	*82.9*				*12.0-120*		*11/28/2019 07:24*	WG1388431
(S) Phenol-d5	*74.7*				*10.0-120*		*11/28/2019 07:24*	WG1388431
(S) Nitrobenzene-d5	*66.6*				*10.0-122*		*11/28/2019 07:24*	WG1388431
(S) 2-Fluorobiphenyl	*65.0*				*15.0-120*		*11/28/2019 07:24*	WG1388431
(S) 2,4,6-Tribromophenol	*90.0*				*10.0-127*		*11/28/2019 07:24*	WG1388431
(S) p-Terphenyl-d14	*77.6*				*10.0-120*		*11/28/2019 07:24*	WG1388431

Sample Narrative:

L1165628-05 WG1388431: Dilution due to matrix.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.9		1	12/03/2019 09:50	WG1389700

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	93.4	J	70.8	4.00	213	50	12/02/2019 16:08	WG1388434
Residual Range Organics (RRO)	1010		177	10.0	533	50	12/02/2019 16:08	WG1388434
(S) o-Terphenyl	*94.2*	J7			*18.0-148*		*12/02/2019 16:08*	WG1388434

Sample Narrative:

L1165628-06 WG1388434: Cannot run at lower dilution due to viscosity of extract

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.137	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Acenaphthylene	U		0.143	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Anthracene	U		0.135	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Benzidine	U		1.36	0.333	7.09	20	11/28/2019 07:04	WG1388433
Benzo(a)anthracene	U		0.0912	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Benzo(b)fluoranthene	U		0.148	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Benzo(k)fluoranthene	U		0.124	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Benzo(g,h,i)perylene	U		0.154	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Benzo(a)pyrene	U		0.117	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Bis(2-chlorethoxy)methane	U		0.164	0.333	7.09	20	11/28/2019 07:04	WG1388433
Bis(2-chloroethyl)ether	U		0.191	0.333	7.09	20	11/28/2019 07:04	WG1388433
2,2-Oxybis(1-Chloropropane)	U		0.162	0.333	7.09	20	11/28/2019 07:04	WG1388433
4-Bromophenyl-phenylether	U		0.243	0.333	7.09	20	11/28/2019 07:04	WG1388433
2-Chloronaphthalene	U		0.136	0.0333	0.709	20	11/28/2019 07:04	WG1388433
4-Chlorophenyl-phenylether	U		0.134	0.333	7.09	20	11/28/2019 07:04	WG1388433
Chrysene	U		0.118	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Dibenz(a,h)anthracene	U		0.175	0.0333	0.709	20	11/28/2019 07:04	WG1388433
1,2-Dichlorobenzene	U		0.196	0.333	7.09	20	11/28/2019 07:04	WG1388433
1,3-Dichlorobenzene	U		0.213	0.333	7.09	20	11/28/2019 07:04	WG1388433
1,4-Dichlorobenzene	U		0.213	0.333	7.09	20	11/28/2019 07:04	WG1388433
3,3-Dichlorobenzidine	U		1.69	0.333	7.09	20	11/28/2019 07:04	WG1388433
2,4-Dinitrotoluene	U		0.129	0.333	7.09	20	11/28/2019 07:04	WG1388433
2,6-Dinitrotoluene	U		0.157	0.333	7.09	20	11/28/2019 07:04	WG1388433
Fluoranthene	U		0.106	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Fluorene	U		0.145	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Hexachlorobenzene	U		0.182	0.333	7.09	20	11/28/2019 07:04	WG1388433
Hexachloro-1,3-butadiene	U		0.213	0.333	7.09	20	11/28/2019 07:04	WG1388433
Hexachlorocyclopentadiene	U		1.25	0.333	7.09	20	11/28/2019 07:04	WG1388433
Hexachloroethane	U		0.285	0.333	7.09	20	11/28/2019 07:04	WG1388433
Indeno(1,2,3-cd)pyrene	U		0.164	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Isophorone	U		0.111	0.333	7.09	20	11/28/2019 07:04	WG1388433
Naphthalene	U		0.189	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Nitrobenzene	U		0.148	0.333	7.09	20	11/28/2019 07:04	WG1388433
n-Nitrosodimethylamine	U		1.38	0.333	7.09	20	11/28/2019 07:04	WG1388433
n-Nitrosodiphenylamine	U		1.92	0.333	7.09	20	11/28/2019 07:04	WG1388433
n-Nitrosodi-n-propylamine	U		0.193	0.333	7.09	20	11/28/2019 07:04	WG1388433
Phenanthrene	U		0.112	0.0333	0.709	20	11/28/2019 07:04	WG1388433
Pyridine	U		1.34	0.333	7.09	20	11/28/2019 07:04	WG1388433
Benzylbutyl phthalate	U		0.219	0.333	7.09	20	11/28/2019 07:04	WG1388433
Bis(2-ethylhexyl)phthalate	U		0.256	0.333	7.09	20	11/28/2019 07:04	WG1388433

SB-15C (2-3)

Collected date/time: 11/14/19 14:02

SAMPLE RESULTS - 06

L1165628

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-butyl phthalate	U		0.232	0.333	7.09	20	11/28/2019 07:04	WG1388433
Diethyl phthalate	U		0.147	0.333	7.09	20	11/28/2019 07:04	WG1388433
Dimethyl phthalate	U		0.115	0.333	7.09	20	11/28/2019 07:04	WG1388433
Di-n-octyl phthalate	U		0.193	0.333	7.09	20	11/28/2019 07:04	WG1388433
Pyrene	U		0.262	0.0333	0.709	20	11/28/2019 07:04	WG1388433
1,2,4-Trichlorobenzene	U		0.187	0.333	7.09	20	11/28/2019 07:04	WG1388433
4-Chloro-3-methylphenol	U		0.102	0.333	7.09	20	11/28/2019 07:04	WG1388433
2-Chlorophenol	U		0.177	0.333	7.09	20	11/28/2019 07:04	WG1388433
2,4-Dichlorophenol	U		0.159	0.333	7.09	20	11/28/2019 07:04	WG1388433
2,4-Dimethylphenol	U		1.00	0.333	7.09	20	11/28/2019 07:04	WG1388433
4,6-Dinitro-2-methylphenol	U		2.64	0.333	7.09	20	11/28/2019 07:04	WG1388433
2,4-Dinitrophenol	U		2.09	0.333	7.09	20	11/28/2019 07:04	WG1388433
2-Methylphenol	U		0.210	0.333	7.09	20	11/28/2019 07:04	WG1388433
3&4-Methyl Phenol	U		0.167	0.333	7.09	20	11/28/2019 07:04	WG1388433
2-Nitrophenol	U		0.277	0.333	7.09	20	11/28/2019 07:04	WG1388433
4-Nitrophenol	U		1.12	0.333	7.09	20	11/28/2019 07:04	WG1388433
Pentachlorophenol	U		1.02	0.333	7.09	20	11/28/2019 07:04	WG1388433
Phenol	U		0.148	0.333	7.09	20	11/28/2019 07:04	WG1388433
2,4,5-Trichlorophenol	U		0.222	0.333	7.09	20	11/28/2019 07:04	WG1388433
2,4,6-Trichlorophenol	U		0.166	0.333	7.09	20	11/28/2019 07:04	WG1388433
(S) 2-Fluorophenol	*83.0*	J7			*12.0-120*		*11/28/2019 07:04*	WG1388433
(S) Phenol-d5	*80.2*	J7			*10.0-120*		*11/28/2019 07:04*	WG1388433
(S) Nitrobenzene-d5	*60.6*	J7			*10.0-122*		*11/28/2019 07:04*	WG1388433
(S) 2-Fluorobiphenyl	*69.5*	J7			*15.0-120*		*11/28/2019 07:04*	WG1388433
(S) 2,4,6-Tribromophenol	*82.7*	J7			*10.0-127*		*11/28/2019 07:04*	WG1388433
(S) p-Terphenyl-d14	*85.7*	J7			*10.0-120*		*11/28/2019 07:04*	WG1388433

Sample Narrative:

L1165628-06 WG1388433: Dilution due to matrix impact during extract concentration procedure

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

SB-15D (0-1)
Collected date/time: 11/14/19 13:20

SAMPLE RESULTS - 07

L1165628

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.6		1	12/03/2019 09:50	WG1389700

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		71.1	4.00	214	50	11/29/2019 13:13	WG1388434
Residual Range Organics (RRO)	913		178	10.0	534	50	11/29/2019 13:13	WG1388434
(S) o-Terphenyl	*106*	J7			*18.0-148*		*11/29/2019 13:13*	WG1388434

Sample Narrative:

L1165628-07 WG1388434: Cannot run at lower dilution due to viscosity of extract

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0686	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Acenaphthylene	U		0.0717	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Anthracene	U		0.0675	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Benzidine	U		0.681	0.333	3.56	10	11/28/2019 06:06	WG1388433
Benzo(a)anthracene	U		0.0457	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Benzo(b)fluoranthene	U		0.0743	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Benzo(k)fluoranthene	U		0.0622	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Benzo(g,h,i)perylene	U		0.0771	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Benzo(a)pyrene	U		0.0586	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Bis(2-chlorethoxy)methane	U		0.0823	0.333	3.56	10	11/28/2019 06:06	WG1388433
Bis(2-chloroethyl)ether	U		0.0958	0.333	3.56	10	11/28/2019 06:06	WG1388433
2,2-Oxybis(1-Chloropropane)	U		0.0812	0.333	3.56	10	11/28/2019 06:06	WG1388433
4-Bromophenyl-phenylether	U		0.122	0.333	3.56	10	11/28/2019 06:06	WG1388433
2-Chloronaphthalene	U		0.0683	0.0333	0.356	10	11/28/2019 06:06	WG1388433
4-Chlorophenyl-phenylether	U		0.0670	0.333	3.56	10	11/28/2019 06:06	WG1388433
Chrysene	U		0.0593	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Dibenz(a,h)anthracene	U		0.0878	0.0333	0.356	10	11/28/2019 06:06	WG1388433
1,2-Dichlorobenzene	U		0.0984	0.333	3.56	10	11/28/2019 06:06	WG1388433
1,3-Dichlorobenzene	U		0.107	0.333	3.56	10	11/28/2019 06:06	WG1388433
1,4-Dichlorobenzene	U		0.107	0.333	3.56	10	11/28/2019 06:06	WG1388433
3,3-Dichlorobenzidine	U		0.849	0.333	3.56	10	11/28/2019 06:06	WG1388433
2,4-Dinitrotoluene	U		0.0649	0.333	3.56	10	11/28/2019 06:06	WG1388433
2,6-Dinitrotoluene	U		0.0788	0.333	3.56	10	11/28/2019 06:06	WG1388433
Fluoranthene	U		0.0530	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Fluorene	U		0.0729	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Hexachlorobenzene	U		0.0915	0.333	3.56	10	11/28/2019 06:06	WG1388433
Hexachloro-1,3-butadiene	U		0.107	0.333	3.56	10	11/28/2019 06:06	WG1388433
Hexachlorocyclopentadiene	U		0.627	0.333	3.56	10	11/28/2019 06:06	WG1388433
Hexachloroethane	U		0.143	0.333	3.56	10	11/28/2019 06:06	WG1388433
Indeno(1,2,3-cd)pyrene	U		0.0825	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Isophorone	U		0.0558	0.333	3.56	10	11/28/2019 06:06	WG1388433
Naphthalene	U		0.0950	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Nitrobenzene	U		0.0743	0.333	3.56	10	11/28/2019 06:06	WG1388433
n-Nitrosodimethylamine	U		0.692	0.333	3.56	10	11/28/2019 06:06	WG1388433
n-Nitrosodiphenylamine	U		0.962	0.333	3.56	10	11/28/2019 06:06	WG1388433
n-Nitrosodi-n-propylamine	U		0.0968	0.333	3.56	10	11/28/2019 06:06	WG1388433
Phenanthrene	U		0.0564	0.0333	0.356	10	11/28/2019 06:06	WG1388433
Pyridine	U		0.671	0.333	3.56	10	11/28/2019 06:06	WG1388433
Benzylbutyl phthalate	U		0.110	0.333	3.56	10	11/28/2019 06:06	WG1388433
Bis(2-ethylhexyl)phthalate	U		0.128	0.333	3.56	10	11/28/2019 06:06	WG1388433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-butyl phthalate	U		0.117	0.333	3.56	10	11/28/2019 06:06	WG1388433
Diethyl phthalate	U		0.0739	0.333	3.56	10	11/28/2019 06:06	WG1388433
Dimethyl phthalate	U		0.0577	0.333	3.56	10	11/28/2019 06:06	WG1388433
Di-n-octyl phthalate	U		0.0969	0.333	3.56	10	11/28/2019 06:06	WG1388433
Pyrene	U		0.131	0.0333	0.356	10	11/28/2019 06:06	WG1388433
1,2,4-Trichlorobenzene	U		0.0936	0.333	3.56	10	11/28/2019 06:06	WG1388433
4-Chloro-3-methylphenol	U		0.0510	0.333	3.56	10	11/28/2019 06:06	WG1388433
2-Chlorophenol	U		0.0888	0.333	3.56	10	11/28/2019 06:06	WG1388433
2,4-Dichlorophenol	U		0.0797	0.333	3.56	10	11/28/2019 06:06	WG1388433
2,4-Dimethylphenol	U		0.503	0.333	3.56	10	11/28/2019 06:06	WG1388433
4,6-Dinitro-2-methylphenol	U		1.33	0.333	3.56	10	11/28/2019 06:06	WG1388433
2,4-Dinitrophenol	U		1.05	0.333	3.56	10	11/28/2019 06:06	WG1388433
2-Methylphenol	U		0.105	0.333	3.56	10	11/28/2019 06:06	WG1388433
3&4-Methyl Phenol	U		0.0837	0.333	3.56	10	11/28/2019 06:06	WG1388433
2-Nitrophenol	U		0.139	0.333	3.56	10	11/28/2019 06:06	WG1388433
4-Nitrophenol	U		0.561	0.333	3.56	10	11/28/2019 06:06	WG1388433
Pentachlorophenol	U		0.513	0.333	3.56	10	11/28/2019 06:06	WG1388433
Phenol	U		0.0743	0.333	3.56	10	11/28/2019 06:06	WG1388433
2,4,5-Trichlorophenol	U		0.111	0.333	3.56	10	11/28/2019 06:06	WG1388433
2,4,6-Trichlorophenol	U		0.0833	0.333	3.56	10	11/28/2019 06:06	WG1388433
(S) 2-Fluorophenol	*79.4*				*12.0-120*		*11/28/2019 06:06*	WG1388433
(S) Phenol-d5	*73.2*				*10.0-120*		*11/28/2019 06:06*	WG1388433
(S) Nitrobenzene-d5	*66.9*				*10.0-122*		*11/28/2019 06:06*	WG1388433
(S) 2-Fluorobiphenyl	*68.7*				*15.0-120*		*11/28/2019 06:06*	WG1388433
(S) 2,4,6-Tribromophenol	*84.2*				*10.0-127*		*11/28/2019 06:06*	WG1388433
(S) p-Terphenyl-d14	*80.1*				*10.0-120*		*11/28/2019 06:06*	WG1388433

Sample Narrative:

L1165628-07 WG1388433: Dilution due to matrix impact during extract concentration procedure

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

SB-15D (2-3)
Collected date/time: 11/14/19 13:22

SAMPLE RESULTS - 08

L1165628

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.1		1	12/03/2019 11:32	WG1389702

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	39.0	J	14.3	4.00	43.0	10	11/29/2019 15:33	WG1388434
Residual Range Organics (RRO)	355		35.8	10.0	107	10	11/29/2019 15:33	WG1388434
(S) o-Terphenyl	*92.8*				*18.0-148*		*11/29/2019 15:33*	WG1388434

Sample Narrative:

L1165628-08 WG1388434: Dilution due to matrix impact during extract concentration procedure

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0345	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Acenaphthylene	U		0.0360	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Anthracene	U		0.0339	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Benzidine	U		0.342	0.333	1.79	5	11/28/2019 04:29	WG1388433
Benzo(a)anthracene	U		0.0230	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Benzo(b)fluoranthene	U		0.0373	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Benzo(k)fluoranthene	U		0.0312	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Benzo(g,h,i)perylene	U		0.0387	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Benzo(a)pyrene	U		0.0294	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Bis(2-chlorethoxy)methane	U		0.0413	0.333	1.79	5	11/28/2019 04:29	WG1388433
Bis(2-chloroethyl)ether	U		0.0481	0.333	1.79	5	11/28/2019 04:29	WG1388433
2,2-Oxybis(1-Chloropropane)	U		0.0408	0.333	1.79	5	11/28/2019 04:29	WG1388433
4-Bromophenyl-phenylether	U		0.0612	0.333	1.79	5	11/28/2019 04:29	WG1388433
2-Chloronaphthalene	U		0.0343	0.0333	0.179	5	11/28/2019 04:29	WG1388433
4-Chlorophenyl-phenylether	U		0.0337	0.333	1.79	5	11/28/2019 04:29	WG1388433
Chrysene	U		0.0298	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Dibenz(a,h)anthracene	U		0.0441	0.0333	0.179	5	11/28/2019 04:29	WG1388433
1,2-Dichlorobenzene	U		0.0495	0.333	1.79	5	11/28/2019 04:29	WG1388433
1,3-Dichlorobenzene	U		0.0537	0.333	1.79	5	11/28/2019 04:29	WG1388433
1,4-Dichlorobenzene	U		0.0537	0.333	1.79	5	11/28/2019 04:29	WG1388433
3,3-Dichlorobenzidine	U		0.426	0.333	1.79	5	11/28/2019 04:29	WG1388433
2,4-Dinitrotoluene	U		0.0326	0.333	1.79	5	11/28/2019 04:29	WG1388433
2,6-Dinitrotoluene	U		0.0396	0.333	1.79	5	11/28/2019 04:29	WG1388433
Fluoranthene	U		0.0266	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Fluorene	U		0.0366	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Hexachlorobenzene	U		0.0460	0.333	1.79	5	11/28/2019 04:29	WG1388433
Hexachloro-1,3-butadiene	U		0.0537	0.333	1.79	5	11/28/2019 04:29	WG1388433
Hexachlorocyclopentadiene	U		0.315	0.333	1.79	5	11/28/2019 04:29	WG1388433
Hexachloroethane	U		0.0719	0.333	1.79	5	11/28/2019 04:29	WG1388433
Indeno(1,2,3-cd)pyrene	U		0.0415	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Isophorone	U		0.0280	0.333	1.79	5	11/28/2019 04:29	WG1388433
Naphthalene	U		0.0477	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Nitrobenzene	U		0.0373	0.333	1.79	5	11/28/2019 04:29	WG1388433
n-Nitrosodimethylamine	U		0.347	0.333	1.79	5	11/28/2019 04:29	WG1388433
n-Nitrosodiphenylamine	U		0.483	0.333	1.79	5	11/28/2019 04:29	WG1388433
n-Nitrosodi-n-propylamine	U		0.0486	0.333	1.79	5	11/28/2019 04:29	WG1388433
Phenanthrene	U		0.0283	0.0333	0.179	5	11/28/2019 04:29	WG1388433
Pyridine	U		0.337	0.333	1.79	5	11/28/2019 04:29	WG1388433
Benzylbutyl phthalate	U		0.0553	0.333	1.79	5	11/28/2019 04:29	WG1388433
Bis(2-ethylhexyl)phthalate	U		0.0644	0.333	1.79	5	11/28/2019 04:29	WG1388433

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

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-butyl phthalate	U		0.0585	0.333	1.79	5	11/28/2019 04:29	WG1388433
Diethyl phthalate	U		0.0371	0.333	1.79	5	11/28/2019 04:29	WG1388433
Dimethyl phthalate	U		0.0290	0.333	1.79	5	11/28/2019 04:29	WG1388433
Di-n-octyl phthalate	U		0.0487	0.333	1.79	5	11/28/2019 04:29	WG1388433
Pyrene	U		0.0660	0.0333	0.179	5	11/28/2019 04:29	WG1388433
1,2,4-Trichlorobenzene	U		0.0470	0.333	1.79	5	11/28/2019 04:29	WG1388433
4-Chloro-3-methylphenol	U		0.0256	0.333	1.79	5	11/28/2019 04:29	WG1388433
2-Chlorophenol	U		0.0446	0.333	1.79	5	11/28/2019 04:29	WG1388433
2,4-Dichlorophenol	U		0.0401	0.333	1.79	5	11/28/2019 04:29	WG1388433
2,4-Dimethylphenol	U		0.253	0.333	1.79	5	11/28/2019 04:29	WG1388433
4,6-Dinitro-2-methylphenol	U		0.666	0.333	1.79	5	11/28/2019 04:29	WG1388433
2,4-Dinitrophenol	U		0.526	0.333	1.79	5	11/28/2019 04:29	WG1388433
2-Methylphenol	U		0.0529	0.333	1.79	5	11/28/2019 04:29	WG1388433
3&4-Methyl Phenol	U		0.0420	0.333	1.79	5	11/28/2019 04:29	WG1388433
2-Nitrophenol	U		0.0698	0.333	1.79	5	11/28/2019 04:29	WG1388433
4-Nitrophenol	U		0.282	0.333	1.79	5	11/28/2019 04:29	WG1388433
Pentachlorophenol	U		0.258	0.333	1.79	5	11/28/2019 04:29	WG1388433
Phenol	U		0.0373	0.333	1.79	5	11/28/2019 04:29	WG1388433
2,4,5-Trichlorophenol	U		0.0558	0.333	1.79	5	11/28/2019 04:29	WG1388433
2,4,6-Trichlorophenol	U		0.0418	0.333	1.79	5	11/28/2019 04:29	WG1388433
(S) 2-Fluorophenol	*59.8*				*12.0-120*		*11/28/2019 04:29*	WG1388433
(S) Phenol-d5	*55.9*				*10.0-120*		*11/28/2019 04:29*	WG1388433
(S) Nitrobenzene-d5	*47.8*				*10.0-122*		*11/28/2019 04:29*	WG1388433
(S) 2-Fluorobiphenyl	*53.7*				*15.0-120*		*11/28/2019 04:29*	WG1388433
(S) 2,4,6-Tribromophenol	*61.0*				*10.0-127*		*11/28/2019 04:29*	WG1388433
(S) p-Terphenyl-d14	*57.1*				*10.0-120*		*11/28/2019 04:29*	WG1388433

Sample Narrative:

L1165628-08 WG1388433: Dilution due to matrix.

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	86.3		1	11/29/2019 21:37	WG1388889

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	2.92	B	0.982	0.100	2.90	25	11/27/2019 23:25	WG1388494
(S) a,a,a-Trifluorotoluene(FID)	*98.6*				*77.0-120*		*11/27/2019 23:25*	WG1388494

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acenaphthene	U		0.00744	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Acenaphthylene	U		0.00778	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Anthracene	U		0.00733	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Benzidine	U		0.0738	0.333	0.386	1	11/28/2019 04:32	WG1388431
Benzo(a)anthracene	0.00567	J	0.00496	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Benzo(b)fluoranthene	U		0.00806	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Benzo(k)fluoranthene	U		0.00675	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Benzo(g,h,i)perylene	U		0.00836	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Benzo(a)pyrene	U		0.00635	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Bis(2-chlorethoxy)methane	U		0.00892	0.333	0.386	1	11/28/2019 04:32	WG1388431
Bis(2-chloroethyl)ether	U		0.0104	0.333	0.386	1	11/28/2019 04:32	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.00881	0.333	0.386	1	11/28/2019 04:32	WG1388431
4-Bromophenyl-phenylether	U		0.0132	0.333	0.386	1	11/28/2019 04:32	WG1388431
2-Chloronaphthalene	U		0.00741	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
4-Chlorophenyl-phenylether	U		0.00727	0.333	0.386	1	11/28/2019 04:32	WG1388431
Chrysene	0.0109	J	0.00643	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Dibenz(a,h)anthracene	U		0.00952	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
1,2-Dichlorobenzene	U		0.0107	0.333	0.386	1	11/28/2019 04:32	WG1388431
1,3-Dichlorobenzene	U		0.0116	0.333	0.386	1	11/28/2019 04:32	WG1388431
1,4-Dichlorobenzene	U		0.0116	0.333	0.386	1	11/28/2019 04:32	WG1388431
3,3-Dichlorobenzidine	U		0.0920	0.333	0.386	1	11/28/2019 04:32	WG1388431
2,4-Dinitrotoluene	U		0.00704	0.333	0.386	1	11/28/2019 04:32	WG1388431
2,6-Dinitrotoluene	U		0.00854	0.333	0.386	1	11/28/2019 04:32	WG1388431
Fluoranthene	0.00984	J	0.00575	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Fluorene	U		0.00790	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Hexachlorobenzene	U		0.00992	0.333	0.386	1	11/28/2019 04:32	WG1388431
Hexachloro-1,3-butadiene	U		0.0116	0.333	0.386	1	11/28/2019 04:32	WG1388431
Hexachlorocyclopentadiene	U		0.0680	0.333	0.386	1	11/28/2019 04:32	WG1388431
Hexachloroethane	U		0.0155	0.333	0.386	1	11/28/2019 04:32	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.00895	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Isophorone	U		0.00605	0.333	0.386	1	11/28/2019 04:32	WG1388431
Naphthalene	0.0178	J	0.0103	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Nitrobenzene	U		0.00806	0.333	0.386	1	11/28/2019 04:32	WG1388431
n-Nitrosodimethylamine	U		0.0750	0.333	0.386	1	11/28/2019 04:32	WG1388431
n-Nitrosodiphenylamine	U		0.104	0.333	0.386	1	11/28/2019 04:32	WG1388431
n-Nitrosodi-n-propylamine	U		0.0105	0.333	0.386	1	11/28/2019 04:32	WG1388431
Phenanthrene	0.0144	J	0.00612	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
Pyridine	U		0.0728	0.333	0.386	1	11/28/2019 04:32	WG1388431
Benzylbutyl phthalate	U		0.0119	0.333	0.386	1	11/28/2019 04:32	WG1388431
Bis(2-ethylhexyl)phthalate	0.0192	J	0.0139	0.333	0.386	1	11/28/2019 04:32	WG1388431
Di-n-butyl phthalate	U		0.0126	0.333	0.386	1	11/28/2019 04:32	WG1388431
Diethyl phthalate	U		0.00801	0.333	0.386	1	11/28/2019 04:32	WG1388431
Dimethyl phthalate	U		0.00626	0.333	0.386	1	11/28/2019 04:32	WG1388431
Di-n-octyl phthalate	U		0.0105	0.333	0.386	1	11/28/2019 04:32	WG1388431

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Pyrene	U		0.0143	0.0333	0.0386	1	11/28/2019 04:32	WG1388431
1,2,4-Trichlorobenzene	U		0.0102	0.333	0.386	1	11/28/2019 04:32	WG1388431
4-Chloro-3-methylphenol	U		0.00553	0.333	0.386	1	11/28/2019 04:32	WG1388431
2-Chlorophenol	U		0.00963	0.333	0.386	1	11/28/2019 04:32	WG1388431
2,4-Dichlorophenol	U		0.00865	0.333	0.386	1	11/28/2019 04:32	WG1388431
2,4-Dimethylphenol	U		0.0546	0.333	0.386	1	11/28/2019 04:32	WG1388431
4,6-Dinitro-2-methylphenol	U		0.144	0.333	0.386	1	11/28/2019 04:32	WG1388431
2,4-Dinitrophenol	U		0.114	0.333	0.386	1	11/28/2019 04:32	WG1388431
2-Methylphenol	U		0.0114	0.333	0.386	1	11/28/2019 04:32	WG1388431
3&4-Methyl Phenol	0.0394	J	0.00908	0.333	0.386	1	11/28/2019 04:32	WG1388431
2-Nitrophenol	U		0.0151	0.333	0.386	1	11/28/2019 04:32	WG1388431
4-Nitrophenol	U		0.0609	0.333	0.386	1	11/28/2019 04:32	WG1388431
Pentachlorophenol	U		0.0556	0.333	0.386	1	11/28/2019 04:32	WG1388431
Phenol	0.0170	J	0.00806	0.333	0.386	1	11/28/2019 04:32	WG1388431
2,4,5-Trichlorophenol	U		0.0121	0.333	0.386	1	11/28/2019 04:32	WG1388431
2,4,6-Trichlorophenol	U		0.00903	0.333	0.386	1	11/28/2019 04:32	WG1388431
(S) 2-Fluorophenol	*69.5*				*12.0-120*		*11/28/2019 04:32*	WG1388431
(S) Phenol-d5	*65.8*				*10.0-120*		*11/28/2019 04:32*	WG1388431
(S) Nitrobenzene-d5	*61.5*				*10.0-122*		*11/28/2019 04:32*	WG1388431
(S) 2-Fluorobiphenyl	*55.1*				*15.0-120*		*11/28/2019 04:32*	WG1388431
(S) 2,4,6-Tribromophenol	*79.1*				*10.0-127*		*11/28/2019 04:32*	WG1388431
(S) p-Terphenyl-d14	*62.5*				*10.0-120*		*11/28/2019 04:32*	WG1388431

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

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.0		1	11/29/2019 21:37	WG1388889

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	10.9	J	7.31	4.00	22.0	5	11/29/2019 14:16	WG1388434
Residual Range Organics (RRO)	136		18.3	10.0	54.9	5	11/29/2019 14:16	WG1388434
(S) o-Terphenyl	*67.0*				*18.0-148*		*11/29/2019 14:16*	WG1388434

Sample Narrative:

L1165628-10 WG1388434: Cannot run at lower dilution due to viscosity of extract

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0141	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Acenaphthylene	U		0.0147	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Anthracene	U		0.0139	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Benzidine	U		0.140	0.333	0.732	2	11/28/2019 06:08	WG1388431
Benzo(a)anthracene	U		0.00940	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Benzo(b)fluoranthene	U		0.0153	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Benzo(k)fluoranthene	U		0.0128	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Benzo(g,h,i)perylene	U		0.0158	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Benzo(a)pyrene	U		0.0120	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Bis(2-chlorethoxy)methane	U		0.0169	0.333	0.732	2	11/28/2019 06:08	WG1388431
Bis(2-chloroethyl)ether	U		0.0197	0.333	0.732	2	11/28/2019 06:08	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.0167	0.333	0.732	2	11/28/2019 06:08	WG1388431
4-Bromophenyl-phenylether	U		0.0250	0.333	0.732	2	11/28/2019 06:08	WG1388431
2-Chloronaphthalene	U		0.0140	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
4-Chlorophenyl-phenylether	U		0.0138	0.333	0.732	2	11/28/2019 06:08	WG1388431
Chrysene	U		0.0122	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Dibenz(a,h)anthracene	U		0.0180	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
1,2-Dichlorobenzene	U		0.0202	0.333	0.732	2	11/28/2019 06:08	WG1388431
1,3-Dichlorobenzene	U		0.0220	0.333	0.732	2	11/28/2019 06:08	WG1388431
1,4-Dichlorobenzene	U		0.0220	0.333	0.732	2	11/28/2019 06:08	WG1388431
3,3-Dichlorobenzidine	U		0.174	0.333	0.732	2	11/28/2019 06:08	WG1388431
2,4-Dinitrotoluene	U		0.0133	0.333	0.732	2	11/28/2019 06:08	WG1388431
2,6-Dinitrotoluene	U		0.0162	0.333	0.732	2	11/28/2019 06:08	WG1388431
Fluoranthene	U		0.0109	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Fluorene	U		0.0150	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Hexachlorobenzene	U		0.0188	0.333	0.732	2	11/28/2019 06:08	WG1388431
Hexachloro-1,3-butadiene	U		0.0220	0.333	0.732	2	11/28/2019 06:08	WG1388431
Hexachlorocyclopentadiene	U		0.129	0.333	0.732	2	11/28/2019 06:08	WG1388431
Hexachloroethane	U		0.0294	0.333	0.732	2	11/28/2019 06:08	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.0170	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Isophorone	U		0.0115	0.333	0.732	2	11/28/2019 06:08	WG1388431
Naphthalene	U		0.0195	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Nitrobenzene	U		0.0153	0.333	0.732	2	11/28/2019 06:08	WG1388431
n-Nitrosodimethylamine	U		0.142	0.333	0.732	2	11/28/2019 06:08	WG1388431
n-Nitrosodiphenylamine	U		0.198	0.333	0.732	2	11/28/2019 06:08	WG1388431
n-Nitrosodi-n-propylamine	U		0.0199	0.333	0.732	2	11/28/2019 06:08	WG1388431
Phenanthrene	U		0.0116	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
Pyridine	U		0.138	0.333	0.732	2	11/28/2019 06:08	WG1388431
Benzylbutyl phthalate	U		0.0226	0.333	0.732	2	11/28/2019 06:08	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.0264	0.333	0.732	2	11/28/2019 06:08	WG1388431

SB-17 (1-2)
Collected date/time: 11/13/19 15:21

SAMPLE RESULTS - 10

L1165628

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-butyl phthalate	U		0.0240	0.333	0.732	2	11/28/2019 06:08	WG1388431
Diethyl phthalate	U		0.0152	0.333	0.732	2	11/28/2019 06:08	WG1388431
Dimethyl phthalate	U		0.0119	0.333	0.732	2	11/28/2019 06:08	WG1388431
Di-n-octyl phthalate	U		0.0199	0.333	0.732	2	11/28/2019 06:08	WG1388431
Pyrene	U		0.0270	0.0333	0.0732	2	11/28/2019 06:08	WG1388431
1,2,4-Trichlorobenzene	U		0.0192	0.333	0.732	2	11/28/2019 06:08	WG1388431
4-Chloro-3-methylphenol	U		0.0105	0.333	0.732	2	11/28/2019 06:08	WG1388431
2-Chlorophenol	U		0.0183	0.333	0.732	2	11/28/2019 06:08	WG1388431
2,4-Dichlorophenol	U		0.0164	0.333	0.732	2	11/28/2019 06:08	WG1388431
2,4-Dimethylphenol	U		0.103	0.333	0.732	2	11/28/2019 06:08	WG1388431
4,6-Dinitro-2-methylphenol	U		0.272	0.333	0.732	2	11/28/2019 06:08	WG1388431
2,4-Dinitrophenol	U		0.215	0.333	0.732	2	11/28/2019 06:08	WG1388431
2-Methylphenol	U		0.0217	0.333	0.732	2	11/28/2019 06:08	WG1388431
3&4-Methyl Phenol	U		0.0172	0.333	0.732	2	11/28/2019 06:08	WG1388431
2-Nitrophenol	U		0.0286	0.333	0.732	2	11/28/2019 06:08	WG1388431
4-Nitrophenol	U		0.115	0.333	0.732	2	11/28/2019 06:08	WG1388431
Pentachlorophenol	U		0.105	0.333	0.732	2	11/28/2019 06:08	WG1388431
Phenol	U		0.0153	0.333	0.732	2	11/28/2019 06:08	WG1388431
2,4,5-Trichlorophenol	U		0.0229	0.333	0.732	2	11/28/2019 06:08	WG1388431
2,4,6-Trichlorophenol	U		0.0171	0.333	0.732	2	11/28/2019 06:08	WG1388431
(S) 2-Fluorophenol	*85.4*				*12.0-120*		*11/28/2019 06:08*	WG1388431
(S) Phenol-d5	*79.7*				*10.0-120*		*11/28/2019 06:08*	WG1388431
(S) Nitrobenzene-d5	*70.8*				*10.0-122*		*11/28/2019 06:08*	WG1388431
(S) 2-Fluorobiphenyl	*67.5*				*15.0-120*		*11/28/2019 06:08*	WG1388431
(S) 2,4,6-Tribromophenol	*92.2*				*10.0-127*		*11/28/2019 06:08*	WG1388431
(S) p-Terphenyl-d14	*80.4*				*10.0-120*		*11/28/2019 06:08*	WG1388431

Sample Narrative:

L1165628-10 WG1388431: Dilution due to matrix impact during extract concentration procedure

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

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.1		1	11/29/2019 21:37	WG1388889

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	121		1.49	4.00	4.49	1	11/29/2019 17:02	WG1388434
Residual Range Organics (RRO)	104		3.74	10.0	11.2	1	11/29/2019 17:02	WG1388434
(S) o-Terphenyl	*46.4*				*18.0-148*		*11/29/2019 17:02*	WG1388434

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00720	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Acenaphthylene	U		0.00753	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Anthracene	U		0.00709	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Benzidine	U		0.0715	0.333	0.374	1	11/28/2019 04:51	WG1388431
Benzo(a)anthracene	U		0.00480	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Benzo(b)fluoranthene	U		0.00780	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Benzo(k)fluoranthene	U		0.00653	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Benzo(g,h,i)perylene	U		0.00809	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Benzo(a)pyrene	U		0.00615	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Bis(2-chlorethoxy)methane	U		0.00864	0.333	0.374	1	11/28/2019 04:51	WG1388431
Bis(2-chloroethyl)ether	U		0.0101	0.333	0.374	1	11/28/2019 04:51	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.00853	0.333	0.374	1	11/28/2019 04:51	WG1388431
4-Bromophenyl-phenylether	U		0.0128	0.333	0.374	1	11/28/2019 04:51	WG1388431
2-Chloronaphthalene	U		0.00717	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
4-Chlorophenyl-phenylether	U		0.00703	0.333	0.374	1	11/28/2019 04:51	WG1388431
Chrysene	U		0.00623	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Dibenz(a,h)anthracene	U		0.00921	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
1,2-Dichlorobenzene	U		0.0103	0.333	0.374	1	11/28/2019 04:51	WG1388431
1,3-Dichlorobenzene	U		0.0112	0.333	0.374	1	11/28/2019 04:51	WG1388431
1,4-Dichlorobenzene	U		0.0112	0.333	0.374	1	11/28/2019 04:51	WG1388431
3,3-Dichlorobenzidine	U		0.0891	0.333	0.374	1	11/28/2019 04:51	WG1388431
2,4-Dinitrotoluene	U		0.00681	0.333	0.374	1	11/28/2019 04:51	WG1388431
2,6-Dinitrotoluene	U		0.00827	0.333	0.374	1	11/28/2019 04:51	WG1388431
Fluoranthene	U		0.00556	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Fluorene	0.0163	J	0.00765	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Hexachlorobenzene	U		0.00960	0.333	0.374	1	11/28/2019 04:51	WG1388431
Hexachloro-1,3-butadiene	U		0.0112	0.333	0.374	1	11/28/2019 04:51	WG1388431
Hexachlorocyclopentadiene	U		0.0658	0.333	0.374	1	11/28/2019 04:51	WG1388431
Hexachloroethane	U		0.0150	0.333	0.374	1	11/28/2019 04:51	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.00866	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Isophorone	U		0.00586	0.333	0.374	1	11/28/2019 04:51	WG1388431
Naphthalene	U		0.00997	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Nitrobenzene	U		0.00780	0.333	0.374	1	11/28/2019 04:51	WG1388431
n-Nitrosodimethylamine	U		0.0726	0.333	0.374	1	11/28/2019 04:51	WG1388431
n-Nitrosodiphenylamine	U		0.101	0.333	0.374	1	11/28/2019 04:51	WG1388431
n-Nitrosodi-n-propylamine	U		0.0102	0.333	0.374	1	11/28/2019 04:51	WG1388431
Phenanthrene	0.0324	J	0.00592	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
Pyridine	U		0.0704	0.333	0.374	1	11/28/2019 04:51	WG1388431
Benzylbutyl phthalate	U		0.0116	0.333	0.374	1	11/28/2019 04:51	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.0135	0.333	0.374	1	11/28/2019 04:51	WG1388431
Di-n-butyl phthalate	U		0.0122	0.333	0.374	1	11/28/2019 04:51	WG1388431
Diethyl phthalate	U		0.00775	0.333	0.374	1	11/28/2019 04:51	WG1388431
Dimethyl phthalate	U		0.00606	0.333	0.374	1	11/28/2019 04:51	WG1388431

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

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-octyl phthalate	U		0.0102	0.333	0.374	1	11/28/2019 04:51	WG1388431
Pyrene	U		0.0138	0.0333	0.0374	1	11/28/2019 04:51	WG1388431
1,2,4-Trichlorobenzene	U		0.00983	0.333	0.374	1	11/28/2019 04:51	WG1388431
4-Chloro-3-methylphenol	U		0.00535	0.333	0.374	1	11/28/2019 04:51	WG1388431
2-Chlorophenol	U		0.00932	0.333	0.374	1	11/28/2019 04:51	WG1388431
2,4-Dichlorophenol	U		0.00837	0.333	0.374	1	11/28/2019 04:51	WG1388431
2,4-Dimethylphenol	U		0.0528	0.333	0.374	1	11/28/2019 04:51	WG1388431
4,6-Dinitro-2-methylphenol	U		0.139	0.333	0.374	1	11/28/2019 04:51	WG1388431
2,4-Dinitrophenol	U		0.110	0.333	0.374	1	11/28/2019 04:51	WG1388431
2-Methylphenol	U		0.0111	0.333	0.374	1	11/28/2019 04:51	WG1388431
3&4-Methyl Phenol	U		0.00878	0.333	0.374	1	11/28/2019 04:51	WG1388431
2-Nitrophenol	U		0.0146	0.333	0.374	1	11/28/2019 04:51	WG1388431
4-Nitrophenol	U		0.0589	0.333	0.374	1	11/28/2019 04:51	WG1388431
Pentachlorophenol	U		0.0538	0.333	0.374	1	11/28/2019 04:51	WG1388431
Phenol	U		0.00780	0.333	0.374	1	11/28/2019 04:51	WG1388431
2,4,5-Trichlorophenol	U		0.0117	0.333	0.374	1	11/28/2019 04:51	WG1388431
2,4,6-Trichlorophenol	U		0.00874	0.333	0.374	1	11/28/2019 04:51	WG1388431
(S) 2-Fluorophenol	*60.3*				*12.0-120*		*11/28/2019 04:51*	WG1388431
(S) Phenol-d5	*58.5*				*10.0-120*		*11/28/2019 04:51*	WG1388431
(S) Nitrobenzene-d5	*47.8*				*10.0-122*		*11/28/2019 04:51*	WG1388431
(S) 2-Fluorobiphenyl	*48.4*				*15.0-120*		*11/28/2019 04:51*	WG1388431
(S) 2,4,6-Tribromophenol	*79.7*				*10.0-127*		*11/28/2019 04:51*	WG1388431
(S) p-Terphenyl-d14	*60.8*				*10.0-120*		*11/28/2019 04:51*	WG1388431

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.5		1	11/29/2019 21:37	WG1388889

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	146	J	71.9	4.00	216	50	12/02/2019 15:55	WG1388434
Residual Range Organics (RRO)	717		180	10.0	541	50	12/02/2019 15:55	WG1388434
(S) o-Terphenyl	*79.5*	J7			*18.0-148*		*12/02/2019 15:55*	WG1388434

Sample Narrative:

L1165628-12 WG1388434: Cannot run at lower dilution due to viscosity of extract

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0694	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Acenaphthylene	U		0.0726	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Anthracene	U		0.0684	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Benzidine	U		0.689	0.333	3.60	10	11/28/2019 07:43	WG1388431
Benzo(a)anthracene	U		0.0463	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Benzo(b)fluoranthene	U		0.0752	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Benzo(k)fluoranthene	U		0.0630	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Benzo(g,h,i)perylene	U		0.0780	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Benzo(a)pyrene	U		0.0593	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Bis(2-chlorethoxy)methane	U		0.0833	0.333	3.60	10	11/28/2019 07:43	WG1388431
Bis(2-chloroethyl)ether	U		0.0969	0.333	3.60	10	11/28/2019 07:43	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.0822	0.333	3.60	10	11/28/2019 07:43	WG1388431
4-Bromophenyl-phenylether	U		0.123	0.333	3.60	10	11/28/2019 07:43	WG1388431
2-Chloronaphthalene	U		0.0691	0.0333	0.360	10	11/28/2019 07:43	WG1388431
4-Chlorophenyl-phenylether	U		0.0678	0.333	3.60	10	11/28/2019 07:43	WG1388431
Chrysene	U		0.0600	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Dibenz(a,h)anthracene	U		0.0888	0.0333	0.360	10	11/28/2019 07:43	WG1388431
1,2-Dichlorobenzene	U		0.0996	0.333	3.60	10	11/28/2019 07:43	WG1388431
1,3-Dichlorobenzene	U		0.108	0.333	3.60	10	11/28/2019 07:43	WG1388431
1,4-Dichlorobenzene	U		0.108	0.333	3.60	10	11/28/2019 07:43	WG1388431
3,3-Dichlorobenzidine	U		0.859	0.333	3.60	10	11/28/2019 07:43	WG1388431
2,4-Dinitrotoluene	U		0.0657	0.333	3.60	10	11/28/2019 07:43	WG1388431
2,6-Dinitrotoluene	U		0.0797	0.333	3.60	10	11/28/2019 07:43	WG1388431
Fluoranthene	U		0.0536	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Fluorene	U		0.0738	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Hexachlorobenzene	U		0.0926	0.333	3.60	10	11/28/2019 07:43	WG1388431
Hexachloro-1,3-butadiene	U		0.108	0.333	3.60	10	11/28/2019 07:43	WG1388431
Hexachlorocyclopentadiene	U		0.635	0.333	3.60	10	11/28/2019 07:43	WG1388431
Hexachloroethane	U		0.145	0.333	3.60	10	11/28/2019 07:43	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.0835	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Isophorone	U		0.0565	0.333	3.60	10	11/28/2019 07:43	WG1388431
Naphthalene	U		0.0962	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Nitrobenzene	U		0.0752	0.333	3.60	10	11/28/2019 07:43	WG1388431
n-Nitrosodimethylamine	U		0.700	0.333	3.60	10	11/28/2019 07:43	WG1388431
n-Nitrosodiphenylamine	U		0.973	0.333	3.60	10	11/28/2019 07:43	WG1388431
n-Nitrosodi-n-propylamine	U		0.0980	0.333	3.60	10	11/28/2019 07:43	WG1388431
Phenanthrene	U		0.0571	0.0333	0.360	10	11/28/2019 07:43	WG1388431
Pyridine	U		0.679	0.333	3.60	10	11/28/2019 07:43	WG1388431
Benzylbutyl phthalate	U		0.111	0.333	3.60	10	11/28/2019 07:43	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.130	0.333	3.60	10	11/28/2019 07:43	WG1388431

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

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-butyl phthalate	U		0.118	0.333	3.60	10	11/28/2019 07:43	WG1388431
Diethyl phthalate	U		0.0747	0.333	3.60	10	11/28/2019 07:43	WG1388431
Dimethyl phthalate	U		0.0584	0.333	3.60	10	11/28/2019 07:43	WG1388431
Di-n-octyl phthalate	U		0.0981	0.333	3.60	10	11/28/2019 07:43	WG1388431
Pyrene	U		0.133	0.0333	0.360	10	11/28/2019 07:43	WG1388431
1,2,4-Trichlorobenzene	U		0.0948	0.333	3.60	10	11/28/2019 07:43	WG1388431
4-Chloro-3-methylphenol	U		0.0516	0.333	3.60	10	11/28/2019 07:43	WG1388431
2-Chlorophenol	U		0.0899	0.333	3.60	10	11/28/2019 07:43	WG1388431
2,4-Dichlorophenol	U		0.0807	0.333	3.60	10	11/28/2019 07:43	WG1388431
2,4-Dimethylphenol	U		0.509	0.333	3.60	10	11/28/2019 07:43	WG1388431
4,6-Dinitro-2-methylphenol	U		1.34	0.333	3.60	10	11/28/2019 07:43	WG1388431
2,4-Dinitrophenol	U		1.06	0.333	3.60	10	11/28/2019 07:43	WG1388431
2-Methylphenol	U		0.107	0.333	3.60	10	11/28/2019 07:43	WG1388431
3&4-Methyl Phenol	U		0.0847	0.333	3.60	10	11/28/2019 07:43	WG1388431
2-Nitrophenol	U		0.141	0.333	3.60	10	11/28/2019 07:43	WG1388431
4-Nitrophenol	U		0.568	0.333	3.60	10	11/28/2019 07:43	WG1388431
Pentachlorophenol	U		0.519	0.333	3.60	10	11/28/2019 07:43	WG1388431
Phenol	U		0.0752	0.333	3.60	10	11/28/2019 07:43	WG1388431
2,4,5-Trichlorophenol	U		0.112	0.333	3.60	10	11/28/2019 07:43	WG1388431
2,4,6-Trichlorophenol	U		0.0843	0.333	3.60	10	11/28/2019 07:43	WG1388431
(S) 2-Fluorophenol	*76.1*				*12.0-120*		*11/28/2019 07:43*	WG1388431
(S) Phenol-d5	*70.0*				*10.0-120*		*11/28/2019 07:43*	WG1388431
(S) Nitrobenzene-d5	*60.4*				*10.0-122*		*11/28/2019 07:43*	WG1388431
(S) 2-Fluorobiphenyl	*59.8*				*15.0-120*		*11/28/2019 07:43*	WG1388431
(S) 2,4,6-Tribromophenol	*78.9*				*10.0-127*		*11/28/2019 07:43*	WG1388431
(S) p-Terphenyl-d14	*72.8*				*10.0-120*		*11/28/2019 07:43*	WG1388431

Sample Narrative:

L1165628-12 WG1388431: Dilution due to matrix.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.3		1	12/03/2019 11:32	WG1389702

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	12.8	J	7.29	4.00	21.9	5	11/29/2019 13:25	WG1388434
Residual Range Organics (RRO)	149		18.2	10.0	54.8	5	11/29/2019 13:25	WG1388434
(S) o-Terphenyl	*80.3*				*18.0-148*		*11/29/2019 13:25*	WG1388434

Sample Narrative:

L1165628-13 WG1388434: Cannot run at lower dilution due to viscosity of extract

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00703	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Acenaphthylene	U		0.00735	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Anthracene	U		0.00692	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Benzidine	U		0.0698	0.333	0.365	1	11/28/2019 02:52	WG1388433
Benzo(a)anthracene	U		0.00469	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Benzo(b)fluoranthene	U		0.00761	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Benzo(k)fluoranthene	U		0.00638	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Benzo(g,h,i)perylene	U		0.00790	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Benzo(a)pyrene	U		0.00600	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Bis(2-chlorethoxy)methane	U		0.00844	0.333	0.365	1	11/28/2019 02:52	WG1388433
Bis(2-chloroethyl)ether	U		0.00982	0.333	0.365	1	11/28/2019 02:52	WG1388433
2,2-Oxybis(1-Chloropropane)	U		0.00833	0.333	0.365	1	11/28/2019 02:52	WG1388433
4-Bromophenyl-phenylether	U		0.0125	0.333	0.365	1	11/28/2019 02:52	WG1388433
2-Chloronaphthalene	U		0.00700	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
4-Chlorophenyl-phenylether	U		0.00687	0.333	0.365	1	11/28/2019 02:52	WG1388433
Chrysene	U		0.00608	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Dibenz(a,h)anthracene	U		0.00899	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
1,2-Dichlorobenzene	U		0.0101	0.333	0.365	1	11/28/2019 02:52	WG1388433
1,3-Dichlorobenzene	U		0.0110	0.333	0.365	1	11/28/2019 02:52	WG1388433
1,4-Dichlorobenzene	U		0.0110	0.333	0.365	1	11/28/2019 02:52	WG1388433
3,3-Dichlorobenzidine	U		0.0870	0.333	0.365	1	11/28/2019 02:52	WG1388433
2,4-Dinitrotoluene	U		0.00665	0.333	0.365	1	11/28/2019 02:52	WG1388433
2,6-Dinitrotoluene	U		0.00807	0.333	0.365	1	11/28/2019 02:52	WG1388433
Fluoranthene	U		0.00543	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Fluorene	U		0.00747	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Hexachlorobenzene	U		0.00938	0.333	0.365	1	11/28/2019 02:52	WG1388433
Hexachloro-1,3-butadiene	U		0.0110	0.333	0.365	1	11/28/2019 02:52	WG1388433
Hexachlorocyclopentadiene	U		0.0643	0.333	0.365	1	11/28/2019 02:52	WG1388433
Hexachloroethane	U		0.0147	0.333	0.365	1	11/28/2019 02:52	WG1388433
Indeno(1,2,3-cd)pyrene	U		0.00846	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Isophorone	U		0.00572	0.333	0.365	1	11/28/2019 02:52	WG1388433
Naphthalene	U		0.00974	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Nitrobenzene	U		0.00761	0.333	0.365	1	11/28/2019 02:52	WG1388433
n-Nitrosodimethylamine	U		0.0709	0.333	0.365	1	11/28/2019 02:52	WG1388433
n-Nitrosodiphenylamine	U		0.0986	0.333	0.365	1	11/28/2019 02:52	WG1388433
n-Nitrosodi-n-propylamine	U		0.00993	0.333	0.365	1	11/28/2019 02:52	WG1388433
Phenanthrene	U		0.00578	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
Pyridine	U		0.0688	0.333	0.365	1	11/28/2019 02:52	WG1388433
Benzylbutyl phthalate	U		0.0113	0.333	0.365	1	11/28/2019 02:52	WG1388433
Bis(2-ethylhexyl)phthalate	U		0.0131	0.333	0.365	1	11/28/2019 02:52	WG1388433

SB-17B (1-2)

Collected date/time: 11/14/19 14:31

SAMPLE RESULTS - 13

L1165628

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-butyl phthalate	U		0.0119	0.333	0.365	1	11/28/2019 02:52	WG1388433
Diethyl phthalate	U		0.00757	0.333	0.365	1	11/28/2019 02:52	WG1388433
Dimethyl phthalate	U		0.00592	0.333	0.365	1	11/28/2019 02:52	WG1388433
Di-n-octyl phthalate	U		0.00994	0.333	0.365	1	11/28/2019 02:52	WG1388433
Pyrene	U		0.0135	0.0333	0.0365	1	11/28/2019 02:52	WG1388433
1,2,4-Trichlorobenzene	U		0.00960	0.333	0.365	1	11/28/2019 02:52	WG1388433
4-Chloro-3-methylphenol	U		0.00523	0.333	0.365	1	11/28/2019 02:52	WG1388433
2-Chlorophenol	U		0.00910	0.333	0.365	1	11/28/2019 02:52	WG1388433
2,4-Dichlorophenol	U		0.00817	0.333	0.365	1	11/28/2019 02:52	WG1388433
2,4-Dimethylphenol	U		0.0516	0.333	0.365	1	11/28/2019 02:52	WG1388433
4,6-Dinitro-2-methylphenol	U		0.136	0.333	0.365	1	11/28/2019 02:52	WG1388433
2,4-Dinitrophenol	U		0.107	0.333	0.365	1	11/28/2019 02:52	WG1388433
2-Methylphenol	U		0.0108	0.333	0.365	1	11/28/2019 02:52	WG1388433
3&4-Methyl Phenol	U		0.00858	0.333	0.365	1	11/28/2019 02:52	WG1388433
2-Nitrophenol	U		0.0142	0.333	0.365	1	11/28/2019 02:52	WG1388433
4-Nitrophenol	U		0.0575	0.333	0.365	1	11/28/2019 02:52	WG1388433
Pentachlorophenol	U		0.0526	0.333	0.365	1	11/28/2019 02:52	WG1388433
Phenol	U		0.00761	0.333	0.365	1	11/28/2019 02:52	WG1388433
2,4,5-Trichlorophenol	U		0.0114	0.333	0.365	1	11/28/2019 02:52	WG1388433
2,4,6-Trichlorophenol	U		0.00853	0.333	0.365	1	11/28/2019 02:52	WG1388433
(S) 2-Fluorophenol	*38.9*				*12.0-120*		*11/28/2019 02:52*	WG1388433
(S) Phenol-d5	*37.8*				*10.0-120*		*11/28/2019 02:52*	WG1388433
(S) Nitrobenzene-d5	*30.1*				*10.0-122*		*11/28/2019 02:52*	WG1388433
(S) 2-Fluorobiphenyl	*36.7*				*15.0-120*		*11/28/2019 02:52*	WG1388433
(S) 2,4,6-Tribromophenol	*53.6*				*10.0-127*		*11/28/2019 02:52*	WG1388433
(S) p-Terphenyl-d14	*59.0*				*10.0-120*		*11/28/2019 02:52*	WG1388433

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

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	92.4		1	12/03/2019 11:32	WG1389702

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	9.21		1.44	4.00	4.33	1	11/29/2019 15:58	WG1388434
Residual Range Organics (RRO)	51.5		3.60	10.0	10.8	1	11/29/2019 15:58	WG1388434
(S) o-Terphenyl	*81.6*				*18.0-148*		*11/29/2019 15:58*	WG1388434

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acenaphthene	U		0.0139	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Acenaphthylene	U		0.0145	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Anthracene	U		0.0137	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Benzidine	U	J3	0.138	0.333	0.721	2	11/28/2019 03:11	WG1388433
Benzo(a)anthracene	U		0.00926	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Benzo(b)fluoranthene	U		0.0150	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Benzo(k)fluoranthene	U		0.0126	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Benzo(g,h,i)perylene	U		0.0156	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Benzo(a)pyrene	U		0.0119	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Bis(2-chlorethoxy)methane	U		0.0167	0.333	0.721	2	11/28/2019 03:11	WG1388433
Bis(2-chloroethyl)ether	U		0.0194	0.333	0.721	2	11/28/2019 03:11	WG1388433
2,2-Oxybis(1-Chloropropane)	U		0.0164	0.333	0.721	2	11/28/2019 03:11	WG1388433
4-Bromophenyl-phenylether	U		0.0247	0.333	0.721	2	11/28/2019 03:11	WG1388433
2-Chloronaphthalene	U		0.0138	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
4-Chlorophenyl-phenylether	U		0.0136	0.333	0.721	2	11/28/2019 03:11	WG1388433
Chrysene	U		0.0120	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Dibenz(a,h)anthracene	U		0.0178	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
1,2-Dichlorobenzene	U		0.0199	0.333	0.721	2	11/28/2019 03:11	WG1388433
1,3-Dichlorobenzene	U		0.0216	0.333	0.721	2	11/28/2019 03:11	WG1388433
1,4-Dichlorobenzene	U		0.0216	0.333	0.721	2	11/28/2019 03:11	WG1388433
3,3-Dichlorobenzidine	U		0.172	0.333	0.721	2	11/28/2019 03:11	WG1388433
2,4-Dinitrotoluene	U		0.0131	0.333	0.721	2	11/28/2019 03:11	WG1388433
2,6-Dinitrotoluene	U		0.0159	0.333	0.721	2	11/28/2019 03:11	WG1388433
Fluoranthene	U		0.0107	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Fluorene	U		0.0148	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Hexachlorobenzene	U		0.0185	0.333	0.721	2	11/28/2019 03:11	WG1388433
Hexachloro-1,3-butadiene	U		0.0216	0.333	0.721	2	11/28/2019 03:11	WG1388433
Hexachlorocyclopentadiene	U		0.127	0.333	0.721	2	11/28/2019 03:11	WG1388433
Hexachloroethane	U		0.0290	0.333	0.721	2	11/28/2019 03:11	WG1388433
Indeno(1,2,3-cd)pyrene	U		0.0167	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Isophorone	U		0.0113	0.333	0.721	2	11/28/2019 03:11	WG1388433
Naphthalene	U		0.0192	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Nitrobenzene	U		0.0150	0.333	0.721	2	11/28/2019 03:11	WG1388433
n-Nitrosodimethylamine	U		0.140	0.333	0.721	2	11/28/2019 03:11	WG1388433
n-Nitrosodiphenylamine	U		0.195	0.333	0.721	2	11/28/2019 03:11	WG1388433
n-Nitrosodi-n-propylamine	U		0.0196	0.333	0.721	2	11/28/2019 03:11	WG1388433
Phenanthrene	U		0.0114	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
Pyridine	U		0.136	0.333	0.721	2	11/28/2019 03:11	WG1388433
Benzylbutyl phthalate	U		0.0223	0.333	0.721	2	11/28/2019 03:11	WG1388433
Bis(2-ethylhexyl)phthalate	U		0.0260	0.333	0.721	2	11/28/2019 03:11	WG1388433
Di-n-butyl phthalate	U		0.0236	0.333	0.721	2	11/28/2019 03:11	WG1388433
Diethyl phthalate	U		0.0150	0.333	0.721	2	11/28/2019 03:11	WG1388433
Dimethyl phthalate	U		0.0117	0.333	0.721	2	11/28/2019 03:11	WG1388433

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

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-octyl phthalate	U		0.0196	0.333	0.721	2	11/28/2019 03:11	WG1388433
Pyrene	U		0.0266	0.0333	0.0721	2	11/28/2019 03:11	WG1388433
1,2,4-Trichlorobenzene	U		0.0190	0.333	0.721	2	11/28/2019 03:11	WG1388433
4-Chloro-3-methylphenol	U		0.0103	0.333	0.721	2	11/28/2019 03:11	WG1388433
2-Chlorophenol	U		0.0180	0.333	0.721	2	11/28/2019 03:11	WG1388433
2,4-Dichlorophenol	U		0.0161	0.333	0.721	2	11/28/2019 03:11	WG1388433
2,4-Dimethylphenol	U		0.102	0.333	0.721	2	11/28/2019 03:11	WG1388433
4,6-Dinitro-2-methylphenol	U		0.268	0.333	0.721	2	11/28/2019 03:11	WG1388433
2,4-Dinitrophenol	U		0.212	0.333	0.721	2	11/28/2019 03:11	WG1388433
2-Methylphenol	U		0.0213	0.333	0.721	2	11/28/2019 03:11	WG1388433
3&4-Methyl Phenol	U		0.0169	0.333	0.721	2	11/28/2019 03:11	WG1388433
2-Nitrophenol	U		0.0281	0.333	0.721	2	11/28/2019 03:11	WG1388433
4-Nitrophenol	U		0.114	0.333	0.721	2	11/28/2019 03:11	WG1388433
Pentachlorophenol	U		0.104	0.333	0.721	2	11/28/2019 03:11	WG1388433
Phenol	U		0.0150	0.333	0.721	2	11/28/2019 03:11	WG1388433
2,4,5-Trichlorophenol	U		0.0225	0.333	0.721	2	11/28/2019 03:11	WG1388433
2,4,6-Trichlorophenol	U		0.0169	0.333	0.721	2	11/28/2019 03:11	WG1388433
(S) 2-Fluorophenol	*42.1*				*12.0-120*		*11/28/2019 03:11*	WG1388433
(S) Phenol-d5	*41.9*				*10.0-120*		*11/28/2019 03:11*	WG1388433
(S) Nitrobenzene-d5	*36.6*				*10.0-122*		*11/28/2019 03:11*	WG1388433
(S) 2-Fluorobiphenyl	*38.8*				*15.0-120*		*11/28/2019 03:11*	WG1388433
(S) 2,4,6-Tribromophenol	*58.5*				*10.0-127*		*11/28/2019 03:11*	WG1388433
(S) p-Terphenyl-d14	*64.0*				*10.0-120*		*11/28/2019 03:11*	WG1388433

Sample Narrative:

L1165628-14 WG1388433: Dilution due to matrix impact during extract concentration procedure

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.2		1	12/03/2019 11:32	WG1389702

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	12.6		1.44	4.00	4.34	1	11/29/2019 12:09	WG1388434
Residual Range Organics (RRO)	31.3		3.61	10.0	10.8	1	11/29/2019 12:09	WG1388434
(S) o-Terphenyl	*57.3*				*18.0-148*		*11/29/2019 12:09*	WG1388434

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0348	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Acenaphthylene	U		0.0364	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Anthracene	U		0.0343	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Benzidine	U		0.345	0.333	1.81	5	11/28/2019 04:09	WG1388433
Benzo(a)anthracene	U		0.0232	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Benzo(b)fluoranthene	U		0.0377	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Benzo(k)fluoranthene	U		0.0315	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Benzo(g,h,i)perylene	U		0.0391	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Benzo(a)pyrene	U		0.0297	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Bis(2-chlorethoxy)methane	U		0.0417	0.333	1.81	5	11/28/2019 04:09	WG1388433
Bis(2-chloroethyl)ether	U		0.0486	0.333	1.81	5	11/28/2019 04:09	WG1388433
2,2-Oxybis(1-Chloropropane)	U		0.0412	0.333	1.81	5	11/28/2019 04:09	WG1388433
4-Bromophenyl-phenylether	U		0.0618	0.333	1.81	5	11/28/2019 04:09	WG1388433
2-Chloronaphthalene	U		0.0346	0.0333	0.181	5	11/28/2019 04:09	WG1388433
4-Chlorophenyl-phenylether	U		0.0340	0.333	1.81	5	11/28/2019 04:09	WG1388433
Chrysene	U		0.0301	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Dibenz(a,h)anthracene	U		0.0445	0.0333	0.181	5	11/28/2019 04:09	WG1388433
1,2-Dichlorobenzene	U		0.0499	0.333	1.81	5	11/28/2019 04:09	WG1388433
1,3-Dichlorobenzene	U		0.0542	0.333	1.81	5	11/28/2019 04:09	WG1388433
1,4-Dichlorobenzene	U		0.0542	0.333	1.81	5	11/28/2019 04:09	WG1388433
3,3-Dichlorobenzidine	U		0.430	0.333	1.81	5	11/28/2019 04:09	WG1388433
2,4-Dinitrotoluene	U		0.0329	0.333	1.81	5	11/28/2019 04:09	WG1388433
2,6-Dinitrotoluene	U		0.0399	0.333	1.81	5	11/28/2019 04:09	WG1388433
Fluoranthene	U		0.0269	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Fluorene	U		0.0370	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Hexachlorobenzene	U		0.0464	0.333	1.81	5	11/28/2019 04:09	WG1388433
Hexachloro-1,3-butadiene	U		0.0542	0.333	1.81	5	11/28/2019 04:09	WG1388433
Hexachlorocyclopentadiene	U		0.318	0.333	1.81	5	11/28/2019 04:09	WG1388433
Hexachloroethane	U		0.0726	0.333	1.81	5	11/28/2019 04:09	WG1388433
Indeno(1,2,3-cd)pyrene	U		0.0418	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Isophorone	U		0.0283	0.333	1.81	5	11/28/2019 04:09	WG1388433
Naphthalene	U		0.0482	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Nitrobenzene	U		0.0377	0.333	1.81	5	11/28/2019 04:09	WG1388433
n-Nitrosodimethylamine	U		0.351	0.333	1.81	5	11/28/2019 04:09	WG1388433
n-Nitrosodiphenylamine	U		0.488	0.333	1.81	5	11/28/2019 04:09	WG1388433
n-Nitrosodi-n-propylamine	U		0.0491	0.333	1.81	5	11/28/2019 04:09	WG1388433
Phenanthrene	U		0.0286	0.0333	0.181	5	11/28/2019 04:09	WG1388433
Pyridine	U		0.340	0.333	1.81	5	11/28/2019 04:09	WG1388433
Benzylbutyl phthalate	U		0.0558	0.333	1.81	5	11/28/2019 04:09	WG1388433
Bis(2-ethylhexyl)phthalate	U		0.0650	0.333	1.81	5	11/28/2019 04:09	WG1388433
Di-n-butyl phthalate	U		0.0591	0.333	1.81	5	11/28/2019 04:09	WG1388433
Diethyl phthalate	U		0.0375	0.333	1.81	5	11/28/2019 04:09	WG1388433
Dimethyl phthalate	U		0.0293	0.333	1.81	5	11/28/2019 04:09	WG1388433

SB-17B (3-4)

Collected date/time: 11/14/19 14:33

SAMPLE RESULTS - 15

L1165628

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Di-n-octyl phthalate	U		0.0492	0.333	1.81	5	11/28/2019 04:09	WG1388433
Pyrene	U		0.0667	0.0333	0.181	5	11/28/2019 04:09	WG1388433
1,2,4-Trichlorobenzene	U		0.0475	0.333	1.81	5	11/28/2019 04:09	WG1388433
4-Chloro-3-methylphenol	U		0.0259	0.333	1.81	5	11/28/2019 04:09	WG1388433
2-Chlorophenol	U		0.0450	0.333	1.81	5	11/28/2019 04:09	WG1388433
2,4-Dichlorophenol	U		0.0404	0.333	1.81	5	11/28/2019 04:09	WG1388433
2,4-Dimethylphenol	U		0.255	0.333	1.81	5	11/28/2019 04:09	WG1388433
4,6-Dinitro-2-methylphenol	U		0.672	0.333	1.81	5	11/28/2019 04:09	WG1388433
2,4-Dinitrophenol	U		0.531	0.333	1.81	5	11/28/2019 04:09	WG1388433
2-Methylphenol	U		0.0534	0.333	1.81	5	11/28/2019 04:09	WG1388433
3&4-Methyl Phenol	U		0.0424	0.333	1.81	5	11/28/2019 04:09	WG1388433
2-Nitrophenol	U		0.0705	0.333	1.81	5	11/28/2019 04:09	WG1388433
4-Nitrophenol	U		0.285	0.333	1.81	5	11/28/2019 04:09	WG1388433
Pentachlorophenol	U		0.260	0.333	1.81	5	11/28/2019 04:09	WG1388433
Phenol	U		0.0377	0.333	1.81	5	11/28/2019 04:09	WG1388433
2,4,5-Trichlorophenol	U		0.0564	0.333	1.81	5	11/28/2019 04:09	WG1388433
2,4,6-Trichlorophenol	U		0.0422	0.333	1.81	5	11/28/2019 04:09	WG1388433
(S) 2-Fluorophenol	*45.8*				*12.0-120*		*11/28/2019 04:09*	WG1388433
(S) Phenol-d5	*43.0*				*10.0-120*		*11/28/2019 04:09*	WG1388433
(S) Nitrobenzene-d5	*37.3*				*10.0-122*		*11/28/2019 04:09*	WG1388433
(S) 2-Fluorobiphenyl	*39.8*				*15.0-120*		*11/28/2019 04:09*	WG1388433
(S) 2,4,6-Tribromophenol	*46.9*				*10.0-127*		*11/28/2019 04:09*	WG1388433
(S) p-Terphenyl-d14	*45.3*				*10.0-120*		*11/28/2019 04:09*	WG1388433

Sample Narrative:

L1165628-15 WG1388433: Dilution due to matrix.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.5		1	12/03/2019 11:32	WG1389702

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	3.39	B	1.02	0.100	2.99	25	11/28/2019 00:27	WG1388494
(S) a,a,a-Trifluorotoluene(FID)	*99.0*				*77.0-120*		*11/28/2019 00:27*	WG1388494

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.154	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Acenaphthylene	U		0.161	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Anthracene	U		0.151	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Benzidine	U		1.53	0.333	7.98	20	11/28/2019 06:44	WG1388433
Benzo(a)anthracene	U		0.103	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Benzo(b)fluoranthene	U		0.166	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Benzo(k)fluoranthene	U		0.139	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Benzo(g,h,i)perylene	U		0.173	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Benzo(a)pyrene	U		0.131	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Bis(2-chlorethoxy)methane	U		0.184	0.333	7.98	20	11/28/2019 06:44	WG1388433
Bis(2-chloroethyl)ether	U		0.215	0.333	7.98	20	11/28/2019 06:44	WG1388433
2,2-Oxybis(1-Chloropropane)	U		0.182	0.333	7.98	20	11/28/2019 06:44	WG1388433
4-Bromophenyl-phenylether	U		0.273	0.333	7.98	20	11/28/2019 06:44	WG1388433
2-Chloronaphthalene	U		0.153	0.0333	0.798	20	11/28/2019 06:44	WG1388433
4-Chlorophenyl-phenylether	U		0.150	0.333	7.98	20	11/28/2019 06:44	WG1388433
Chrysene	U		0.133	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Dibenz(a,h)anthracene	U		0.197	0.0333	0.798	20	11/28/2019 06:44	WG1388433
1,2-Dichlorobenzene	U		0.221	0.333	7.98	20	11/28/2019 06:44	WG1388433
1,3-Dichlorobenzene	U		0.240	0.333	7.98	20	11/28/2019 06:44	WG1388433
1,4-Dichlorobenzene	U		0.240	0.333	7.98	20	11/28/2019 06:44	WG1388433
3,3-Dichlorobenzidine	U		1.90	0.333	7.98	20	11/28/2019 06:44	WG1388433
2,4-Dinitrotoluene	U		0.145	0.333	7.98	20	11/28/2019 06:44	WG1388433
2,6-Dinitrotoluene	U		0.177	0.333	7.98	20	11/28/2019 06:44	WG1388433
Fluoranthene	U		0.119	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Fluorene	U		0.163	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Hexachlorobenzene	U		0.205	0.333	7.98	20	11/28/2019 06:44	WG1388433
Hexachloro-1,3-butadiene	U		0.240	0.333	7.98	20	11/28/2019 06:44	WG1388433
Hexachlorocyclopentadiene	U		1.41	0.333	7.98	20	11/28/2019 06:44	WG1388433
Hexachloroethane	U		0.321	0.333	7.98	20	11/28/2019 06:44	WG1388433
Indeno(1,2,3-cd)pyrene	U		0.185	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Isophorone	U		0.125	0.333	7.98	20	11/28/2019 06:44	WG1388433
Naphthalene	U		0.213	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Nitrobenzene	U		0.166	0.333	7.98	20	11/28/2019 06:44	WG1388433
n-Nitrosodimethylamine	U		1.55	0.333	7.98	20	11/28/2019 06:44	WG1388433
n-Nitrosodiphenylamine	U		2.16	0.333	7.98	20	11/28/2019 06:44	WG1388433
n-Nitrosodi-n-propylamine	U		0.217	0.333	7.98	20	11/28/2019 06:44	WG1388433
Phenanthrene	U		0.126	0.0333	0.798	20	11/28/2019 06:44	WG1388433
Pyridine	U		1.50	0.333	7.98	20	11/28/2019 06:44	WG1388433
Benzylbutyl phthalate	U		0.247	0.333	7.98	20	11/28/2019 06:44	WG1388433
Bis(2-ethylhexyl)phthalate	U		0.287	0.333	7.98	20	11/28/2019 06:44	WG1388433
Di-n-butyl phthalate	U		0.261	0.333	7.98	20	11/28/2019 06:44	WG1388433
Diethyl phthalate	U		0.166	0.333	7.98	20	11/28/2019 06:44	WG1388433
Dimethyl phthalate	U		0.129	0.333	7.98	20	11/28/2019 06:44	WG1388433
Di-n-octyl phthalate	U		0.217	0.333	7.98	20	11/28/2019 06:44	WG1388433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Pyrene	U		0.295	0.0333	0.798	20	11/28/2019 06:44	WG1388433
1,2,4-Trichlorobenzene	U		0.210	0.333	7.98	20	11/28/2019 06:44	WG1388433
4-Chloro-3-methylphenol	U		0.114	0.333	7.98	20	11/28/2019 06:44	WG1388433
2-Chlorophenol	U		0.199	0.333	7.98	20	11/28/2019 06:44	WG1388433
2,4-Dichlorophenol	U		0.179	0.333	7.98	20	11/28/2019 06:44	WG1388433
2,4-Dimethylphenol	U		1.13	0.333	7.98	20	11/28/2019 06:44	WG1388433
4,6-Dinitro-2-methylphenol	U		2.97	0.333	7.98	20	11/28/2019 06:44	WG1388433
2,4-Dinitrophenol	U		2.35	0.333	7.98	20	11/28/2019 06:44	WG1388433
2-Methylphenol	U		0.236	0.333	7.98	20	11/28/2019 06:44	WG1388433
3&4-Methyl Phenol	U		0.188	0.333	7.98	20	11/28/2019 06:44	WG1388433
2-Nitrophenol	U		0.311	0.333	7.98	20	11/28/2019 06:44	WG1388433
4-Nitrophenol	U		1.26	0.333	7.98	20	11/28/2019 06:44	WG1388433
Pentachlorophenol	U		1.15	0.333	7.98	20	11/28/2019 06:44	WG1388433
Phenol	U		0.166	0.333	7.98	20	11/28/2019 06:44	WG1388433
2,4,5-Trichlorophenol	U		0.249	0.333	7.98	20	11/28/2019 06:44	WG1388433
2,4,6-Trichlorophenol	U		0.187	0.333	7.98	20	11/28/2019 06:44	WG1388433
(S) 2-Fluorophenol	*53.8*	J7			*12.0-120*		*11/28/2019 06:44*	WG1388433
(S) Phenol-d5	*50.3*	J7			*10.0-120*		*11/28/2019 06:44*	WG1388433
(S) Nitrobenzene-d5	*52.7*	J7			*10.0-122*		*11/28/2019 06:44*	WG1388433
(S) 2-Fluorobiphenyl	*53.7*	J7			*15.0-120*		*11/28/2019 06:44*	WG1388433
(S) 2,4,6-Tribromophenol	*73.8*	J7			*10.0-127*		*11/28/2019 06:44*	WG1388433
(S) p-Terphenyl-d14	*71.6*	J7			*10.0-120*		*11/28/2019 06:44*	WG1388433

Sample Narrative:

L1165628-16 WG1388433: Dilution due to matrix impact during extract concentration procedure

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.8		1	11/29/2019 21:37	WG1388889

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	11.0		0.506	2.00	2.20	1	12/01/2019 21:50	WG1388691
Copper	22.5		0.584	2.00	2.20	1	12/01/2019 21:50	WG1388691
Nickel	27.5		0.540	2.00	2.20	1	12/01/2019 21:50	WG1388691
Zinc	59.2		0.650	5.00	5.51	1	12/01/2019 21:50	WG1388691

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	88.9		1	11/29/2019 21:37	WG1388889

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	4.02		0.518	2.00	2.25	1	12/01/2019 21:53	WG1388691

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	U		15.0	4.00	45.0	10	12/02/2019 18:15	WG1388434
Residual Range Organics (RRO)	129		37.5	10.0	113	10	12/02/2019 18:15	WG1388434
(S) o-Terphenyl	*59.0*				*18.0-148*		*12/02/2019 18:15*	WG1388434

Sample Narrative:

L1165628-18 WG1388434: Dilution due to matrix impact during extract concentration procedure

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acenaphthene	U		0.00723	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Acenaphthylene	U		0.00755	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Anthracene	U		0.00711	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Benzidine	U		0.0717	0.333	0.375	1	11/28/2019 05:11	WG1388431
Benzo(a)anthracene	U		0.00482	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Benzo(b)fluoranthene	U		0.00782	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Benzo(k)fluoranthene	U		0.00655	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Benzo(g,h,i)perylene	U		0.00811	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Benzo(a)pyrene	U		0.00617	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Bis(2-chlorethoxy)methane	U		0.00867	0.333	0.375	1	11/28/2019 05:11	WG1388431
Bis(2-chloroethyl)ether	U		0.0101	0.333	0.375	1	11/28/2019 05:11	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.00855	0.333	0.375	1	11/28/2019 05:11	WG1388431
4-Bromophenyl-phenylether	U		0.0128	0.333	0.375	1	11/28/2019 05:11	WG1388431
2-Chloronaphthalene	U		0.00719	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
4-Chlorophenyl-phenylether	U		0.00706	0.333	0.375	1	11/28/2019 05:11	WG1388431
Chrysene	U		0.00625	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Dibenz(a,h)anthracene	U		0.00924	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
1,2-Dichlorobenzene	U		0.0104	0.333	0.375	1	11/28/2019 05:11	WG1388431
1,3-Dichlorobenzene	U		0.0113	0.333	0.375	1	11/28/2019 05:11	WG1388431
1,4-Dichlorobenzene	U		0.0113	0.333	0.375	1	11/28/2019 05:11	WG1388431
3,3-Dichlorobenzidine	U		0.0894	0.333	0.375	1	11/28/2019 05:11	WG1388431
2,4-Dinitrotoluene	U		0.00683	0.333	0.375	1	11/28/2019 05:11	WG1388431
2,6-Dinitrotoluene	U		0.00829	0.333	0.375	1	11/28/2019 05:11	WG1388431
Fluoranthene	U		0.00558	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Fluorene	U		0.00768	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Hexachlorobenzene	U		0.00963	0.333	0.375	1	11/28/2019 05:11	WG1388431
Hexachloro-1,3-butadiene	U		0.0113	0.333	0.375	1	11/28/2019 05:11	WG1388431
Hexachlorocyclopentadiene	U		0.0661	0.333	0.375	1	11/28/2019 05:11	WG1388431
Hexachloroethane	U		0.0151	0.333	0.375	1	11/28/2019 05:11	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.00869	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Isophorone	U		0.00587	0.333	0.375	1	11/28/2019 05:11	WG1388431
Naphthalene	U		0.0100	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Nitrobenzene	U		0.00782	0.333	0.375	1	11/28/2019 05:11	WG1388431
n-Nitrosodimethylamine	U		0.0728	0.333	0.375	1	11/28/2019 05:11	WG1388431

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
n-Nitrosodiphenylamine	U		0.101	0.333	0.375	1	11/28/2019 05:11	WG1388431
n-Nitrosodi-n-propylamine	U		0.0102	0.333	0.375	1	11/28/2019 05:11	WG1388431
Phenanthrene	U		0.00594	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
Pyridine	U		0.0707	0.333	0.375	1	11/28/2019 05:11	WG1388431
Benzylbutyl phthalate	U		0.0116	0.333	0.375	1	11/28/2019 05:11	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.0135	0.333	0.375	1	11/28/2019 05:11	WG1388431
Di-n-butyl phthalate	U		0.0123	0.333	0.375	1	11/28/2019 05:11	WG1388431
Diethyl phthalate	U		0.00778	0.333	0.375	1	11/28/2019 05:11	WG1388431
Dimethyl phthalate	U		0.00608	0.333	0.375	1	11/28/2019 05:11	WG1388431
Di-n-octyl phthalate	U		0.0102	0.333	0.375	1	11/28/2019 05:11	WG1388431
Pyrene	U		0.0138	0.0333	0.0375	1	11/28/2019 05:11	WG1388431
1,2,4-Trichlorobenzene	U		0.00986	0.333	0.375	1	11/28/2019 05:11	WG1388431
4-Chloro-3-methylphenol	U		0.00537	0.333	0.375	1	11/28/2019 05:11	WG1388431
2-Chlorophenol	U		0.00935	0.333	0.375	1	11/28/2019 05:11	WG1388431
2,4-Dichlorophenol	U		0.00840	0.333	0.375	1	11/28/2019 05:11	WG1388431
2,4-Dimethylphenol	U		0.0530	0.333	0.375	1	11/28/2019 05:11	WG1388431
4,6-Dinitro-2-methylphenol	U		0.140	0.333	0.375	1	11/28/2019 05:11	WG1388431
2,4-Dinitrophenol	U		0.110	0.333	0.375	1	11/28/2019 05:11	WG1388431
2-Methylphenol	U		0.0111	0.333	0.375	1	11/28/2019 05:11	WG1388431
3&4-Methyl Phenol	U		0.00881	0.333	0.375	1	11/28/2019 05:11	WG1388431
2-Nitrophenol	U		0.0146	0.333	0.375	1	11/28/2019 05:11	WG1388431
4-Nitrophenol	U		0.0591	0.333	0.375	1	11/28/2019 05:11	WG1388431
Pentachlorophenol	U		0.0540	0.333	0.375	1	11/28/2019 05:11	WG1388431
Phenol	U		0.00782	0.333	0.375	1	11/28/2019 05:11	WG1388431
2,4,5-Trichlorophenol	U		0.0117	0.333	0.375	1	11/28/2019 05:11	WG1388431
2,4,6-Trichlorophenol	U		0.00877	0.333	0.375	1	11/28/2019 05:11	WG1388431
(S) 2-Fluorophenol	*57.8*				*12.0-120*		*11/28/2019 05:11*	WG1388431
(S) Phenol-d5	*57.2*				*10.0-120*		*11/28/2019 05:11*	WG1388431
(S) Nitrobenzene-d5	*43.4*				*10.0-122*		*11/28/2019 05:11*	WG1388431
(S) 2-Fluorobiphenyl	*46.2*				*15.0-120*		*11/28/2019 05:11*	WG1388431
(S) 2,4,6-Tribromophenol	*81.3*				*10.0-127*		*11/28/2019 05:11*	WG1388431
(S) p-Terphenyl-d14	*67.3*				*10.0-120*		*11/28/2019 05:11*	WG1388431

SB-17D (2-3)
Collected date/time: 11/13/19 14:22

SAMPLE RESULTS - 19
L1165628

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.8		1	11/29/2019 22:47	WG1388891

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.86		0.536	2.00	2.33	1	12/01/2019 21:55	WG1388691

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	5.99		1.55	4.00	4.66	1	11/29/2019 15:46	WG1388434
Residual Range Organics (RRO)	53.5		3.88	10.0	11.7	1	11/29/2019 15:46	WG1388434
(S) o-Terphenyl	*70.0*				*18.0-148*		*11/29/2019 15:46*	WG1388434

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00748	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Acenaphthylene	U		0.00782	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Anthracene	U		0.00737	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Benzidine	U		0.0742	0.333	0.388	1	11/28/2019 02:38	WG1388431
Benzo(a)anthracene	U		0.00499	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Benzo(b)fluoranthene	U		0.00810	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Benzo(k)fluoranthene	U		0.00678	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Benzo(g,h,i)perylene	U		0.00840	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Benzo(a)pyrene	U		0.00639	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Bis(2-chlorethoxy)methane	U		0.00897	0.333	0.388	1	11/28/2019 02:38	WG1388431
Bis(2-chloroethyl)ether	U		0.0104	0.333	0.388	1	11/28/2019 02:38	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.00886	0.333	0.388	1	11/28/2019 02:38	WG1388431
4-Bromophenyl-phenylether	U		0.0133	0.333	0.388	1	11/28/2019 02:38	WG1388431
2-Chloronaphthalene	U		0.00745	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
4-Chlorophenyl-phenylether	U		0.00731	0.333	0.388	1	11/28/2019 02:38	WG1388431
Chrysene	U		0.00647	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Dibenz(a,h)anthracene	U		0.00957	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
1,2-Dichlorobenzene	U		0.0107	0.333	0.388	1	11/28/2019 02:38	WG1388431
1,3-Dichlorobenzene	U		0.0117	0.333	0.388	1	11/28/2019 02:38	WG1388431
1,4-Dichlorobenzene	U		0.0117	0.333	0.388	1	11/28/2019 02:38	WG1388431
3,3-Dichlorobenzidine	U		0.0925	0.333	0.388	1	11/28/2019 02:38	WG1388431
2,4-Dinitrotoluene	U		0.00707	0.333	0.388	1	11/28/2019 02:38	WG1388431
2,6-Dinitrotoluene	U		0.00859	0.333	0.388	1	11/28/2019 02:38	WG1388431
Fluoranthene	U		0.00578	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Fluorene	U		0.00795	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Hexachlorobenzene	U		0.00998	0.333	0.388	1	11/28/2019 02:38	WG1388431
Hexachloro-1,3-butadiene	U		0.0117	0.333	0.388	1	11/28/2019 02:38	WG1388431
Hexachlorocyclopentadiene	U		0.0684	0.333	0.388	1	11/28/2019 02:38	WG1388431
Hexachloroethane	U		0.0156	0.333	0.388	1	11/28/2019 02:38	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.00900	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Isophorone	U		0.00608	0.333	0.388	1	11/28/2019 02:38	WG1388431
Naphthalene	U		0.0104	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
Nitrobenzene	U		0.00810	0.333	0.388	1	11/28/2019 02:38	WG1388431
n-Nitrosodimethylamine	U		0.0754	0.333	0.388	1	11/28/2019 02:38	WG1388431
n-Nitrosodiphenylamine	U		0.105	0.333	0.388	1	11/28/2019 02:38	WG1388431
n-Nitrosodi-n-propylamine	U		0.0106	0.333	0.388	1	11/28/2019 02:38	WG1388431
Phenanthrene	U		0.00615	0.0333	0.0388	1	11/28/2019 02:38	WG1388431

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Pyridine	U		0.0732	0.333	0.388	1	11/28/2019 02:38	WG1388431
Benzylbutyl phthalate	U		0.0120	0.333	0.388	1	11/28/2019 02:38	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.0140	0.333	0.388	1	11/28/2019 02:38	WG1388431
Di-n-butyl phthalate	U		0.0127	0.333	0.388	1	11/28/2019 02:38	WG1388431
Diethyl phthalate	U		0.00805	0.333	0.388	1	11/28/2019 02:38	WG1388431
Dimethyl phthalate	U		0.00629	0.333	0.388	1	11/28/2019 02:38	WG1388431
Di-n-octyl phthalate	U		0.0106	0.333	0.388	1	11/28/2019 02:38	WG1388431
Pyrene	U		0.0143	0.0333	0.0388	1	11/28/2019 02:38	WG1388431
1,2,4-Trichlorobenzene	U		0.0102	0.333	0.388	1	11/28/2019 02:38	WG1388431
4-Chloro-3-methylphenol	U		0.00556	0.333	0.388	1	11/28/2019 02:38	WG1388431
2-Chlorophenol	U		0.00969	0.333	0.388	1	11/28/2019 02:38	WG1388431
2,4-Dichlorophenol	U		0.00869	0.333	0.388	1	11/28/2019 02:38	WG1388431
2,4-Dimethylphenol	U		0.0549	0.333	0.388	1	11/28/2019 02:38	WG1388431
4,6-Dinitro-2-methylphenol	U		0.145	0.333	0.388	1	11/28/2019 02:38	WG1388431
2,4-Dinitrophenol	U		0.114	0.333	0.388	1	11/28/2019 02:38	WG1388431
2-Methylphenol	U		0.0115	0.333	0.388	1	11/28/2019 02:38	WG1388431
3&4-Methyl Phenol	U		0.00913	0.333	0.388	1	11/28/2019 02:38	WG1388431
2-Nitrophenol	U		0.0152	0.333	0.388	1	11/28/2019 02:38	WG1388431
4-Nitrophenol	U		0.0612	0.333	0.388	1	11/28/2019 02:38	WG1388431
Pentachlorophenol	U		0.0559	0.333	0.388	1	11/28/2019 02:38	WG1388431
Phenol	U		0.00810	0.333	0.388	1	11/28/2019 02:38	WG1388431
2,4,5-Trichlorophenol	U		0.0121	0.333	0.388	1	11/28/2019 02:38	WG1388431
2,4,6-Trichlorophenol	U		0.00908	0.333	0.388	1	11/28/2019 02:38	WG1388431
(S) 2-Fluorophenol	*72.5*				*12.0-120*		*11/28/2019 02:38*	WG1388431
(S) Phenol-d5	*68.7*				*10.0-120*		*11/28/2019 02:38*	WG1388431
(S) Nitrobenzene-d5	*56.2*				*10.0-122*		*11/28/2019 02:38*	WG1388431
(S) 2-Fluorobiphenyl	*55.2*				*15.0-120*		*11/28/2019 02:38*	WG1388431
(S) 2,4,6-Tribromophenol	*78.2*				*10.0-127*		*11/28/2019 02:38*	WG1388431
(S) p-Terphenyl-d14	*67.9*				*10.0-120*		*11/28/2019 02:38*	WG1388431

SB-17D (3-4)

Collected date/time: 11/13/19 14:23

SAMPLE RESULTS - 20

L1165628

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	89.5		1	11/29/2019 22:47	WG1388891

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	1.61	B J	1.13	0.100	3.33	29.8	11/27/2019 23:46	WG1388494
(S) a,a,a-Trifluorotoluene(FID)	*99.2*				*77.0-120*		*11/27/2019 23:46*	WG1388494

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	3.95	J	1.49	4.00	4.47	1	11/29/2019 12:34	WG1388434
Residual Range Organics (RRO)	28.4		3.72	10.0	11.2	1	11/29/2019 12:34	WG1388434
(S) o-Terphenyl	*72.4*				*18.0-148*		*11/29/2019 12:34*	WG1388434

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acenaphthene	U		0.00718	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Acenaphthylene	U		0.00750	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Anthracene	U		0.00706	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Benzidine	U		0.0712	0.333	0.372	1	11/28/2019 02:57	WG1388431
Benzo(a)anthracene	U		0.00478	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Benzo(b)fluoranthene	U		0.00777	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Benzo(k)fluoranthene	U		0.00651	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Benzo(g,h,i)perylene	U		0.00806	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Benzo(a)pyrene	U		0.00613	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Bis(2-chlorethoxy)methane	U		0.00861	0.333	0.372	1	11/28/2019 02:57	WG1388431
Bis(2-chloroethyl)ether	U		0.0100	0.333	0.372	1	11/28/2019 02:57	WG1388431
2,2-Oxybis(1-Chloropropane)	U		0.00849	0.333	0.372	1	11/28/2019 02:57	WG1388431
4-Bromophenyl-phenylether	U		0.0127	0.333	0.372	1	11/28/2019 02:57	WG1388431
2-Chloronaphthalene	U		0.00714	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
4-Chlorophenyl-phenylether	U		0.00701	0.333	0.372	1	11/28/2019 02:57	WG1388431
Chrysene	U		0.00620	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Dibenz(a,h)anthracene	U		0.00918	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
1,2-Dichlorobenzene	U		0.0103	0.333	0.372	1	11/28/2019 02:57	WG1388431
1,3-Dichlorobenzene	U		0.0112	0.333	0.372	1	11/28/2019 02:57	WG1388431
1,4-Dichlorobenzene	U		0.0112	0.333	0.372	1	11/28/2019 02:57	WG1388431
3,3-Dichlorobenzidine	U		0.0887	0.333	0.372	1	11/28/2019 02:57	WG1388431
2,4-Dinitrotoluene	U		0.00678	0.333	0.372	1	11/28/2019 02:57	WG1388431
2,6-Dinitrotoluene	U		0.00824	0.333	0.372	1	11/28/2019 02:57	WG1388431
Fluoranthene	U		0.00554	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Fluorene	U		0.00762	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Hexachlorobenzene	U		0.00957	0.333	0.372	1	11/28/2019 02:57	WG1388431
Hexachloro-1,3-butadiene	U		0.0112	0.333	0.372	1	11/28/2019 02:57	WG1388431
Hexachlorocyclopentadiene	U		0.0656	0.333	0.372	1	11/28/2019 02:57	WG1388431
Hexachloroethane	U		0.0150	0.333	0.372	1	11/28/2019 02:57	WG1388431
Indeno(1,2,3-cd)pyrene	U		0.00863	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Isophorone	U		0.00583	0.333	0.372	1	11/28/2019 02:57	WG1388431
Naphthalene	U		0.00994	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Nitrobenzene	U		0.00777	0.333	0.372	1	11/28/2019 02:57	WG1388431
n-Nitrosodimethylamine	U		0.0723	0.333	0.372	1	11/28/2019 02:57	WG1388431
n-Nitrosodiphenylamine	U		0.101	0.333	0.372	1	11/28/2019 02:57	WG1388431
n-Nitrosodi-n-propylamine	U		0.0101	0.333	0.372	1	11/28/2019 02:57	WG1388431

SB-17D (3-4)

Collected date/time: 11/13/19 14:23

SAMPLE RESULTS - 20

L1165628

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Phenanthrene	U		0.00590	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
Pyridine	U		0.0702	0.333	0.372	1	11/28/2019 02:57	WG1388431
Benzylbutyl phthalate	U		0.0115	0.333	0.372	1	11/28/2019 02:57	WG1388431
Bis(2-ethylhexyl)phthalate	U		0.0134	0.333	0.372	1	11/28/2019 02:57	WG1388431
Di-n-butyl phthalate	U		0.0122	0.333	0.372	1	11/28/2019 02:57	WG1388431
Diethyl phthalate	U		0.00772	0.333	0.372	1	11/28/2019 02:57	WG1388431
Dimethyl phthalate	U		0.00604	0.333	0.372	1	11/28/2019 02:57	WG1388431
Di-n-octyl phthalate	U		0.0101	0.333	0.372	1	11/28/2019 02:57	WG1388431
Pyrene	U		0.0137	0.0333	0.0372	1	11/28/2019 02:57	WG1388431
1,2,4-Trichlorobenzene	U		0.00979	0.333	0.372	1	11/28/2019 02:57	WG1388431
4-Chloro-3-methylphenol	U		0.00533	0.333	0.372	1	11/28/2019 02:57	WG1388431
2-Chlorophenol	U		0.00929	0.333	0.372	1	11/28/2019 02:57	WG1388431
2,4-Dichlorophenol	U		0.00834	0.333	0.372	1	11/28/2019 02:57	WG1388431
2,4-Dimethylphenol	U		0.0526	0.333	0.372	1	11/28/2019 02:57	WG1388431
4,6-Dinitro-2-methylphenol	U		0.139	0.333	0.372	1	11/28/2019 02:57	WG1388431
2,4-Dinitrophenol	U		0.110	0.333	0.372	1	11/28/2019 02:57	WG1388431
2-Methylphenol	U		0.0110	0.333	0.372	1	11/28/2019 02:57	WG1388431
3&4-Methyl Phenol	U		0.00875	0.333	0.372	1	11/28/2019 02:57	WG1388431
2-Nitrophenol	U		0.0145	0.333	0.372	1	11/28/2019 02:57	WG1388431
4-Nitrophenol	U		0.0587	0.333	0.372	1	11/28/2019 02:57	WG1388431
Pentachlorophenol	U		0.0537	0.333	0.372	1	11/28/2019 02:57	WG1388431
Phenol	U		0.00777	0.333	0.372	1	11/28/2019 02:57	WG1388431
2,4,5-Trichlorophenol	U		0.0116	0.333	0.372	1	11/28/2019 02:57	WG1388431
2,4,6-Trichlorophenol	U		0.00871	0.333	0.372	1	11/28/2019 02:57	WG1388431
(S) 2-Fluorophenol	*74.2*				*12.0-120*		*11/28/2019 02:57*	WG1388431
(S) Phenol-d5	*72.1*				*10.0-120*		*11/28/2019 02:57*	WG1388431
(S) Nitrobenzene-d5	*58.5*				*10.0-122*		*11/28/2019 02:57*	WG1388431
(S) 2-Fluorobiphenyl	*57.0*				*15.0-120*		*11/28/2019 02:57*	WG1388431
(S) 2,4,6-Tribromophenol	*84.1*				*10.0-127*		*11/28/2019 02:57*	WG1388431
(S) p-Terphenyl-d14	*69.8*				*10.0-120*		*11/28/2019 02:57*	WG1388431

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

SB-18 (2-3)

Collected date/time: 11/14/19 07:57

SAMPLE RESULTS - 21

L1165628

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.5		1	11/21/2019 09:26	WG1384252

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.12	B J	0.980	0.100	2.89	25	11/28/2019 00:48	WG1388494
(S) a,a,a-Trifluorotoluene(FID)	*96.9*				*77.0-120*		*11/28/2019 00:48*	WG1388494

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	80.4	J3 J6	15.4	4.00	46.3	10	12/01/2019 14:04	WG1388517
Residual Range Organics (RRO)	637		38.5	10.0	116	10	12/01/2019 14:04	WG1388517
(S) o-Terphenyl	*65.7*				*18.0-148*		*12/01/2019 14:04*	WG1388517

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0742	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Acenaphthylene	U		0.0776	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Anthracene	U		0.0731	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Benzidine	U		0.737	0.333	3.85	10	11/28/2019 05:08	WG1388433
Benzo(a)anthracene	U		0.0495	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Benzo(b)fluoranthene	U		0.0804	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Benzo(k)fluoranthene	U		0.0673	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Benzo(g,h,i)perylene	U		0.0834	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Benzo(a)pyrene	U		0.0634	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Bis(2-chlorethoxy)methane	U		0.0890	0.333	3.85	10	11/28/2019 05:08	WG1388433
Bis(2-chloroethyl)ether	U		0.104	0.333	3.85	10	11/28/2019 05:08	WG1388433
2,2-Oxybis(1-Chloropropane)	U		0.0879	0.333	3.85	10	11/28/2019 05:08	WG1388433
4-Bromophenyl-phenylether	U		0.132	0.333	3.85	10	11/28/2019 05:08	WG1388433
2-Chloronaphthalene	U		0.0739	0.0333	0.385	10	11/28/2019 05:08	WG1388433
4-Chlorophenyl-phenylether	U		0.0725	0.333	3.85	10	11/28/2019 05:08	WG1388433
Chrysene	U		0.0642	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Dibenz(a,h)anthracene	U		0.0949	0.0333	0.385	10	11/28/2019 05:08	WG1388433
1,2-Dichlorobenzene	U		0.107	0.333	3.85	10	11/28/2019 05:08	WG1388433
1,3-Dichlorobenzene	U		0.116	0.333	3.85	10	11/28/2019 05:08	WG1388433
1,4-Dichlorobenzene	U		0.116	0.333	3.85	10	11/28/2019 05:08	WG1388433
3,3-Dichlorobenzidine	U		0.918	0.333	3.85	10	11/28/2019 05:08	WG1388433
2,4-Dinitrotoluene	U		0.0702	0.333	3.85	10	11/28/2019 05:08	WG1388433
2,6-Dinitrotoluene	U		0.0852	0.333	3.85	10	11/28/2019 05:08	WG1388433
Fluoranthene	U		0.0574	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Fluorene	U		0.0789	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Hexachlorobenzene	U		0.0990	0.333	3.85	10	11/28/2019 05:08	WG1388433
Hexachloro-1,3-butadiene	U		0.116	0.333	3.85	10	11/28/2019 05:08	WG1388433
Hexachlorocyclopentadiene	U		0.679	0.333	3.85	10	11/28/2019 05:08	WG1388433
Hexachloroethane	U		0.155	0.333	3.85	10	11/28/2019 05:08	WG1388433
Indeno(1,2,3-cd)pyrene	U		0.0893	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Isophorone	U		0.0604	0.333	3.85	10	11/28/2019 05:08	WG1388433
Naphthalene	U		0.103	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Nitrobenzene	U		0.0804	0.333	3.85	10	11/28/2019 05:08	WG1388433
n-Nitrosodimethylamine	U		0.748	0.333	3.85	10	11/28/2019 05:08	WG1388433
n-Nitrosodiphenylamine	U		1.04	0.333	3.85	10	11/28/2019 05:08	WG1388433
n-Nitrosodi-n-propylamine	U		0.105	0.333	3.85	10	11/28/2019 05:08	WG1388433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Phenanthrene	U		0.0611	0.0333	0.385	10	11/28/2019 05:08	WG1388433
Pyridine	U		0.726	0.333	3.85	10	11/28/2019 05:08	WG1388433
Benzylbutyl phthalate	U		0.119	0.333	3.85	10	11/28/2019 05:08	WG1388433
Bis(2-ethylhexyl)phthalate	U		0.139	0.333	3.85	10	11/28/2019 05:08	WG1388433
Di-n-butyl phthalate	U		0.126	0.333	3.85	10	11/28/2019 05:08	WG1388433
Diethyl phthalate	U		0.0799	0.333	3.85	10	11/28/2019 05:08	WG1388433
Dimethyl phthalate	U		0.0624	0.333	3.85	10	11/28/2019 05:08	WG1388433
Di-n-octyl phthalate	U		0.105	0.333	3.85	10	11/28/2019 05:08	WG1388433
Pyrene	U		0.142	0.0333	0.385	10	11/28/2019 05:08	WG1388433
1,2,4-Trichlorobenzene	U		0.101	0.333	3.85	10	11/28/2019 05:08	WG1388433
4-Chloro-3-methylphenol	U		0.0552	0.333	3.85	10	11/28/2019 05:08	WG1388433
2-Chlorophenol	U		0.0961	0.333	3.85	10	11/28/2019 05:08	WG1388433
2,4-Dichlorophenol	U		0.0863	0.333	3.85	10	11/28/2019 05:08	WG1388433
2,4-Dimethylphenol	U		0.545	0.333	3.85	10	11/28/2019 05:08	WG1388433
4,6-Dinitro-2-methylphenol	U		1.43	0.333	3.85	10	11/28/2019 05:08	WG1388433
2,4-Dinitrophenol	U		1.13	0.333	3.85	10	11/28/2019 05:08	WG1388433
2-Methylphenol	U		0.114	0.333	3.85	10	11/28/2019 05:08	WG1388433
3&4-Methyl Phenol	U		0.0905	0.333	3.85	10	11/28/2019 05:08	WG1388433
2-Nitrophenol	U		0.150	0.333	3.85	10	11/28/2019 05:08	WG1388433
4-Nitrophenol	U		0.607	0.333	3.85	10	11/28/2019 05:08	WG1388433
Pentachlorophenol	U		0.555	0.333	3.85	10	11/28/2019 05:08	WG1388433
Phenol	U		0.0804	0.333	3.85	10	11/28/2019 05:08	WG1388433
2,4,5-Trichlorophenol	U		0.120	0.333	3.85	10	11/28/2019 05:08	WG1388433
2,4,6-Trichlorophenol	U		0.0901	0.333	3.85	10	11/28/2019 05:08	WG1388433
(S) 2-Fluorophenol	*70.8*				*12.0-120*		*11/28/2019 05:08*	WG1388433
(S) Phenol-d5	*75.2*				*10.0-120*		*11/28/2019 05:08*	WG1388433
(S) Nitrobenzene-d5	*56.2*				*10.0-122*		*11/28/2019 05:08*	WG1388433
(S) 2-Fluorobiphenyl	*65.6*				*15.0-120*		*11/28/2019 05:08*	WG1388433
(S) 2,4,6-Tribromophenol	*87.0*				*10.0-127*		*11/28/2019 05:08*	WG1388433
(S) p-Terphenyl-d14	*90.0*				*10.0-120*		*11/28/2019 05:08*	WG1388433

Sample Narrative:

L1165628-21 WG1388433: Dilution due to matrix impact during extract concentration procedure

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	11/21/2019 09:26	WG1384252

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.907	0.100	2.68	25	11/28/2019 01:08	WG1388494
(S) a,a,a-Trifluorotoluene(FID)	*97.3*				*77.0-120*		*11/28/2019 01:08*	WG1388494

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	29.0	J	14.2	4.00	42.8	10	12/01/2019 13:37	WG1388517
Residual Range Organics (RRO)	424		35.6	10.0	107	10	12/01/2019 13:37	WG1388517
(S) o-Terphenyl	*48.9*				*18.0-148*		*12/01/2019 13:37*	WG1388517

Sample Narrative:

L1165628-22 WG1388517: Dilution due to matrix impact during extract concentration procedure

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acenaphthene	U		0.137	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Acenaphthylene	U		0.144	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Anthracene	U		0.135	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Benzidine	U		1.36	0.333	7.13	20	11/28/2019 06:25	WG1388433
Benzo(a)anthracene	U		0.0916	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Benzo(b)fluoranthene	U		0.149	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Benzo(k)fluoranthene	U		0.125	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Benzo(g,h,i)perylene	U		0.154	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Benzo(a)pyrene	U		0.117	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Bis(2-chlorethoxy)methane	U		0.165	0.333	7.13	20	11/28/2019 06:25	WG1388433
Bis(2-chloroethyl)ether	U		0.192	0.333	7.13	20	11/28/2019 06:25	WG1388433
2,2-Oxybis(1-Chloropropane)	U		0.163	0.333	7.13	20	11/28/2019 06:25	WG1388433
4-Bromophenyl-phenylether	U		0.244	0.333	7.13	20	11/28/2019 06:25	WG1388433
2-Chloronaphthalene	U		0.137	0.0333	0.713	20	11/28/2019 06:25	WG1388433
4-Chlorophenyl-phenylether	U		0.134	0.333	7.13	20	11/28/2019 06:25	WG1388433
Chrysene	U		0.119	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Dibenz(a,h)anthracene	U		0.176	0.0333	0.713	20	11/28/2019 06:25	WG1388433
1,2-Dichlorobenzene	U		0.197	0.333	7.13	20	11/28/2019 06:25	WG1388433
1,3-Dichlorobenzene	U		0.214	0.333	7.13	20	11/28/2019 06:25	WG1388433
1,4-Dichlorobenzene	U		0.214	0.333	7.13	20	11/28/2019 06:25	WG1388433
3,3-Dichlorobenzidine	U		1.70	0.333	7.13	20	11/28/2019 06:25	WG1388433
2,4-Dinitrotoluene	U		0.130	0.333	7.13	20	11/28/2019 06:25	WG1388433
2,6-Dinitrotoluene	U		0.158	0.333	7.13	20	11/28/2019 06:25	WG1388433
Fluoranthene	U		0.106	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Fluorene	U		0.146	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Hexachlorobenzene	U		0.183	0.333	7.13	20	11/28/2019 06:25	WG1388433
Hexachloro-1,3-butadiene	U		0.214	0.333	7.13	20	11/28/2019 06:25	WG1388433
Hexachlorocyclopentadiene	U		1.26	0.333	7.13	20	11/28/2019 06:25	WG1388433
Hexachloroethane	U		0.287	0.333	7.13	20	11/28/2019 06:25	WG1388433
Indeno(1,2,3-cd)pyrene	U		0.165	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Isophorone	U		0.112	0.333	7.13	20	11/28/2019 06:25	WG1388433
Naphthalene	U		0.190	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Nitrobenzene	U		0.149	0.333	7.13	20	11/28/2019 06:25	WG1388433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
n-Nitrosodimethylamine	U		1.39	0.333	7.13	20	11/28/2019 06:25	WG1388433
n-Nitrosodiphenylamine	U		1.93	0.333	7.13	20	11/28/2019 06:25	WG1388433
n-Nitrosodi-n-propylamine	U		0.194	0.333	7.13	20	11/28/2019 06:25	WG1388433
Phenanthrene	U		0.113	0.0333	0.713	20	11/28/2019 06:25	WG1388433
Pyridine	U		1.34	0.333	7.13	20	11/28/2019 06:25	WG1388433
Benzylbutyl phthalate	U		0.221	0.333	7.13	20	11/28/2019 06:25	WG1388433
Bis(2-ethylhexyl)phthalate	U		0.257	0.333	7.13	20	11/28/2019 06:25	WG1388433
Di-n-butyl phthalate	U		0.233	0.333	7.13	20	11/28/2019 06:25	WG1388433
Diethyl phthalate	U		0.148	0.333	7.13	20	11/28/2019 06:25	WG1388433
Dimethyl phthalate	U		0.116	0.333	7.13	20	11/28/2019 06:25	WG1388433
Di-n-octyl phthalate	U		0.194	0.333	7.13	20	11/28/2019 06:25	WG1388433
Pyrene	U		0.263	0.0333	0.713	20	11/28/2019 06:25	WG1388433
1,2,4-Trichlorobenzene	U		0.188	0.333	7.13	20	11/28/2019 06:25	WG1388433
4-Chloro-3-methylphenol	U		0.102	0.333	7.13	20	11/28/2019 06:25	WG1388433
2-Chlorophenol	U		0.178	0.333	7.13	20	11/28/2019 06:25	WG1388433
2,4-Dichlorophenol	U		0.160	0.333	7.13	20	11/28/2019 06:25	WG1388433
2,4-Dimethylphenol	U		1.01	0.333	7.13	20	11/28/2019 06:25	WG1388433
4,6-Dinitro-2-methylphenol	U		2.65	0.333	7.13	20	11/28/2019 06:25	WG1388433
2,4-Dinitrophenol	U		2.10	0.333	7.13	20	11/28/2019 06:25	WG1388433
2-Methylphenol	U		0.211	0.333	7.13	20	11/28/2019 06:25	WG1388433
3&4-Methyl Phenol	U		0.168	0.333	7.13	20	11/28/2019 06:25	WG1388433
2-Nitrophenol	U		0.278	0.333	7.13	20	11/28/2019 06:25	WG1388433
4-Nitrophenol	U		1.12	0.333	7.13	20	11/28/2019 06:25	WG1388433
Pentachlorophenol	U		1.03	0.333	7.13	20	11/28/2019 06:25	WG1388433
Phenol	U		0.149	0.333	7.13	20	11/28/2019 06:25	WG1388433
2,4,5-Trichlorophenol	U		0.223	0.333	7.13	20	11/28/2019 06:25	WG1388433
2,4,6-Trichlorophenol	U		0.167	0.333	7.13	20	11/28/2019 06:25	WG1388433
(S) 2-Fluorophenol	*69.7*	J7			*12.0-120*		*11/28/2019 06:25*	WG1388433
(S) Phenol-d5	*70.1*	J7			*10.0-120*		*11/28/2019 06:25*	WG1388433
(S) Nitrobenzene-d5	*70.9*	J7			*10.0-122*		*11/28/2019 06:25*	WG1388433
(S) 2-Fluorobiphenyl	*69.1*	J7			*15.0-120*		*11/28/2019 06:25*	WG1388433
(S) 2,4,6-Tribromophenol	*83.9*	J7			*10.0-127*		*11/28/2019 06:25*	WG1388433
(S) p-Terphenyl-d14	*84.4*	J7			*10.0-120*		*11/28/2019 06:25*	WG1388433

Sample Narrative:

L1165628-22 WG1388433: Dilution due to matrix impact during extract concentration procedure

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

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	91.5		1	12/03/2019 11:32	WG1389702

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	8.97	B	0.927	0.100	2.73	25	11/28/2019 01:29	WG1388494
(S) a,a,a-Trifluorotoluene(FID)	*97.5*				*77.0-120*		*11/28/2019 01:29*	WG1388494

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	292		29.1	4.00	87.5	20	12/04/2019 01:36	WG1389942
Residual Range Organics (RRO)	432		72.8	10.0	219	20	12/04/2019 01:36	WG1389942
(S) o-Terphenyl	*79.6*	J7			*18.0-148*		*12/04/2019 01:36*	WG1389942

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acenaphthene	U		0.0702	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Acenaphthylene	U		0.0734	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Anthracene	U		0.0691	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Benzidine	U		0.696	0.333	3.64	10	11/28/2019 05:27	WG1388433
Benzo(a)anthracene	U		0.0468	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Benzo(b)fluoranthene	U		0.0760	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Benzo(k)fluoranthene	U		0.0636	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Benzo(g,h,i)perylene	U		0.0788	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Benzo(a)pyrene	U		0.0599	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Bis(2-chlorethoxy)methane	U		0.0842	0.333	3.64	10	11/28/2019 05:27	WG1388433
Bis(2-chloroethyl)ether	U		0.0980	0.333	3.64	10	11/28/2019 05:27	WG1388433
2,2-Oxybis(1-Chloropropane)	U		0.0831	0.333	3.64	10	11/28/2019 05:27	WG1388433
4-Bromophenyl-phenylether	U		0.125	0.333	3.64	10	11/28/2019 05:27	WG1388433
2-Chloronaphthalene	U		0.0699	0.0333	0.364	10	11/28/2019 05:27	WG1388433
4-Chlorophenyl-phenylether	U		0.0686	0.333	3.64	10	11/28/2019 05:27	WG1388433
Chrysene	U		0.0607	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Dibenz(a,h)anthracene	U		0.0898	0.0333	0.364	10	11/28/2019 05:27	WG1388433
1,2-Dichlorobenzene	U		0.101	0.333	3.64	10	11/28/2019 05:27	WG1388433
1,3-Dichlorobenzene	U		0.109	0.333	3.64	10	11/28/2019 05:27	WG1388433
1,4-Dichlorobenzene	U		0.109	0.333	3.64	10	11/28/2019 05:27	WG1388433
3,3-Dichlorobenzidine	U		0.868	0.333	3.64	10	11/28/2019 05:27	WG1388433
2,4-Dinitrotoluene	U		0.0664	0.333	3.64	10	11/28/2019 05:27	WG1388433
2,6-Dinitrotoluene	U		0.0806	0.333	3.64	10	11/28/2019 05:27	WG1388433
Fluoranthene	U		0.0542	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Fluorene	U		0.0746	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Hexachlorobenzene	U		0.0936	0.333	3.64	10	11/28/2019 05:27	WG1388433
Hexachloro-1,3-butadiene	U		0.109	0.333	3.64	10	11/28/2019 05:27	WG1388433
Hexachlorocyclopentadiene	U		0.642	0.333	3.64	10	11/28/2019 05:27	WG1388433
Hexachloroethane	U		0.147	0.333	3.64	10	11/28/2019 05:27	WG1388433
Indeno(1,2,3-cd)pyrene	U		0.0844	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Isophorone	U		0.0571	0.333	3.64	10	11/28/2019 05:27	WG1388433
Naphthalene	U		0.0972	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Nitrobenzene	U		0.0760	0.333	3.64	10	11/28/2019 05:27	WG1388433
n-Nitrosodimethylamine	U		0.707	0.333	3.64	10	11/28/2019 05:27	WG1388433
n-Nitrosodiphenylamine	U		0.984	0.333	3.64	10	11/28/2019 05:27	WG1388433
n-Nitrosodi-n-propylamine	U		0.0991	0.333	3.64	10	11/28/2019 05:27	WG1388433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Phenanthrene	U		0.0577	0.0333	0.364	10	11/28/2019 05:27	WG1388433
Pyridine	U		0.687	0.333	3.64	10	11/28/2019 05:27	WG1388433
Benzylbutyl phthalate	U		0.113	0.333	3.64	10	11/28/2019 05:27	WG1388433
Bis(2-ethylhexyl)phthalate	U		0.131	0.333	3.64	10	11/28/2019 05:27	WG1388433
Di-n-butyl phthalate	U		0.119	0.333	3.64	10	11/28/2019 05:27	WG1388433
Diethyl phthalate	U		0.0756	0.333	3.64	10	11/28/2019 05:27	WG1388433
Dimethyl phthalate	U		0.0590	0.333	3.64	10	11/28/2019 05:27	WG1388433
Di-n-octyl phthalate	U		0.0992	0.333	3.64	10	11/28/2019 05:27	WG1388433
Pyrene	U		0.134	0.0333	0.364	10	11/28/2019 05:27	WG1388433
1,2,4-Trichlorobenzene	U		0.0958	0.333	3.64	10	11/28/2019 05:27	WG1388433
4-Chloro-3-methylphenol	U		0.0522	0.333	3.64	10	11/28/2019 05:27	WG1388433
2-Chlorophenol	U		0.0909	0.333	3.64	10	11/28/2019 05:27	WG1388433
2,4-Dichlorophenol	U		0.0816	0.333	3.64	10	11/28/2019 05:27	WG1388433
2,4-Dimethylphenol	U		0.515	0.333	3.64	10	11/28/2019 05:27	WG1388433
4,6-Dinitro-2-methylphenol	U		1.36	0.333	3.64	10	11/28/2019 05:27	WG1388433
2,4-Dinitrophenol	U		1.07	0.333	3.64	10	11/28/2019 05:27	WG1388433
2-Methylphenol	U		0.108	0.333	3.64	10	11/28/2019 05:27	WG1388433
3&4-Methyl Phenol	U		0.0856	0.333	3.64	10	11/28/2019 05:27	WG1388433
2-Nitrophenol	U		0.142	0.333	3.64	10	11/28/2019 05:27	WG1388433
4-Nitrophenol	U		0.574	0.333	3.64	10	11/28/2019 05:27	WG1388433
Pentachlorophenol	U		0.525	0.333	3.64	10	11/28/2019 05:27	WG1388433
Phenol	U		0.0760	0.333	3.64	10	11/28/2019 05:27	WG1388433
2,4,5-Trichlorophenol	U		0.114	0.333	3.64	10	11/28/2019 05:27	WG1388433
2,4,6-Trichlorophenol	U		0.0852	0.333	3.64	10	11/28/2019 05:27	WG1388433
(S) 2-Fluorophenol	*57.7*				*12.0-120*		*11/28/2019 05:27*	WG1388433
(S) Phenol-d5	*57.5*				*10.0-120*		*11/28/2019 05:27*	WG1388433
(S) Nitrobenzene-d5	*55.7*				*10.0-122*		*11/28/2019 05:27*	WG1388433
(S) 2-Fluorobiphenyl	*60.3*				*15.0-120*		*11/28/2019 05:27*	WG1388433
(S) 2,4,6-Tribromophenol	*85.5*				*10.0-127*		*11/28/2019 05:27*	WG1388433
(S) p-Terphenyl-d14	*80.9*				*10.0-120*		*11/28/2019 05:27*	WG1388433

Sample Narrative:

L1165628-23 WG1388433: Dilution due to matrix impact during extract concentration procedure

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

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.9		1	12/03/2019 11:32	WG1389702

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2.00	B J	1.26	0.100	3.73	35	11/28/2019 01:49	WG1388494
(S) a,a,a-Trifluorotoluene(FID)	*96.7*				*77.0-120*		*11/28/2019 01:49*	WG1388494

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	38.8	J	14.2	4.00	42.6	10	11/30/2019 05:32	WG1388517
Residual Range Organics (RRO)	345		35.5	10.0	107	10	11/30/2019 05:32	WG1388517
(S) o-Terphenyl	*82.3*				*18.0-148*		*11/30/2019 05:32*	WG1388517

Sample Narrative:

L1165628-24 WG1388517: Dilution due to matrix impact during extract concentration procedure

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0684	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Acenaphthylene	U		0.0715	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Anthracene	U		0.0673	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Benzidine	U		0.678	0.333	3.55	10	11/28/2019 04:48	WG1388433
Benzo(a)anthracene	U		0.0456	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Benzo(b)fluoranthene	U		0.0740	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Benzo(k)fluoranthene	U		0.0620	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Benzo(g,h,i)perylene	U		0.0768	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Benzo(a)pyrene	U		0.0584	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Bis(2-chlorethoxy)methane	U		0.0820	0.333	3.55	10	11/28/2019 04:48	WG1388433
Bis(2-chloroethyl)ether	U		0.0954	0.333	3.55	10	11/28/2019 04:48	WG1388433
2,2-Oxybis(1-Chloropropane)	U		0.0809	0.333	3.55	10	11/28/2019 04:48	WG1388433
4-Bromophenyl-phenylether	U		0.121	0.333	3.55	10	11/28/2019 04:48	WG1388433
2-Chloronaphthalene	U		0.0681	0.0333	0.355	10	11/28/2019 04:48	WG1388433
4-Chlorophenyl-phenylether	U		0.0668	0.333	3.55	10	11/28/2019 04:48	WG1388433
Chrysene	U		0.0591	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Dibenz(a,h)anthracene	U		0.0874	0.0333	0.355	10	11/28/2019 04:48	WG1388433
1,2-Dichlorobenzene	U		0.0981	0.333	3.55	10	11/28/2019 04:48	WG1388433
1,3-Dichlorobenzene	U		0.107	0.333	3.55	10	11/28/2019 04:48	WG1388433
1,4-Dichlorobenzene	U		0.107	0.333	3.55	10	11/28/2019 04:48	WG1388433
3,3-Dichlorobenzidine	U		0.846	0.333	3.55	10	11/28/2019 04:48	WG1388433
2,4-Dinitrotoluene	U		0.0647	0.333	3.55	10	11/28/2019 04:48	WG1388433
2,6-Dinitrotoluene	U		0.0785	0.333	3.55	10	11/28/2019 04:48	WG1388433
Fluoranthene	U		0.0528	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Fluorene	U		0.0726	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Hexachlorobenzene	U		0.0912	0.333	3.55	10	11/28/2019 04:48	WG1388433
Hexachloro-1,3-butadiene	U		0.107	0.333	3.55	10	11/28/2019 04:48	WG1388433
Hexachlorocyclopentadiene	U		0.625	0.333	3.55	10	11/28/2019 04:48	WG1388433
Hexachloroethane	U		0.143	0.333	3.55	10	11/28/2019 04:48	WG1388433
Indeno(1,2,3-cd)pyrene	U		0.0822	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Isophorone	U		0.0556	0.333	3.55	10	11/28/2019 04:48	WG1388433
Naphthalene	U		0.0947	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Nitrobenzene	U		0.0740	0.333	3.55	10	11/28/2019 04:48	WG1388433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
n-Nitrosodimethylamine	U		0.689	0.333	3.55	10	11/28/2019 04:48	WG1388433
n-Nitrosodiphenylamine	U		0.959	0.333	3.55	10	11/28/2019 04:48	WG1388433
n-Nitrosodi-n-propylamine	U		0.0965	0.333	3.55	10	11/28/2019 04:48	WG1388433
Phenanthrene	U		0.0562	0.0333	0.355	10	11/28/2019 04:48	WG1388433
Pyridine	U		0.669	0.333	3.55	10	11/28/2019 04:48	WG1388433
Benzylbutyl phthalate	U		0.110	0.333	3.55	10	11/28/2019 04:48	WG1388433
Bis(2-ethylhexyl)phthalate	U		0.128	0.333	3.55	10	11/28/2019 04:48	WG1388433
Di-n-butyl phthalate	U		0.116	0.333	3.55	10	11/28/2019 04:48	WG1388433
Diethyl phthalate	U		0.0736	0.333	3.55	10	11/28/2019 04:48	WG1388433
Dimethyl phthalate	U		0.0575	0.333	3.55	10	11/28/2019 04:48	WG1388433
Di-n-octyl phthalate	U		0.0966	0.333	3.55	10	11/28/2019 04:48	WG1388433
Pyrene	U		0.131	0.0333	0.355	10	11/28/2019 04:48	WG1388433
1,2,4-Trichlorobenzene	U		0.0933	0.333	3.55	10	11/28/2019 04:48	WG1388433
4-Chloro-3-methylphenol	U		0.0508	0.333	3.55	10	11/28/2019 04:48	WG1388433
2-Chlorophenol	U		0.0885	0.333	3.55	10	11/28/2019 04:48	WG1388433
2,4-Dichlorophenol	U		0.0795	0.333	3.55	10	11/28/2019 04:48	WG1388433
2,4-Dimethylphenol	U		0.502	0.333	3.55	10	11/28/2019 04:48	WG1388433
4,6-Dinitro-2-methylphenol	U		1.32	0.333	3.55	10	11/28/2019 04:48	WG1388433
2,4-Dinitrophenol	U		1.04	0.333	3.55	10	11/28/2019 04:48	WG1388433
2-Methylphenol	U		0.105	0.333	3.55	10	11/28/2019 04:48	WG1388433
3&4-Methyl Phenol	U		0.0834	0.333	3.55	10	11/28/2019 04:48	WG1388433
2-Nitrophenol	U		0.138	0.333	3.55	10	11/28/2019 04:48	WG1388433
4-Nitrophenol	U		0.559	0.333	3.55	10	11/28/2019 04:48	WG1388433
Pentachlorophenol	U		0.511	0.333	3.55	10	11/28/2019 04:48	WG1388433
Phenol	U		0.0740	0.333	3.55	10	11/28/2019 04:48	WG1388433
2,4,5-Trichlorophenol	U		0.111	0.333	3.55	10	11/28/2019 04:48	WG1388433
2,4,6-Trichlorophenol	U		0.0830	0.333	3.55	10	11/28/2019 04:48	WG1388433
(S) 2-Fluorophenol	*67.1*				*12.0-120*		*11/28/2019 04:48*	WG1388433
(S) Phenol-d5	*72.2*				*10.0-120*		*11/28/2019 04:48*	WG1388433
(S) Nitrobenzene-d5	*58.4*				*10.0-122*		*11/28/2019 04:48*	WG1388433
(S) 2-Fluorobiphenyl	*65.7*				*15.0-120*		*11/28/2019 04:48*	WG1388433
(S) 2,4,6-Tribromophenol	*102*				*10.0-127*		*11/28/2019 04:48*	WG1388433
(S) p-Terphenyl-d14	*93.3*				*10.0-120*		*11/28/2019 04:48*	WG1388433

Sample Narrative:

L1165628-24 WG1388433: Dilution due to matrix impact during extract concentration procedure

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.1		1	12/03/2019 11:32	WG1389702

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	1.18	B J	0.910	0.100	2.68	25	11/28/2019 02:10	WG1388494
(S) a,a,a-Trifluorotoluene(FID)	*98.5*				*77.0-120*		*11/28/2019 02:10*	WG1388494

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	37.1	J	14.3	4.00	43.0	10	11/30/2019 05:45	WG1388517
Residual Range Organics (RRO)	376		35.8	10.0	107	10	11/30/2019 05:45	WG1388517
(S) o-Terphenyl	*76.2*				*18.0-148*		*11/30/2019 05:45*	WG1388517

Sample Narrative:

L1165628-25 WG1388517: Dilution due to matrix impact during extract concentration procedure

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acenaphthene	U		0.0689	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Acenaphthylene	U		0.0721	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Anthracene	U		0.0679	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Benzidine	U		0.684	0.333	3.58	10	11/28/2019 05:46	WG1388433
Benzo(a)anthracene	U		0.0460	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Benzo(b)fluoranthene	U		0.0746	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Benzo(k)fluoranthene	U		0.0625	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Benzo(g,h,i)perylene	U		0.0774	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Benzo(a)pyrene	U		0.0589	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Bis(2-chlorethoxy)methane	U		0.0827	0.333	3.58	10	11/28/2019 05:46	WG1388433
Bis(2-chloroethyl)ether	U		0.0962	0.333	3.58	10	11/28/2019 05:46	WG1388433
2,2-Oxybis(1-Chloropropane)	U		0.0816	0.333	3.58	10	11/28/2019 05:46	WG1388433
4-Bromophenyl-phenylether	U		0.122	0.333	3.58	10	11/28/2019 05:46	WG1388433
2-Chloronaphthalene	U		0.0686	0.0333	0.358	10	11/28/2019 05:46	WG1388433
4-Chlorophenyl-phenylether	U		0.0673	0.333	3.58	10	11/28/2019 05:46	WG1388433
Chrysene	U		0.0596	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Dibenz(a,h)anthracene	U		0.0882	0.0333	0.358	10	11/28/2019 05:46	WG1388433
1,2-Dichlorobenzene	U		0.0989	0.333	3.58	10	11/28/2019 05:46	WG1388433
1,3-Dichlorobenzene	U		0.107	0.333	3.58	10	11/28/2019 05:46	WG1388433
1,4-Dichlorobenzene	U		0.107	0.333	3.58	10	11/28/2019 05:46	WG1388433
3,3-Dichlorobenzidine	U		0.853	0.333	3.58	10	11/28/2019 05:46	WG1388433
2,4-Dinitrotoluene	U		0.0652	0.333	3.58	10	11/28/2019 05:46	WG1388433
2,6-Dinitrotoluene	U		0.0792	0.333	3.58	10	11/28/2019 05:46	WG1388433
Fluoranthene	U		0.0533	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Fluorene	U		0.0732	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Hexachlorobenzene	U		0.0919	0.333	3.58	10	11/28/2019 05:46	WG1388433
Hexachloro-1,3-butadiene	U		0.107	0.333	3.58	10	11/28/2019 05:46	WG1388433
Hexachlorocyclopentadiene	U		0.630	0.333	3.58	10	11/28/2019 05:46	WG1388433
Hexachloroethane	U		0.144	0.333	3.58	10	11/28/2019 05:46	WG1388433
Indeno(1,2,3-cd)pyrene	U		0.0829	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Isophorone	U		0.0561	0.333	3.58	10	11/28/2019 05:46	WG1388433
Naphthalene	U		0.0955	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Nitrobenzene	U		0.0746	0.333	3.58	10	11/28/2019 05:46	WG1388433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
n-Nitrosodimethylamine	U		0.695	0.333	3.58	10	11/28/2019 05:46	WG1388433
n-Nitrosodiphenylamine	U		0.967	0.333	3.58	10	11/28/2019 05:46	WG1388433
n-Nitrosodi-n-propylamine	U		0.0973	0.333	3.58	10	11/28/2019 05:46	WG1388433
Phenanthrene	U		0.0567	0.0333	0.358	10	11/28/2019 05:46	WG1388433
Pyridine	U		0.674	0.333	3.58	10	11/28/2019 05:46	WG1388433
Benzylbutyl phthalate	U		0.111	0.333	3.58	10	11/28/2019 05:46	WG1388433
Bis(2-ethylhexyl)phthalate	U		0.129	0.333	3.58	10	11/28/2019 05:46	WG1388433
Di-n-butyl phthalate	U		0.117	0.333	3.58	10	11/28/2019 05:46	WG1388433
Diethyl phthalate	U		0.0742	0.333	3.58	10	11/28/2019 05:46	WG1388433
Dimethyl phthalate	U		0.0580	0.333	3.58	10	11/28/2019 05:46	WG1388433
Di-n-octyl phthalate	U		0.0974	0.333	3.58	10	11/28/2019 05:46	WG1388433
Pyrene	U		0.132	0.0333	0.358	10	11/28/2019 05:46	WG1388433
1,2,4-Trichlorobenzene	U		0.0941	0.333	3.58	10	11/28/2019 05:46	WG1388433
4-Chloro-3-methylphenol	U		0.0512	0.333	3.58	10	11/28/2019 05:46	WG1388433
2-Chlorophenol	U		0.0892	0.333	3.58	10	11/28/2019 05:46	WG1388433
2,4-Dichlorophenol	U		0.0801	0.333	3.58	10	11/28/2019 05:46	WG1388433
2,4-Dimethylphenol	U		0.506	0.333	3.58	10	11/28/2019 05:46	WG1388433
4,6-Dinitro-2-methylphenol	U		1.33	0.333	3.58	10	11/28/2019 05:46	WG1388433
2,4-Dinitrophenol	U		1.05	0.333	3.58	10	11/28/2019 05:46	WG1388433
2-Methylphenol	U		0.106	0.333	3.58	10	11/28/2019 05:46	WG1388433
3&4-Methyl Phenol	U		0.0841	0.333	3.58	10	11/28/2019 05:46	WG1388433
2-Nitrophenol	U		0.140	0.333	3.58	10	11/28/2019 05:46	WG1388433
4-Nitrophenol	U		0.564	0.333	3.58	10	11/28/2019 05:46	WG1388433
Pentachlorophenol	U		0.516	0.333	3.58	10	11/28/2019 05:46	WG1388433
Phenol	U		0.0746	0.333	3.58	10	11/28/2019 05:46	WG1388433
2,4,5-Trichlorophenol	U		0.112	0.333	3.58	10	11/28/2019 05:46	WG1388433
2,4,6-Trichlorophenol	U		0.0837	0.333	3.58	10	11/28/2019 05:46	WG1388433
(S) 2-Fluorophenol	*59.7*				*12.0-120*		*11/28/2019 05:46*	WG1388433
(S) Phenol-d5	*64.3*				*10.0-120*		*11/28/2019 05:46*	WG1388433
(S) Nitrobenzene-d5	*44.8*				*10.0-122*		*11/28/2019 05:46*	WG1388433
(S) 2-Fluorobiphenyl	*58.9*				*15.0-120*		*11/28/2019 05:46*	WG1388433
(S) 2,4,6-Tribromophenol	*77.1*				*10.0-127*		*11/28/2019 05:46*	WG1388433
(S) p-Terphenyl-d14	*79.9*				*10.0-120*		*11/28/2019 05:46*	WG1388433

Sample Narrative:

L1165628-25 WG1388433: Dilution due to matrix impact during extract concentration procedure

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5		1	12/03/2019 11:32	WG1389702

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	4.72		1.42	4.00	4.28	1	11/29/2019 16:37	WG1388434
Residual Range Organics (RRO)	52.8		3.56	10.0	10.7	1	11/29/2019 16:37	WG1388434
(S) o-Terphenyl	*88.4*				*18.0-148*		*11/29/2019 16:37*	WG1388434

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.0		1	12/03/2019 11:32	WG1389702

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	28.1	J	14.6	4.00	44.0	10	11/29/2019 16:11	WG1388434
Residual Range Organics (RRO)	455		36.6	10.0	110	10	11/29/2019 16:11	WG1388434
(S) o-Terphenyl	*88.5*				*18.0-148*		*11/29/2019 16:11*	WG1388434

Sample Narrative:

L1165628-27 WG1388434: Dilution due to matrix impact during extract concentration procedure

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.0		1	12/03/2019 11:19	WG1389703

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	21.1		1.48	4.00	4.44	1	11/29/2019 16:49	WG1388434
Residual Range Organics (RRO)	76.7		3.70	10.0	11.1	1	11/29/2019 16:49	WG1388434
(S) o-Terphenyl	*46.5*				*18.0-148*		*11/29/2019 16:49*	WG1388434

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.1		1	12/03/2019 11:19	WG1389703

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	8.59		0.202	0.500	0.531	1	12/01/2019 21:58	WG1388691

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	78.7		1	12/03/2019 11:19	WG1389703

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Copper	19.6		0.674	2.00	2.54	1	12/01/2019 22:00	WG1388691
Lead	14.1		0.241	0.500	0.636	1	12/01/2019 22:00	WG1388691
Nickel	35.1		0.623	2.00	2.54	1	12/01/2019 22:00	WG1388691
Zinc	50.2		0.750	5.00	6.36	1	12/01/2019 22:00	WG1388691

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.5		1	12/03/2019 11:19	WG1389703

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	12.6		0.225	0.500	0.592	1	12/01/2019 22:03	WG1388691

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.9		1	11/22/2019 15:46	WG1384986

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	14.9		0.238	0.500	0.625	1	12/01/2019 22:05	WG1388691

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.2		1	12/03/2019 11:19	WG1389703

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	26.7		0.206	0.500	0.542	1	12/01/2019 22:08	WG1388691

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.5		1	12/03/2019 11:19	WG1389703

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	137	J6	0.208	0.500	0.546	1	12/01/2019 21:25	WG1388691

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.7		1	12/03/2019 11:19	WG1389703

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	3.24		0.203	0.500	0.534	1	12/01/2019 22:11	WG1388691

SB-27 (9-10)

Collected date/time: 11/14/19 08:47

SAMPLE RESULTS - 36

L1165628

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.3		1	12/03/2019 11:19	WG1389703

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	10.2		0.201	0.500	0.530	1	12/01/2019 22:18	WG1388691

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.7		1	12/03/2019 11:19	WG1389703

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	25.3		0.207	0.500	0.545	1	12/01/2019 22:21	WG1388691

SB-27 (19-20)

Collected date/time: 11/14/19 08:53

SAMPLE RESULTS - 38

L1165628

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.2		1	11/22/2019 15:04	WG1384990

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	30.8		0.228	0.500	0.601	1	12/01/2019 22:23	WG1388691

SB-30 (3-3.5)

Collected date/time: 11/14/19 13:39

SAMPLE RESULTS - 39

L1165628

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.1		1	12/03/2019 11:19	WG1389703

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.31		0.499	2.00	2.17	1	12/01/2019 22:26	WG1388691
Chromium	31.8		0.152	1.00	1.09	1	12/01/2019 22:26	WG1388691
Lead	27.5		0.206	0.500	0.543	1	12/01/2019 22:26	WG1388691

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00147	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Alpha BHC	U		0.00148	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Beta BHC	U		0.00174	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Delta BHC	U		0.00155	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Gamma BHC	U		0.00157	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Chlordane	U		0.0423	0.200	0.217	1	12/02/2019 16:12	WG1388462
4,4-DDD	U		0.00169	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
4,4-DDE	U		0.00167	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
4,4-DDT	0.00432	J	0.00217	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Dieldrin	0.00186	J	0.00165	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Endosulfan I	U		0.00162	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Endosulfan II	U		0.00174	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Endosulfan sulfate	U		0.00164	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Endrin	U		0.00170	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Endrin aldehyde	U		0.00140	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Endrin ketone	U		0.00179	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Hexachlorobenzene	U		0.00135	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Heptachlor	U		0.00167	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Heptachlor epoxide	U		0.00175	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Methoxychlor	U		0.00193	0.0200	0.0217	1	12/02/2019 16:12	WG1388462
Toxaphene	U		0.0391	0.400	0.434	1	12/02/2019 16:12	WG1388462
(S) Decachlorobiphenyl	*71.0*				*10.0-135*		*12/02/2019 16:12*	WG1388462
(S) Tetrachloro-m-xylene	*79.4*				*10.0-139*		*12/02/2019 16:12*	WG1388462

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	12/03/2019 11:07	WG1389704

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	13.2		0.496	2.00	2.16	1	12/01/2019 22:29	WG1388691
Chromium	28.7		0.151	1.00	1.08	1	12/01/2019 22:29	WG1388691
Lead	12.0		0.205	0.500	0.539	1	12/01/2019 22:29	WG1388691

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00146	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Alpha BHC	U		0.00147	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Beta BHC	U		0.00173	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Delta BHC	U		0.00154	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Gamma BHC	U		0.00156	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Chlordane	U		0.0421	0.200	0.216	1	12/01/2019 15:39	WG1388462
4,4-DDD	U		0.00168	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
4,4-DDE	U		0.00166	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
4,4-DDT	U		0.00216	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Dieldrin	U		0.00164	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Endosulfan I	U		0.00161	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Endosulfan II	U		0.00173	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Endosulfan sulfate	U		0.00163	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Endrin	U		0.00169	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Endrin aldehyde	U		0.00139	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Endrin ketone	U		0.00178	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Hexachlorobenzene	U		0.00134	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Heptachlor	U		0.00166	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Heptachlor epoxide	U		0.00174	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Methoxychlor	U		0.00192	0.0200	0.0216	1	12/01/2019 15:39	WG1388462
Toxaphene	U		0.0388	0.400	0.432	1	12/01/2019 15:39	WG1388462
(S) Decachlorobiphenyl	*77.9*				*10.0-135*		*12/01/2019 15:39*	WG1388462
(S) Tetrachloro-m-xylene	*70.9*				*10.0-139*		*12/01/2019 15:39*	WG1388462

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.4		1	12/03/2019 11:07	WG1389704

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	170		0.503	2.00	2.19	1	12/01/2019 22:31	WG1388691
Cadmium	1.13		0.0766	0.500	0.547	1	12/01/2019 22:31	WG1388691

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00148	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Alpha BHC	U		0.00149	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Beta BHC	U		0.00175	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Delta BHC	U		0.00156	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Gamma BHC	U		0.00159	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Chlordane	U		0.0427	0.200	0.219	1	12/01/2019 15:54	WG1388462
4,4-DDD	U		0.00171	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
4,4-DDE	U		0.00168	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
4,4-DDT	U		0.00219	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Dieldrin	0.00291	J	0.00166	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Endosulfan I	U		0.00163	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Endosulfan II	U		0.00175	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Endosulfan sulfate	U		0.00165	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Endrin	U		0.00172	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Endrin aldehyde	U		0.00141	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Endrin ketone	U		0.00180	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Hexachlorobenzene	U		0.00136	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Heptachlor	U		0.00168	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Heptachlor epoxide	U		0.00176	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Methoxychlor	U		0.00195	0.0200	0.0219	1	12/01/2019 15:54	WG1388462
Toxaphene	U		0.0394	0.400	0.437	1	12/01/2019 15:54	WG1388462
(S) Decachlorobiphenyl	*78.4*				*10.0-135*		*12/01/2019 15:54*	WG1388462
(S) Tetrachloro-m-xylene	*78.1*				*10.0-139*		*12/01/2019 15:54*	WG1388462

SB-31 (4-4.5)

Collected date/time: 11/14/19 14:35

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.4		1	12/03/2019 11:07	WG1389704

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	56.4		0.492	2.00	2.14	1	12/01/2019 22:34	WG1388691
Cadmium	0.296	J	0.0749	0.500	0.535	1	12/01/2019 22:34	WG1388691

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00144	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Alpha BHC	U		0.00146	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Beta BHC	U		0.00171	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Delta BHC	U		0.00153	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Gamma BHC	U		0.00155	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Chlordane	U		0.0417	0.200	0.214	1	12/02/2019 13:05	WG1388462
4,4-DDD	U		0.00167	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
4,4-DDE	U		0.00165	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
4,4-DDT	U		0.00214	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Dieldrin	U		0.00163	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Endosulfan I	U		0.00159	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Endosulfan II	U		0.00171	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Endosulfan sulfate	U		0.00162	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Endrin	U		0.00168	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Endrin aldehyde	U		0.00138	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Endrin ketone	U		0.00177	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Hexachlorobenzene	U		0.00133	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Heptachlor	U		0.00165	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Heptachlor epoxide	U		0.00172	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Methoxychlor	U		0.00190	0.0200	0.0214	1	12/02/2019 13:05	WG1388462
Toxaphene	U		0.0385	0.400	0.428	1	12/02/2019 13:05	WG1388462
(S) Decachlorobiphenyl	*57.1*				*10.0-135*		*12/02/2019 13:05*	WG1388462
(S) Tetrachloro-m-xylene	*74.0*				*10.0-139*		*12/02/2019 13:05*	WG1388462

Method Blank (MB)

(MB) R3474870-1 11/21/19 09:26

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1161400-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1161400-11 11/21/19 09:26 • (DUP) R3474870-3 11/21/19 09:26

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	93.4	93.0	1	0.407		10

Laboratory Control Sample (LCS)

(LCS) R3474870-2 11/21/19 09:26

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) R3475325-1 11/22/19 15:46

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00500			

L1161924-36 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-36 11/22/19 15:46 • (DUP) R3475325-3 11/22/19 15:46

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	79.9	80.0	1	0.0729		10

Laboratory Control Sample (LCS)

(LCS) R3475325-2 11/22/19 15:46

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) R3475318-1 11/22/19 15:04

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00400			

L1161924-56 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-56 11/22/19 15:04 • (DUP) R3475318-3 11/22/19 15:04

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.5	90.3	1	1.34		10

Laboratory Control Sample (LCS)

(LCS) R3475318-2 11/22/19 15:04

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	

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

Method Blank (MB)

(MB) R3477897-1 11/29/19 21:37

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1165494-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1165494-06 11/29/19 21:37 • (DUP) R3477897-3 11/29/19 21:37

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	67.0	66.8	1	0.197		10

Laboratory Control Sample (LCS)

(LCS) R3477897-2 11/29/19 21:37

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	49.8	99.6	85.0-115	

Method Blank (MB)

(MB) R3477903-1 11/29/19 22:47

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1165708-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1165708-01 11/29/19 22:47 • (DUP) R3477903-3 11/29/19 22:47

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	84.0	85.3	1	1.44		10

Laboratory Control Sample (LCS)

(LCS) R3477903-2 11/29/19 22:47

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

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

Method Blank (MB)

(MB) R3478795-1 12/03/19 09:50

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1165628-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1165628-04 12/03/19 09:50 • (DUP) R3478795-3 12/03/19 09:50

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.3	95.2	1	0.919		10

Laboratory Control Sample (LCS)

(LCS) R3478795-2 12/03/19 09:50

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

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

Method Blank (MB)

(MB) R3478907-1 12/03/19 11:32

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00200			

L1165628-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1165628-13 12/03/19 11:32 • (DUP) R3478907-3 12/03/19 11:32

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	91.3	92.6	1	1.43		10

Laboratory Control Sample (LCS)

(LCS) R3478907-2 12/03/19 11:32

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

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

Method Blank (MB)

(MB) R3478900-1 12/03/19 11:19

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1165628-37 Original Sample (OS) • Duplicate (DUP)

(OS) L1165628-37 12/03/19 11:19 • (DUP) R3478900-3 12/03/19 11:19

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.7	93.3	1	1.72		10

Laboratory Control Sample (LCS)

(LCS) R3478900-2 12/03/19 11:19

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) R3478896-1 12/03/19 11:07

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1165183-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1165183-02 12/03/19 11:07 • (DUP) R3478896-3 12/03/19 11:07

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	78.8	78.0	1	0.951		10

Laboratory Control Sample (LCS)

(LCS) R3478896-2 12/03/19 11:07

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) R3477923-1 12/01/19 21:17

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Cadmium	U		0.0700	0.500
Chromium	0.290	J	0.140	1.00
Copper	U		0.530	2.00
Lead	U		0.190	0.500
Nickel	U		0.490	2.00
Zinc	U		0.590	5.00

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

(LCS) R3477923-2 12/01/19 21:20 • (LCSD) R3477923-3 12/01/19 21:22

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 %
Arsenic	100	97.2	96.0	97.2	96.0	80.0-120			1.29	20
Cadmium	100	97.5	95.7	97.5	95.7	80.0-120			1.87	20
Chromium	100	96.6	94.8	96.6	94.8	80.0-120			1.94	20
Copper	100	95.8	94.2	95.8	94.2	80.0-120			1.74	20
Lead	100	97.5	96.5	97.5	96.5	80.0-120			1.10	20
Nickel	100	99.3	97.9	99.3	97.9	80.0-120			1.45	20
Zinc	100	100	99.4	100	99.4	80.0-120			1.03	20

L1165628-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165628-34 12/01/19 21:25 • (MS) R3477923-6 12/01/19 21:32 • (MSD) R3477923-7 12/01/19 21:34

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 %
Arsenic	109	7.58	102	108	86.7	92.0	1	75.0-125			5.49	20
Cadmium	109	0.596	101	106	92.0	96.0	1	75.0-125			4.28	20
Chromium	109	30.8	116	122	78.1	83.7	1	75.0-125			5.17	20
Copper	109	23.9	123	124	90.9	91.9	1	75.0-125			0.869	20
Lead	109	137	108	110	0.000	0.000	1	75.0-125	J6	J6	1.79	20
Nickel	109	30.3	121	128	83.3	89.7	1	75.0-125			5.60	20
Zinc	109	88.2	144	144	50.6	51.2	1	75.0-125	J6	J6	0.435	20

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3477209-2 11/27/19 22:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	0.0347	J	0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3477209-1 11/27/19 21:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.83	106	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*111*	*77.0-120*	

WG1388434

QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT L1165628-01,02,03,04,05,06,07,08,10,11,12,13,14,15,18,19,20,26,27,28

Method Blank (MB)

(MB) R3477541-1 11/28/19 12:52

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	*81.8*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3477541-2 11/28/19 13:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	44.5	89.0	50.0-150	
(S) o-Terphenyl			*87.4*	*18.0-148*	

L1165628-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165628-04 11/29/19 11:31 • (MS) R3477533-1 11/29/19 11:44 • (MSD) R3477533-2 11/29/19 11:56

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)	51.9	9.17	51.5	55.2	81.5	88.7	1	50.0-150			6.95	20
(S) o-Terphenyl					*60.2*	*63.0*		*18.0-148*				

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

Method Blank (MB)

(MB) R3477662-1 11/30/19 01:23

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	*58.6*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3477662-2 11/30/19 01:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	40.3	80.6	50.0-150	
(S) o-Terphenyl			*72.4*	*18.0-148*	

L1165628-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165628-21 12/01/19 14:04 • (MS) R3477841-1 12/01/19 14:17 • (MSD) R3477841-2 12/01/19 14:30

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)	57.9	80.4	79.2	50.3	0.000	0.000	10	50.0-150	J6	J3 J6	44.6	20
(S) o-Terphenyl					*44.5*	*34.7*		*18.0-148*				

Method Blank (MB)

(MB) R3478638-1 12/03/19 15:50

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	*73.9*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3478638-2 12/03/19 16:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	43.2	86.4	50.0-150	
(S) o-Terphenyl			*86.8*	*18.0-148*	

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

Method Blank (MB)

(MB) R3478023-1 12/01/19 15:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00135	0.0200
Alpha BHC	U		0.00136	0.0200
Beta BHC	U		0.00160	0.0200
Delta BHC	U		0.00143	0.0200
Gamma BHC	U		0.00145	0.0200
4,4-DDD	U		0.00156	0.0200
4,4-DDE	U		0.00154	0.0200
4,4-DDT	U		0.00200	0.0200
Dieldrin	U		0.00152	0.0200
Endosulfan I	U		0.00149	0.0200
Endosulfan II	U		0.00160	0.0200
Endosulfan sulfate	U		0.00151	0.0200
Endrin	U		0.00157	0.0200
Endrin aldehyde	U		0.00129	0.0200
Endrin ketone	U		0.00165	0.0200
Heptachlor	U		0.00154	0.0200
Heptachlor epoxide	U		0.00161	0.0200
Hexachlorobenzene	U		0.00124	0.0200
Methoxychlor	U		0.00178	0.0200
Chlordane	U		0.0390	0.200
Toxaphene	U		0.0360	0.400
(S) Decachlorobiphenyl	*47.9*			*10.0-135*
(S) Tetrachloro-m-xylene	*42.5*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3478023-2 12/01/19 15:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0248	37.2	34.0-136	
Alpha BHC	0.0666	0.0266	39.9	34.0-139	
Beta BHC	0.0666	0.0264	39.6	34.0-133	
Delta BHC	0.0666	0.0268	40.2	34.0-135	
Gamma BHC	0.0666	0.0254	38.1	34.0-136	
4,4-DDD	0.0666	0.0265	39.8	33.0-141	
4,4-DDE	0.0666	0.0261	39.2	34.0-134	
4,4-DDT	0.0666	0.0287	43.1	30.0-143	
Dieldrin	0.0666	0.0262	39.3	35.0-137	
Endosulfan I	0.0666	0.0260	39.0	34.0-134	

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

Laboratory Control Sample (LCS)

(LCS) R3478023-2 12/01/19 15:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0246	36.9	35.0-132	
Endosulfan sulfate	0.0666	0.0268	40.2	35.0-132	
Endrin	0.0666	0.0274	41.1	34.0-137	
Endrin aldehyde	0.0666	0.0200	30.0	23.0-121	
Endrin ketone	0.0666	0.0274	41.1	35.0-144	
Heptachlor	0.0666	0.0270	40.5	36.0-141	
Heptachlor epoxide	0.0666	0.0266	39.9	36.0-134	
Hexachlorobenzene	0.0666	0.0228	34.2	33.0-129	
Methoxychlor	0.0666	0.0302	45.3	28.0-150	
(S) Decachlorobiphenyl			*53.3*	*10.0-135*	
(S) Tetrachloro-m-xylene			*47.3*	*10.0-139*	

L1165343-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165343-02 12/02/19 13:30 • (MS) R3478356-1 12/02/19 13:42 • (MSD) R3478356-2 12/02/19 13:55

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 %
Aldrin	0.0745	U	0.0513	0.0469	68.8	62.9	1	20.0-135			8.89	37
Alpha BHC	0.0745	U	0.0609	0.0563	81.7	75.5	1	27.0-140			7.83	35
Beta BHC	0.0745	U	0.0622	0.0589	83.5	79.0	1	23.0-141			5.55	37
Delta BHC	0.0745	U	0.0589	0.0541	79.0	72.5	1	21.0-138			8.52	35
Gamma BHC	0.0745	U	0.0585	0.0536	78.5	71.9	1	27.0-137			8.78	36
4,4-DDD	0.0745	U	0.0687	0.0658	92.2	88.3	1	15.0-152			4.33	39
4,4-DDE	0.0745	U	0.0481	0.0451	64.6	60.5	1	10.0-152			6.48	40
4,4-DDT	0.0745	U	0.0336	0.0269	45.0	36.0	1	10.0-151			22.2	40
Dieldrin	0.0745	U	0.0514	0.0472	68.9	63.4	1	17.0-145			8.40	37
Endosulfan I	0.0745	U	0.0479	0.0438	64.3	58.7	1	20.0-137			9.04	36
Endosulfan II	0.0745	U	0.0463	0.0424	62.2	56.9	1	15.0-141			8.83	37
Endosulfan sulfate	0.0745	U	0.0478	0.0433	64.1	58.1	1	15.0-143			9.83	38
Endrin	0.0745	U	0.0486	0.0443	65.2	59.5	1	19.0-143			9.16	37
Endrin aldehyde	0.0745	U	0.0454	0.0411	61.0	55.1	1	10.0-139			10.1	40
Endrin ketone	0.0745	U	0.0424	0.0377	56.9	50.6	1	17.0-149			11.7	38
Heptachlor	0.0745	U	0.0522	0.0473	70.0	63.5	1	22.0-138			9.67	37
Heptachlor epoxide	0.0745	U	0.0481	0.0439	64.6	58.9	1	22.0-138			9.25	36
Hexachlorobenzene	0.0745	U	0.0481	0.0444	64.6	59.6	1	25.0-126			7.98	35
Methoxychlor	0.0745	U	0.0370	0.0297	49.7	39.8	1	10.0-159			22.1	40
(S) Decachlorobiphenyl					*50.6*	*46.1*		*10.0-135*				
(S) Tetrachloro-m-xylene					*72.5*	*66.8*		*10.0-139*				

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

Method Blank (MB)

(MB) R3477330-2 11/28/19 01:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00642	0.0333
Acenaphthylene	U		0.00671	0.0333
Anthracene	U		0.00632	0.0333
Benzidine	U		0.0637	0.333
Benzo(a)anthracene	U		0.00428	0.0333
Benzo(b)fluoranthene	U		0.00695	0.0333
Benzo(k)fluoranthene	U		0.00582	0.0333
Benzo(g,h,i)perylene	U		0.00721	0.0333
Benzo(a)pyrene	U		0.00548	0.0333
Bis(2-chlorethoxy)methane	U		0.00770	0.333
Bis(2-chloroethyl)ether	U		0.00896	0.333
2,2-oxybis(1-chloropropane)	U		0.00760	0.333
4-Bromophenyl-phenylether	U		0.0114	0.333
2-Chloronaphthalene	U		0.00639	0.0333
4-Chlorophenyl-phenylether	U		0.00627	0.333
Chrysene	U		0.00555	0.0333
Dibenz(a,h)anthracene	U		0.00821	0.0333
1,2-Dichlorobenzene	U		0.00921	0.333
1,3-Dichlorobenzene	U		0.0100	0.333
1,4-Dichlorobenzene	U		0.0100	0.333
3,3-Dichlorobenzidine	U		0.0794	0.333
2,4-Dinitrotoluene	U		0.00607	0.333
2,6-Dinitrotoluene	U		0.00737	0.333
Fluoranthene	U		0.00496	0.0333
Fluorene	U		0.00682	0.0333
Hexachlorobenzene	U		0.00856	0.333
Hexachloro-1,3-butadiene	U		0.0100	0.333
Hexachlorocyclopentadiene	U		0.0587	0.333
Hexachloroethane	U		0.0134	0.333
Indeno(1,2,3-cd)pyrene	U		0.00772	0.0333
Isophorone	U		0.00522	0.333
Naphthalene	U		0.00889	0.0333
Nitrobenzene	U		0.00695	0.333
n-Nitrosodimethylamine	U		0.0647	0.333
n-Nitrosodiphenylamine	U		0.0900	0.333
n-Nitrosodi-n-propylamine	U		0.00906	0.333
Phenanthrene	U		0.00528	0.0333
Benzylbutyl phthalate	U		0.0103	0.333
Bis(2-ethylhexyl)phthalate	U		0.0120	0.333
Di-n-butyl phthalate	U		0.0109	0.333

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

Method Blank (MB)

(MB) R3477330-2 11/28/19 01:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Diethyl phthalate	U		0.00691	0.333
Dimethyl phthalate	U		0.00540	0.333
Di-n-octyl phthalate	U		0.00907	0.333
Pyrene	U		0.0123	0.0333
Pyridine	U		0.0628	0.333
1,2,4-Trichlorobenzene	U		0.00876	0.333
4-Chloro-3-methylphenol	U		0.00477	0.333
2-Chlorophenol	U		0.00831	0.333
2-Methylphenol	U		0.00986	0.333
3&4-Methyl Phenol	U		0.00783	0.333
2,4-Dichlorophenol	U		0.00746	0.333
2,4-Dimethylphenol	U		0.0471	0.333
4,6-Dinitro-2-methylphenol	U		0.124	0.333
2,4-Dinitrophenol	U		0.0980	0.333
2-Nitrophenol	U		0.0130	0.333
4-Nitrophenol	U		0.0525	0.333
Pentachlorophenol	U		0.0480	0.333
Phenol	U		0.00695	0.333
2,4,5-Trichlorophenol	U		0.0104	0.333
2,4,6-Trichlorophenol	U		0.00779	0.333
(S) Nitrobenzene-d5	*63.7*			*10.0-122*
(S) 2-Fluorobiphenyl	*67.0*			*15.0-120*
(S) p-Terphenyl-d14	*80.8*			*10.0-120*
(S) Phenol-d5	*74.5*			*10.0-120*
(S) 2-Fluorophenol	*82.3*			*12.0-120*
(S) 2,4,6-Tribromophenol	*92.2*			*10.0-127*

Laboratory Control Sample (LCS)

(LCS) R3477330-1 11/28/19 01:21

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Acenaphthene	0.666	0.423	63.5	38.0-120	
Acenaphthylene	0.666	0.462	69.4	40.0-120	
Anthracene	0.666	0.473	71.0	42.0-120	
Benzidine	1.33	0.154	11.6	10.0-120	
Benzo(a)anthracene	0.666	0.532	79.9	44.0-120	
Benzo(b)fluoranthene	0.666	0.493	74.0	43.0-120	
Benzo(k)fluoranthene	0.666	0.471	70.7	44.0-120	

Laboratory Control Sample (LCS)

(LCS) R3477330-1 11/28/19 01:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzo(g,h,i)perylene	0.666	0.458	68.8	43.0-120	
Benzo(a)pyrene	0.666	0.504	75.7	45.0-120	
Bis(2-chlorethoxy)methane	0.666	0.433	65.0	20.0-120	
Bis(2-chloroethyl)ether	0.666	0.516	77.5	16.0-120	
2,2-Oxybis(1-Chloropropane)	0.666	0.440	66.1	23.0-120	
4-Bromophenyl-phenylether	0.666	0.476	71.5	40.0-120	
2-Chloronaphthalene	0.666	0.445	66.8	35.0-120	
4-Chlorophenyl-phenylether	0.666	0.456	68.5	40.0-120	
Chrysene	0.666	0.472	70.9	43.0-120	
Dibenz(a,h)anthracene	0.666	0.448	67.3	44.0-120	
1,2-Dichlorobenzene	0.666	0.428	64.3	32.0-120	
1,3-Dichlorobenzene	0.666	0.410	61.6	30.0-120	
1,4-Dichlorobenzene	0.666	0.407	61.1	31.0-120	
3,3-Dichlorobenzidine	1.33	0.933	70.2	28.0-120	
2,4-Dinitrotoluene	0.666	0.559	83.9	45.0-120	
2,6-Dinitrotoluene	0.666	0.536	80.5	42.0-120	
Fluoranthene	0.666	0.505	75.8	44.0-120	
Fluorene	0.666	0.450	67.6	41.0-120	
Hexachlorobenzene	0.666	0.464	69.7	39.0-120	
Hexachloro-1,3-butadiene	0.666	0.407	61.1	15.0-120	
Hexachlorocyclopentadiene	0.666	0.370	55.6	15.0-120	
Hexachloroethane	0.666	0.425	63.8	17.0-120	
Indeno(1,2,3-cd)pyrene	0.666	0.476	71.5	45.0-120	
Isophorone	0.666	0.420	63.1	23.0-120	
Naphthalene	0.666	0.391	58.7	18.0-120	
Nitrobenzene	0.666	0.435	65.3	17.0-120	
n-Nitrosodimethylamine	0.666	0.438	65.8	10.0-125	
n-Nitrosodiphenylamine	0.666	0.471	70.7	40.0-120	
n-Nitrosodi-n-propylamine	0.666	0.487	73.1	26.0-120	
Phenanthrene	0.666	0.456	68.5	42.0-120	
Benzylbutyl phthalate	0.666	0.637	95.6	40.0-120	
Bis(2-ethylhexyl)phthalate	0.666	0.551	82.7	41.0-120	
Di-n-butyl phthalate	0.666	0.551	82.7	43.0-120	
Diethyl phthalate	0.666	0.512	76.9	43.0-120	
Dimethyl phthalate	0.666	0.475	71.3	43.0-120	
Di-n-octyl phthalate	0.666	0.638	95.8	40.0-120	
Pyrene	0.666	0.499	74.9	41.0-120	
Pyridine	0.666	0.276	41.4	10.0-120	
1,2,4-Trichlorobenzene	0.666	0.394	59.2	17.0-120	
4-Chloro-3-methylphenol	0.666	0.528	79.3	28.0-120	

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

Laboratory Control Sample (LCS)

(LCS) R3477330-1 11/28/19 01:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Chlorophenol	0.666	0.469	70.4	28.0-120	
2-Methylphenol	0.666	0.527	79.1	35.0-120	
3&4-Methyl Phenol	0.666	0.559	83.9	42.0-120	
2,4-Dichlorophenol	0.666	0.455	68.3	25.0-120	
2,4-Dimethylphenol	0.666	0.452	67.9	15.0-120	
4,6-Dinitro-2-methylphenol	0.666	0.388	58.3	16.0-120	
2,4-Dinitrophenol	0.666	0.261	39.2	10.0-120	
2-Nitrophenol	0.666	0.450	67.6	20.0-120	
4-Nitrophenol	0.666	0.478	71.8	27.0-120	
Pentachlorophenol	0.666	0.428	64.3	29.0-120	
Phenol	0.666	0.475	71.3	28.0-120	
2,4,5-Trichlorophenol	0.666	0.535	80.3	38.0-120	
2,4,6-Trichlorophenol	0.666	0.476	71.5	37.0-120	
(S) Nitrobenzene-d5			*64.9*	*10.0-122*	
(S) 2-Fluorobiphenyl			*67.0*	*15.0-120*	
(S) p-Terphenyl-d14			*77.2*	*10.0-120*	
(S) Phenol-d5			*80.6*	*10.0-120*	
(S) 2-Fluorophenol			*85.7*	*12.0-120*	
(S) 2,4,6-Tribromophenol			*89.2*	*10.0-127*	

L1165576-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165576-11 11/28/19 03:35 • (MS) R3477330-3 11/28/19 03:54 • (MSD) R3477330-4 11/28/19 04:13

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 %
Acenaphthene	0.775	U	0.283	0.360	36.5	46.4	1	18.0-120			23.9	32
Acenaphthylene	0.775	U	0.292	0.371	37.7	47.9	1	25.0-120			23.9	32
Anthracene	0.775	U	0.321	0.404	41.4	52.1	1	22.0-120			22.8	29
Benzidine	1.55	U	ND	ND	0.000	0.000	1	10.0-120	J6	J6	0.000	40
Benzo(a)anthracene	0.775	U	0.348	0.432	44.9	55.7	1	25.0-120			21.5	29
Benzo(b)fluoranthene	0.775	U	0.326	0.405	42.0	52.3	1	19.0-122			21.7	31
Benzo(k)fluoranthene	0.775	U	0.291	0.390	37.5	50.3	1	23.0-120			29.1	30
Benzo(g,h,i)perylene	0.775	U	0.304	0.394	39.2	50.8	1	10.0-120			25.7	33
Benzo(a)pyrene	0.775	U	0.320	0.406	41.3	52.4	1	24.0-120			23.7	30
Bis(2-chlorethoxy)methane	0.775	U	0.562	0.588	72.5	75.8	1	10.0-120			4.45	34
Bis(2-chloroethyl)ether	0.775	U	0.304	0.298	39.2	38.4	1	10.0-120			1.93	40
2,2-Oxybis(1-Chloropropane)	0.775	U	0.242	0.278	31.2	35.9	1	10.0-120			13.9	40
4-Bromophenyl-phenylether	0.775	U	0.324	0.418	41.7	53.9	1	27.0-120			25.4	30
2-Chloronaphthalene	0.775	U	0.272	0.336	35.1	43.4	1	20.0-120			21.0	32

L1165576-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165576-11 11/28/19 03:35 • (MS) R3477330-3 11/28/19 03:54 • (MSD) R3477330-4 11/28/19 04:13

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
4-Chlorophenyl-phenylether	0.775	U	0.305	0.398	39.3	51.4	1	24.0-120			26.5	29
Chrysene	0.775	U	0.300	0.377	38.7	48.6	1	21.0-120			22.7	29
Dibenz(a,h)anthracene	0.775	U	0.306	0.396	39.5	51.1	1	10.0-120			25.5	32
1,2-Dichlorobenzene	0.775	U	0.205	0.247	26.4	31.8	1	10.0-120			18.6	38
1,3-Dichlorobenzene	0.775	U	0.186	0.228	24.0	29.4	1	10.0-120			20.2	40
1,4-Dichlorobenzene	0.775	U	0.184	0.226	23.7	29.1	1	10.0-120			20.5	39
3,3-Dichlorobenzidine	1.55	U	ND	ND	0.000	0.000	1	10.0-120	J6	J6	0.000	34
2,4-Dinitrotoluene	0.775	U	0.332	0.423	42.8	54.5	1	30.0-120			24.1	31
2,6-Dinitrotoluene	0.775	U	0.336	0.424	43.4	54.7	1	25.0-120			23.0	31
Fluoranthene	0.775	U	0.335	0.420	43.2	54.2	1	18.0-126			22.5	32
Fluorene	0.775	U	0.297	0.382	38.3	49.2	1	25.0-120			25.0	30
Hexachlorobenzene	0.775	U	0.318	0.438	41.0	56.5	1	27.0-120		J3	31.7	28
Hexachloro-1,3-butadiene	0.775	U	0.233	0.292	30.0	37.7	1	10.0-120			22.6	38
Hexachlorocyclopentadiene	0.775	U	0.0803	0.107	10.4	13.8	1	10.0-120			28.7	40
Hexachloroethane	0.775	U	0.206	0.242	26.6	31.2	1	10.0-120			16.1	40
Indeno(1,2,3-cd)pyrene	0.775	U	0.326	0.428	42.0	55.3	1	10.0-120			27.2	32
Isophorone	0.775	U	0.487	0.515	62.8	66.4	1	13.0-120			5.58	34
Naphthalene	0.775	U	0.217	0.258	27.9	33.3	1	10.0-120			17.6	35
Nitrobenzene	0.775	U	0.321	0.348	41.4	44.9	1	10.0-120			8.00	36
n-Nitrosodimethylamine	0.775	U	0.255	0.238	32.9	30.6	1	10.0-127			7.09	40
n-Nitrosodiphenylamine	0.775	U	0.331	0.416	42.6	53.6	1	17.0-120			22.8	29
n-Nitrosodi-n-propylamine	0.775	U	0.316	0.304	40.7	39.2	1	10.0-120			3.76	37
Phenanthrene	0.775	0.00959	0.316	0.397	39.5	50.0	1	17.0-120			22.9	31
Benzylbutyl phthalate	0.775	U	0.626	0.682	80.8	88.0	1	23.0-120			8.54	30
Bis(2-ethylhexyl)phthalate	0.775	U	0.640	0.820	82.6	106	1	17.0-126			24.6	30
Di-n-butyl phthalate	0.775	U	0.515	0.560	66.4	72.2	1	30.0-120			8.45	29
Diethyl phthalate	0.775	U	0.331	0.409	42.6	52.7	1	26.0-120			21.1	28
Dimethyl phthalate	0.775	U	0.305	0.378	39.3	48.8	1	25.0-120			21.5	29
Di-n-octyl phthalate	0.775	0.0392	0.427	0.560	50.0	67.2	1	21.0-123			26.9	29
Pyrene	0.775	U	0.284	0.401	36.6	51.7	1	16.0-121		J3	34.0	32
Pyridine	0.775	U	0.225	0.233	29.0	30.0	1	10.0-120			3.56	40
1,2,4-Trichlorobenzene	0.775	U	0.208	0.262	26.9	33.8	1	12.0-120			22.8	37
4-Chloro-3-methylphenol	0.775	U	0.421	0.527	54.4	68.0	1	15.0-120			22.3	30
2-Chlorophenol	0.775	U	0.286	0.306	36.9	39.5	1	15.0-120			6.68	37
2-Methylphenol	0.775	U	0.314	0.345	40.5	44.4	1	11.0-120			9.19	40
3&4-Methyl Phenol	0.775	0.0254	0.385	0.418	46.4	50.6	1	12.0-123			8.12	38
2,4-Dichlorophenol	0.775	U	0.299	0.392	38.6	50.6	1	20.0-120			26.9	31
2,4-Dimethylphenol	0.775	U	0.309	0.374	39.8	48.2	1	10.0-120			19.1	33
4,6-Dinitro-2-methylphenol	0.775	U	0.320	0.389	41.3	50.2	1	10.0-120			19.4	39

L1165576-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165576-11 11/28/19 03:35 • (MS) R3477330-3 11/28/19 03:54 • (MSD) R3477330-4 11/28/19 04:13

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
2,4-Dinitrophenol	0.775	U	0.357	0.431	46.1	55.6	1	10.0-121			18.6	40
2-Nitrophenol	0.775	U	0.286	0.333	36.9	42.9	1	12.0-120			15.0	39
4-Nitrophenol	0.775	U	0.343	0.410	44.3	52.9	1	10.0-137			17.6	32
Pentachlorophenol	0.775	U	0.418	0.560	53.9	72.2	1	10.0-160			29.0	31
Phenol	0.775	U	0.330	0.345	42.5	44.4	1	12.0-120			4.49	38
2,4,5-Trichlorophenol	0.775	U	0.382	0.504	49.2	65.0	1	20.0-120			27.6	30
2,4,6-Trichlorophenol	0.775	U	0.346	0.444	44.6	57.2	1	19.0-120			24.8	32
(S) Nitrobenzene-d5					*31.8*	*34.8*		*10.0-122*				
(S) 2-Fluorobiphenyl					*33.0*	*42.0*		*15.0-120*				
(S) p-Terphenyl-d14					*39.6*	*55.6*		*10.0-120*				
(S) Phenol-d5					*44.6*	*47.0*		*10.0-120*				
(S) 2-Fluorophenol					*44.0*	*44.3*		*12.0-120*				
(S) 2,4,6-Tribromophenol					*54.7*	*72.5*		*10.0-127*				

Method Blank (MB)

(MB) R3477203-2 11/28/19 02:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00642	0.0333
Acenaphthylene	U		0.00671	0.0333
Anthracene	U		0.00632	0.0333
Benzidine	U		0.0637	0.333
Benzo(a)anthracene	U		0.00428	0.0333
Benzo(b)fluoranthene	U		0.00695	0.0333
Benzo(k)fluoranthene	U		0.00582	0.0333
Benzo(g,h,i)perylene	U		0.00721	0.0333
Benzo(a)pyrene	U		0.00548	0.0333
Bis(2-chlorethoxy)methane	U		0.00770	0.333
Bis(2-chloroethyl)ether	U		0.00896	0.333
2,2-oxybis(1-chloropropane)	U		0.00760	0.333
4-Bromophenyl-phenylether	U		0.0114	0.333
2-Chloronaphthalene	U		0.00639	0.0333
4-Chlorophenyl-phenylether	U		0.00627	0.333
Chrysene	U		0.00555	0.0333
Dibenz(a,h)anthracene	U		0.00821	0.0333
1,2-Dichlorobenzene	U		0.00921	0.333
1,3-Dichlorobenzene	U		0.0100	0.333
1,4-Dichlorobenzene	U		0.0100	0.333
3,3-Dichlorobenzidine	U		0.0794	0.333
2,4-Dinitrotoluene	U		0.00607	0.333
2,6-Dinitrotoluene	U		0.00737	0.333
Fluoranthene	U		0.00496	0.0333
Fluorene	U		0.00682	0.0333
Hexachlorobenzene	U		0.00856	0.333
Hexachloro-1,3-butadiene	U		0.0100	0.333
Hexachlorocyclopentadiene	U		0.0587	0.333
Hexachloroethane	U		0.0134	0.333
Indeno(1,2,3-cd)pyrene	U		0.00772	0.0333
Isophorone	U		0.00522	0.333
Naphthalene	U		0.00889	0.0333
Nitrobenzene	U		0.00695	0.333
n-Nitrosodimethylamine	U		0.0647	0.333
n-Nitrosodiphenylamine	U		0.0900	0.333
n-Nitrosodi-n-propylamine	U		0.00906	0.333
Phenanthrene	U		0.00528	0.0333
Benzylbutyl phthalate	U		0.0103	0.333
Bis(2-ethylhexyl)phthalate	U		0.0120	0.333
Di-n-butyl phthalate	U		0.0109	0.333

Method Blank (MB)

(MB) R3477203-2 11/28/19 02:33

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Diethyl phthalate	U		0.00691	0.333
Dimethyl phthalate	U		0.00540	0.333
Di-n-octyl phthalate	U		0.00907	0.333
Pyrene	U		0.0123	0.0333
Pyridine	U		0.0628	0.333
1,2,4-Trichlorobenzene	U		0.00876	0.333
4-Chloro-3-methylphenol	U		0.00477	0.333
2-Chlorophenol	U		0.00831	0.333
2-Methylphenol	U		0.00986	0.333
3&4-Methyl Phenol	U		0.00783	0.333
2,4-Dichlorophenol	U		0.00746	0.333
2,4-Dimethylphenol	U		0.0471	0.333
4,6-Dinitro-2-methylphenol	U		0.124	0.333
2,4-Dinitrophenol	U		0.0980	0.333
2-Nitrophenol	U		0.0130	0.333
4-Nitrophenol	U		0.0525	0.333
Pentachlorophenol	U		0.0480	0.333
Phenol	U		0.00695	0.333
2,4,5-Trichlorophenol	U		0.0104	0.333
2,4,6-Trichlorophenol	U		0.00779	0.333
(S) Nitrobenzene-d5	*67.3*			*10.0-122*
(S) 2-Fluorobiphenyl	*69.7*			*15.0-120*
(S) p-Terphenyl-d14	*78.4*			*10.0-120*
(S) Phenol-d5	*71.8*			*10.0-120*
(S) 2-Fluorophenol	*78.2*			*12.0-120*
(S) 2,4,6-Tribromophenol	*59.9*			*10.0-127*

Laboratory Control Sample (LCS)

(LCS) R3477203-1 11/28/19 02:14

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Acenaphthene	0.666	0.468	70.3	38.0-120	
Acenaphthylene	0.666	0.499	74.9	40.0-120	
Anthracene	0.666	0.524	78.7	42.0-120	
Benzidine	1.33	0.148	11.1	10.0-120	
Benzo(a)anthracene	0.666	0.545	81.8	44.0-120	
Benzo(b)fluoranthene	0.666	0.542	81.4	43.0-120	
Benzo(k)fluoranthene	0.666	0.549	82.4	44.0-120	

WG1388433

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

QUALITY CONTROL SUMMARY

L1165628-06,07,08,13,14,15,16,21,22,23,24,25

Laboratory Control Sample (LCS)

(LCS) R3477203-1 11/28/19 02:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzo(g,h,i)perylene	0.666	0.520	78.1	43.0-120	
Benzo(a)pyrene	0.666	0.547	82.1	45.0-120	
Bis(2-chlorethoxy)methane	0.666	0.370	55.6	20.0-120	
Bis(2-chloroethyl)ether	0.666	0.459	68.9	16.0-120	
2,2-Oxybis(1-Chloropropane)	0.666	0.437	65.6	23.0-120	
4-Bromophenyl-phenylether	0.666	0.534	80.2	40.0-120	
2-Chloronaphthalene	0.666	0.487	73.1	35.0-120	
4-Chlorophenyl-phenylether	0.666	0.520	78.1	40.0-120	
Chrysene	0.666	0.510	76.6	43.0-120	
Dibenz(a,h)anthracene	0.666	0.535	80.3	44.0-120	
1,2-Dichlorobenzene	0.666	0.449	67.4	32.0-120	
1,3-Dichlorobenzene	0.666	0.435	65.3	30.0-120	
1,4-Dichlorobenzene	0.666	0.441	66.2	31.0-120	
3,3-Dichlorobenzidine	1.33	0.897	67.4	28.0-120	
2,4-Dinitrotoluene	0.666	0.510	76.6	45.0-120	
2,6-Dinitrotoluene	0.666	0.515	77.3	42.0-120	
Fluoranthene	0.666	0.521	78.2	44.0-120	
Fluorene	0.666	0.499	74.9	41.0-120	
Hexachlorobenzene	0.666	0.515	77.3	39.0-120	
Hexachloro-1,3-butadiene	0.666	0.399	59.9	15.0-120	
Hexachlorocyclopentadiene	0.666	0.511	76.7	15.0-120	
Hexachloroethane	0.666	0.441	66.2	17.0-120	
Indeno(1,2,3-cd)pyrene	0.666	0.528	79.3	45.0-120	
Isophorone	0.666	0.373	56.0	23.0-120	
Naphthalene	0.666	0.386	58.0	18.0-120	
Nitrobenzene	0.666	0.386	58.0	17.0-120	
n-Nitrosodimethylamine	0.666	0.396	59.5	10.0-125	
n-Nitrosodiphenylamine	0.666	0.521	78.2	40.0-120	
n-Nitrosodi-n-propylamine	0.666	0.462	69.4	26.0-120	
Phenanthrene	0.666	0.505	75.8	42.0-120	
Benzylbutyl phthalate	0.666	0.571	85.7	40.0-120	
Bis(2-ethylhexyl)phthalate	0.666	0.561	84.2	41.0-120	
Di-n-butyl phthalate	0.666	0.542	81.4	43.0-120	
Diethyl phthalate	0.666	0.512	76.9	43.0-120	
Dimethyl phthalate	0.666	0.502	75.4	43.0-120	
Di-n-octyl phthalate	0.666	0.515	77.3	40.0-120	
Pyrene	0.666	0.532	79.9	41.0-120	
Pyridine	0.666	0.248	37.2	10.0-120	
1,2,4-Trichlorobenzene	0.666	0.388	58.3	17.0-120	
4-Chloro-3-methylphenol	0.666	0.437	65.6	28.0-120	

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

Laboratory Control Sample (LCS)

(LCS) R3477203-1 11/28/19 02:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Chlorophenol	0.666	0.490	73.6	28.0-120	
2-Methylphenol	0.666	0.488	73.3	35.0-120	
3&4-Methyl Phenol	0.666	0.556	83.5	42.0-120	
2,4-Dichlorophenol	0.666	0.419	62.9	25.0-120	
2,4-Dimethylphenol	0.666	0.408	61.3	15.0-120	
4,6-Dinitro-2-methylphenol	0.666	0.352	52.9	16.0-120	
2,4-Dinitrophenol	0.666	0.259	38.9	10.0-120	
2-Nitrophenol	0.666	0.402	60.4	20.0-120	
4-Nitrophenol	0.666	0.467	70.1	27.0-120	
Pentachlorophenol	0.666	0.472	70.9	29.0-120	
Phenol	0.666	0.487	73.1	28.0-120	
2,4,5-Trichlorophenol	0.666	0.537	80.6	38.0-120	
2,4,6-Trichlorophenol	0.666	0.500	75.1	37.0-120	
(S) Nitrobenzene-d5			*52.9*	*10.0-122*	
(S) 2-Fluorobiphenyl			*71.8*	*15.0-120*	
(S) p-Terphenyl-d14			*80.5*	*10.0-120*	
(S) Phenol-d5			*75.7*	*10.0-120*	
(S) 2-Fluorophenol			*80.8*	*12.0-120*	
(S) 2,4,6-Tribromophenol			*85.4*	*10.0-127*	

L1165628-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165628-14 11/28/19 03:11 • (MS) R3477203-3 11/28/19 03:31 • (MSD) R3477203-4 11/28/19 03:50

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 %
Acenaphthene	0.723	U	0.370	0.370	51.2	51.2	2	18.0-120			0.000	32
Acenaphthylene	0.723	U	0.384	0.394	53.1	54.5	2	25.0-120			2.50	32
Anthracene	0.723	U	0.420	0.487	58.1	67.4	2	22.0-120			14.8	29
Benzidine	1.45	U	0.220	0.348	15.1	24.0	2	10.0-120		J3	45.3	40
Benzo(a)anthracene	0.723	U	0.473	0.537	65.4	74.3	2	25.0-120			12.6	29
Benzo(b)fluoranthene	0.723	U	0.426	0.515	59.0	71.3	2	19.0-122			18.9	31
Benzo(k)fluoranthene	0.723	U	0.397	0.476	54.9	65.9	2	23.0-120			18.1	30
Benzo(g,h,i)perylene	0.723	U	0.432	0.510	59.7	70.5	2	10.0-120			16.6	33
Benzo(a)pyrene	0.723	U	0.446	0.525	61.7	72.6	2	24.0-120			16.3	30
Bis(2-chlorethoxy)methane	0.723	U	0.283	0.240	39.2	33.2	2	10.0-120			16.5	34
Bis(2-chloroethyl)ether	0.723	U	0.302	0.233	41.8	32.2	2	10.0-120			25.9	40
2,2-Oxybis(1-Chloropropane)	0.723	U	0.293	0.228	40.6	31.6	2	10.0-120			24.9	40
4-Bromophenyl-phenylether	0.723	U	0.445	0.490	61.5	67.8	2	27.0-120			9.72	30
2-Chloronaphthalene	0.723	U	0.368	0.347	50.9	48.1	2	20.0-120			5.75	32

L1165628-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165628-14 11/28/19 03:11 • (MS) R3477203-3 11/28/19 03:31 • (MSD) R3477203-4 11/28/19 03:50

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 %
4-Chlorophenyl-phenylether	0.723	U	0.398	0.444	55.1	61.4	2	24.0-120			10.8	29
Chrysene	0.723	U	0.444	0.499	61.4	69.0	2	21.0-120			11.7	29
Dibenz(a,h)anthracene	0.723	U	0.440	0.520	60.9	72.0	2	10.0-120			16.7	32
1,2-Dichlorobenzene	0.723	U	0.288	0.227	39.8	31.4	2	10.0-120			23.5	38
1,3-Dichlorobenzene	0.723	U	0.275	0.210	38.0	29.0	2	10.0-120			26.8	40
1,4-Dichlorobenzene	0.723	U	0.279	0.212	38.6	29.3	2	10.0-120			27.3	39
3,3-Dichlorobenzidine	1.45	U	0.810	1.04	55.9	71.6	2	10.0-120			24.7	34
2,4-Dinitrotoluene	0.723	U	0.379	0.438	52.4	60.6	2	30.0-120			14.6	31
2,6-Dinitrotoluene	0.723	U	0.385	0.427	53.3	59.1	2	25.0-120			10.4	31
Fluoranthene	0.723	U	0.431	0.510	59.6	70.5	2	18.0-126			16.8	32
Fluorene	0.723	U	0.400	0.427	55.4	59.1	2	25.0-120			6.54	30
Hexachlorobenzene	0.723	U	0.425	0.480	58.8	66.5	2	27.0-120			12.2	28
Hexachloro-1,3-butadiene	0.723	U	0.309	0.248	42.8	34.3	2	10.0-120			22.1	38
Hexachlorocyclopentadiene	0.723	U	0.233	0.182	32.2	25.1	2	10.0-120			24.5	40
Hexachloroethane	0.723	U	0.282	0.213	39.1	29.5	2	10.0-120			27.9	40
Indeno(1,2,3-cd)pyrene	0.723	U	0.453	0.553	62.7	76.5	2	10.0-120			19.8	32
Isophorone	0.723	U	0.291	0.247	40.3	34.1	2	13.0-120			16.5	34
Naphthalene	0.723	U	0.299	0.243	41.3	33.7	2	10.0-120			20.4	35
Nitrobenzene	0.723	U	0.282	0.239	39.1	33.1	2	10.0-120			16.6	36
n-Nitrosodimethylamine	0.723	U	0.259	0.212	35.8	29.3	2	10.0-127			19.8	40
n-Nitrosodiphenylamine	0.723	U	0.432	0.485	59.7	67.1	2	17.0-120			11.6	29
n-Nitrosodi-n-propylamine	0.723	U	0.293	0.241	40.6	33.4	2	10.0-120			19.4	37
Phenanthrene	0.723	U	0.411	0.473	56.9	65.4	2	17.0-120			14.0	31
Benzylbutyl phthalate	0.723	U	0.554	0.622	76.6	86.1	2	23.0-120			11.6	30
Bis(2-ethylhexyl)phthalate	0.723	U	0.530	0.609	73.4	84.3	2	17.0-126			13.9	30
Di-n-butyl phthalate	0.723	U	0.459	0.531	63.5	73.5	2	30.0-120			14.6	29
Diethyl phthalate	0.723	U	0.406	0.459	56.1	63.5	2	26.0-120			12.3	28
Dimethyl phthalate	0.723	U	0.385	0.407	53.3	56.3	2	25.0-120			5.46	29
Di-n-octyl phthalate	0.723	U	0.544	0.619	75.3	85.6	2	21.0-123			12.8	29
Pyrene	0.723	U	0.455	0.512	63.0	70.8	2	16.0-121			11.6	32
Pyridine	0.723	U	0.184	0.163	25.4	22.6	2	10.0-120			11.8	40
1,2,4-Trichlorobenzene	0.723	U	0.308	0.253	42.7	35.0	2	12.0-120			19.7	37
4-Chloro-3-methylphenol	0.723	U	0.423	0.473	58.5	65.4	2	15.0-120			11.1	30
2-Chlorophenol	0.723	U	0.342	0.280	47.3	38.8	2	15.0-120			19.8	37
2-Methylphenol	0.723	U	0.365	0.320	50.4	44.3	2	11.0-120			13.0	40
3&4-Methyl Phenol	0.723	U	0.425	0.392	58.8	54.2	2	12.0-123			8.21	38
2,4-Dichlorophenol	0.723	U	0.398	0.393	55.1	54.3	2	20.0-120			1.37	31
2,4-Dimethylphenol	0.723	U	0.368	0.339	50.9	46.9	2	10.0-120			8.27	33
4,6-Dinitro-2-methylphenol	0.723	U	0.435	0.439	60.2	60.8	2	10.0-120			0.990	39

L1165628-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165628-14 11/28/19 03:11 • (MS) R3477203-3 11/28/19 03:31 • (MSD) R3477203-4 11/28/19 03:50

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 %
2,4-Dinitrophenol	0.723	U	0.353	0.368	48.8	50.9	2	10.0-121			4.20	40
2-Nitrophenol	0.723	U	0.306	0.263	42.4	36.4	2	12.0-120			15.2	39
4-Nitrophenol	0.723	U	0.422	0.500	58.4	69.2	2	10.0-137			16.9	32
Pentachlorophenol	0.723	U	0.467	0.570	64.7	78.9	2	10.0-160			19.8	31
Phenol	0.723	U	0.343	0.302	47.5	41.8	2	12.0-120			12.8	38
2,4,5-Trichlorophenol	0.723	U	0.476	0.561	65.9	77.7	2	20.0-120			16.5	30
2,4,6-Trichlorophenol	0.723	U	0.452	0.485	62.6	67.1	2	19.0-120			6.93	32
(S) Nitrobenzene-d5					*35.0*	*32.3*		*10.0-122*				
(S) 2-Fluorobiphenyl					*48.2*	*45.8*		*15.0-120*				
(S) p-Terphenyl-d14					*65.3*	*72.5*		*10.0-120*				
(S) Phenol-d5					*48.4*	*43.4*		*10.0-120*				
(S) 2-Fluorophenol					*49.7*	*40.4*		*12.0-120*				
(S) 2,4,6-Tribromophenol					*65.3*	*76.6*		*10.0-127*				

Sample Narrative:

OS: Dilution due to matrix impact during extract concentration procedure

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Qualifier	Description
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia[1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky[1,6]	90010
Kentucky[2]	16
Louisiana	AI30792
Louisiana[1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico[1]	n/a
New York	11742
North Carolina	Env375
North Carolina[1]	DW21704
North Carolina[3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee[1,4]	2006
Texas	T104704245-18-15
Texas[5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

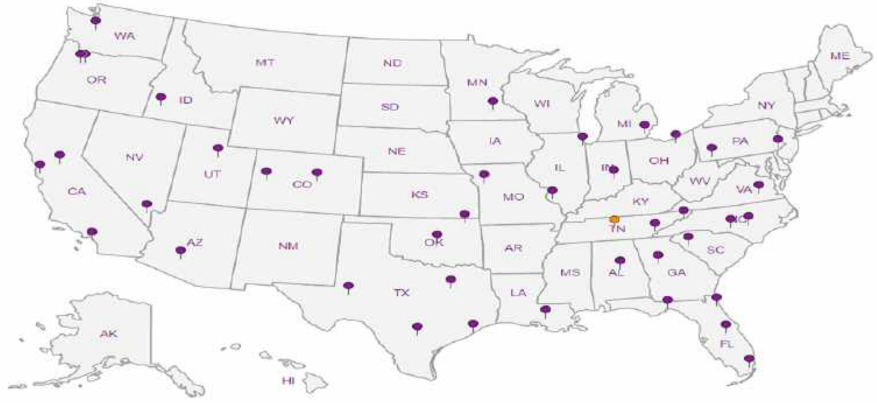
A2LA – ISO 17025	1461.01
A2LA – ISO 17025[5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 18

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SDG # ~~L1161424~~
D212
L1165628

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB: 11/13/19 MWB
Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)	
SB-15 (0-1)	Grab	SS	0-1	11/14/19	1145	32	X	X	X		X		-01	
SB-15 (1-2)	Grab	SS	1-2	11/14/19	1146	3						Hold	-	
SB-15 (2-3)	Grab	SS	2-3	11/14/19	1147	3	X	X	X		X		02	
SB-15 (3-4)	Grab	SS	3-4	11/14/19	1148	3						Hold		
SB-15 (6-8)	Grab	SS	6-8	11/14/19	1149	3						Hold		
SB-15 (10-12)	Grab	SS	10-12	11/14/19	1150	2	X	X	X		X		03	
SB-15A (0-1)	Grab	SS	0-1	11/14/19	1125	3						Hold		-01
SB-15A (1-2)	Grab	SS	1-2	11/14/19	1126	3						Hold		
SB-15A (2-3)	Grab	SS	2-3	11/14/19	1127	3						Hold		-02
SB-15A (3-4)	Grab	SS	3-4	11/14/19	1128	3						Hold		

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

Remarks:
4510 1662 0396/0411/0536/0514/ 0488/0400/
0503/0422/0444/0433/0477/0525/0466/0455

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS X FedEx __ Courier ________

Tracking # 4686 6470 7042

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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] No 5 [✓ HCl] / MeoH TBR
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp 4.1 °C 02-1=01 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-131

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com,**
tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #
8657

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

Quote #

Date Results Needed

Chain of Custody Page 2 of 18

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 # ~~L1161624~~

Table # L1165628

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB: 11/13/19 MW

Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-15A (6-8)	Grab	SS	6-8	11/14/19	1129	3						Held	
SB-15A (10-12)	Grab	SS	10-12	11/14/19	1130	3						Held	
SB-15B (0-1)	Grab	SS	0-1	11/14/19	1310	3						Held	-03
SB-15B (1-2)	Grab	SS	1-2	11/14/19	1311	3						Held	
SB-15B (2-3)	Grab	SS	2-3	11/14/19	1312	3						Held	-04
SB-15B (3-4)	Grab	SS	3-4	11/14/19	1313	3						Held	
SB-15B (6-8)	Grab	SS	6-8	11/14/19	1314	3						Held	
SB-15B (14-15)	Grab	SS	14-15	11/14/19	1315	3						Held	
SB-15C (0-1)	Grab	SS	0-1	11/14/19	1400	3						Held	-05
SB-15C (1-2)	Grab	SS	1-2	11/14/19	1401	3						Held	

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCl] / MeoH TBR	
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp: [illegible] °C 0.2-.1=0.1	Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

11-130

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 4 of 18

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

SDG # L1161424

Table # L1165628

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: 134 - Mark W. Beasley

PB: 11/13/19 mm

Shipped Via: **FedEX Priority**

Collected by (print): Tim Crump

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Site/Facility ID #

P.O. #
8657

Quote #

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

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-17B (0-1)	Grab	SS	0-1	11/14/19	1430	3						Hold	
SB-17B (1-2)	Grab	SS	1-2	11/14/19	1431	3						Hold	-13
SB-17B (2-3)	Grab	SS	2-3	11/14/19	1432	3						Hold	-14
SB-17B (3-4)	Grab	SS	3-4	11/14/19	1433	3						Hold	-15
SB-17B (6-8)	Grab	SS	6-8	11/14/19	1434	3						Hold	
SB-17B (14-15)	Grab	SS	14-15	11/14/19	1435	3						Hold	
SB-17E (9-10)	Grab	SS	9-10	11/14/19	1500	3	X	X	X		X		-04
SB-17E (14-15)	Grab	SS	14-15	11/14/19	1505	3	X	X	X		X		-05
SB-17F (6-8)	Grab	SS	6-8	11/14/19	1548	3						Hold	16
SB-17F (10-11)	Grab	SS	10-11	11/14/19	1547	3	X	X	X		X		-06

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 11/15	Time: 1700	Received by: (Signature)	Temp: [illegible] °C 0.2+1=3.1	Bottles Received: 228
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

11-128

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 9 of 10

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Phone: 800-767-5859
Fax: 615-758-5859

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: Future Federal Way Hospital

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #
8657

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

Quote #

Date Results Needed

SDG # H611480

Table # L1165678

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: 134 - Mark W. Beasley
PB:
Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-17C (0-1)	Grab	SS	0-1	11/13/19	1400	3											Hold	
SB-17C (1-2)	Grab	SS	1-2	11/13/19	1401	3											Hold	
SB-17C (2-3)	Grab	SS	2-3	11/13/19	1402	3	X	X	X		X							16
SB-17C (6-7)	Grab	SS	6-7	11/13/19	1403	3											Hold	
SB-17C (9-10)	Grab	SS	9-10	11/13/19	1404	3	X	X	X		X							17
SB-17C (14-15)	Grab	SS	14-15	11/13/19	1405	3	X	X	X		X							18
SB-17D (0-1)	Grab	SS	0-1	11/13/19	1420	3											Hold	
SB-17D (1-2)	Grab	SS	1-2	11/13/19	1421	3											Hold	
SB-17D (2-3)	Grab	SS	2-3	11/13/19	1422	3											Hold	
SB-17D (3-4)	Grab	SS	3-4	11/13/19	1423	3											Hold	

17
18
19
20

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

Remarks:

pH ______ Temp ______
Flow ______ Other ______

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

Samples returned via:
_ UPS _ FedEx _ Courier ______

Tracking #

Relinquished by : (Signature)	Date: 11/14/19	Time:	Received by: (Signature)	Trip Blank Received: [✓ Yes] No S [✓ HCl] MeoH TBR
Relinquished by : (Signature)	Date: 11-14	Time: 1720	Received by: (Signature)	Temp ASR °C 1+1.2=1.3 Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Hanley M	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

Chain of Custody Page 5 of 18

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Mount Juliet, TN 37122
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Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1161924

Table # L11656[illegible]

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: 134 - Mark W. Beasley

PB:

Shipped Via: **FedEX Priority**

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-17F (18-20)	Grab	SS	18-20	11/14/19	1545	3	X	X	X		X							~~07~~
SB-17F (24-25)	Grab	SS	24-25	11/14/19	1546	3	X	X	X		X							~~08~~
SB-18 (0-1)	Grab	SS	0-1	11/14/19	0755	3	X	X	X		X							~~09~~
SB-18 (1-2)	Grab	SS	1-2	11/14/19	0756	3											Hold	
SB-18 (2-3)	Grab	SS	2-3	11/14/19	0757	3	X	X	X		X							10 21
SB-18 (3-4)	Grab	SS	3-4	11/14/19	0758	3											Hold	
SB-18 (4-6)	Grab	SS	4-6	11/14/19	0759	3	X	X	X		X							11 22
SB-18 (6-8)	Grab	SS	6-8	11/14/19	0800	3											Hold	
SB-18 (9-11)	Grab	SS	9-11	11/14/19	0801	3											Hold	
SB-18 (12-14)	Grab	SS	12-14	11/14/19	0802	3											Hold	

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] No [✓ HCL] MeoH TBR 5
Relinquished by : (Signature)	Date: 11-15	Time: 1100	Received by: (Signature)	Temp: [illegible] °C 0.2-1=[illegible] Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-127

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 8 of 18

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1161924

Table # L1165628

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)	
SB-21 (4-6)	Grab	SS	4-6	11/14/19	1009	3											Held		23
SB-21 (6-8)	Grab	SS	6-8	11/14/19	1010	3	X	X	X		X							~~19~~	
SB-21 (9-11)	Grab	SS	9-11	11/14/19	1011	3	X	X	X		X							~~20~~	
SB-21 (12-14)	Grab	SS	12-14	11/14/19	1012	3											Held		
SB-22 (0-1)	Grab	SS	0-1	11/14/19	0950	3	X	X	X		X							~~21~~	
SB-22 (1-2)	Grab	SS	1-2	11/14/19	0951	3											Held		
SB-22 (2-3)	Grab	SS	2-3	11/14/19	0952	3	X	X	X		X							~~22~~	24
SB-22 (3-4)	Grab	SS	3-4	11/14/19	0953	3											Held		
SB-22 (4-6)	Grab	SS	4-6	11/14/19	0954	3	X	X	X		X							~~23~~	25
SB-22 (6-8)	Grab	SS	6-8	11/14/19	0955	3											Held		

* 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 X 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: 11/15/19	Time: 1250	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5	
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp: °C 0.2-.1=0.1 Bottles Received: 223	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00	Hold: Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #
8657

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

Quote #

Date Results Needed

Chain of Custody Page 9 of 18

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1161924

Table # L1165628

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-22 (9-11)	Grab	SS	9-11	11/14/19	0956	3											Hold	
SB-22 (12-14)	Grab	SS	12-14	11/14/19	0957	3											Hold	
SB-23 (0-1)	Grab	SS	0-1	11/14/19	1115	3	X	X	X		X							24
SB-23 (1-2)	Grab	SS	1-2	11/14/19	1116	3											Hold	
SB-23 (2-3)	Grab	SS	2-3	11/14/19	1117	3											Hold	
SB-23 (3-4)	Grab	SS	3-4	11/18/19	1118	3	X	X	X		X							25
SB-23 (4-6)	Grab	SS	4-6	11/14/19	1119	3	X	X	X		X							26
SB-23 (6-8)	Grab	SS	6-8	11/14/19	1120	3											Hold	26
SB-23 (9-11)	Grab	SS	9-11	11/14/19	1121	3											Hold	27
SB-23 (12-14)	Grab	SS	12-14	11/14/19	1122	3											Hold	28

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5	
Relinquished by: (Signature)	Date: 11-15	Time: 1130	Received by: (Signature)	Temp: Afm °C 2.2-1=01 Bottles Received: 223	If preservation required by Login: Date/Time
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00	Hold: Condition: NCF / [✓ OK]

Chain of Custody Page 11 of 15

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 # L1161924
Table # L1165628
Acctnum: TGERESHTX
Template: T158754
Prelogin: P740770
PM: 134 - Mark W. Beasley
PB:
Shipped Via: FedEX Priority

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Report to: Kristi Barnette

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Project Description: Future Federal Way Hospital

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Phone: 713-744-5800
Fax: 713-744-5888

Site/Facility ID #

P.O. # 8657

Collected by (print): Tim Crump

Quote #

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

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)	
SB-25 (2-3)	Grab	SS	2-3	11/14/19	0954	3	X	X	X		X								27
SB-25 (3-4)	Grab	SS	3-4	11/14/19	0955	3											Hold	~~31~~	
SB-25 (4-6)	Grab	SS	4-6	11/14/19	0956	3	X	X	X		X								
SB-25 (6-8)	Grab	SS	6-8	11/14/19	0957	3	X	X	X		X								30
SB-25 (8-9)	Grab	SS	8-9	11/14/19	0958	3											Held	~~32~~	
SB-25 (9-10)	Grab	SS	9-10	11/14/19	0959	3	X	X	X		X								31
SB-25 (10-11)	Grab	SS	10-11	11/14/19	1000	3											Held	~~33~~	
SB-25 (11-12)	Grab	SS	11-12	11/14/19	1001	3											Held	~~34~~	
SB-25 (14-15)	Grab	SS	14-15	11/14/19	1002	3	X	X	X		X								
SB-25 (16-17)	Grab	SS	16-17	11/14/19	1003	3											Held	~~35~~	

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

Remarks:

pH ______ Temp ______
Flow ______ Other ______

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

Samples returned via:
___ UPS X FedEx ___ Courier ________

Tracking #

Trip Blank Received: [✓ Yes] / No
[✓ HCl] / MeoH
TBR
5

Relinquished by : (Signature)
Date: 11/15/19 Time: 1230
Received by: (Signature)

Temp: 0.2-.1=0.1 °C
Bottles Received: 223

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date: 11/15 Time:
Received by: (Signature)

Hold:

Condition: NCF / [✓ OK]

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

Date: 11-16-19 Time: 9:00

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 12 of 18

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: Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: Future Federal Way Hospital

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

SDG# L1161924

Table # L1165628

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

Acctnum: TGERESHTX

Template: T158754

Prelogin: P740770

PM: 134 - Mark W. Beasley

PB:

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

Quote #

Date Results Needed

Shipped Via: FedEX Priority

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-25(17-18)	Grab	SS	17-18	11/14/19	1004	3											Hold	
SB-25(19-20)	Grab	SS	19-20	11/14/19	1005	3	X	X	X		X							36 32
SB-26(0-1)	Grab	SS	0-1	11/14/19	0917	3	X	X	X		X							37
SB-26(1-2)	Grab	SS	1-2	11/14/19	0918	3											Hold	
SB-26(2-3)	Grab	SS	2-3	11/14/19	0919	3	X	X	X		X							38
SB-26(3-4)	Grab	SS	3-4	11/14/19	0920	3											Hold	
SB-26(4-6)	Grab	SS	4-6	11/14/19	0921	3	X	X	X		X							39
SB-26(6-8)	Grab	SS	6-8	11/14/19	0922	3											Hold	
SB-26(8-9)	Grab	SS	8-9	11/14/19	0923	3	X	X	X		X							40
SB-26(9-10)	Grab	SS	9-10	11/14/19	0924	3											Hold	

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

Remarks:

pH ______ Temp ______

Flow ______ Other ______

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

Samples returned via:
__ UPS X FedEx __ Courier ________

Tracking #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5
	11/15/19	1030		
Relinquished by : (Signature)	Date: 11-15	Time: 1100	Received by: (Signature)	Temp: Amb °C 0.2-.1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Chain of Custody Page 13 of 18

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 # L1161924

Table # L1165628

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-26 (10-11)	Grab	SS	10-11	11/14/19	0925	3	X	X	X		X							-41
SB-26 (11-12)	Grab	SS	11-12	11/14/19	0926	3											Hold	
~~SB-26 (14-15)~~	~~Grab~~	~~SS~~	~~14-15~~	~~11/14/19~~	~~0927~~	~~3~~											~~Hold~~	
SB-26 (16-17)	Grab	SS	16-17	11/14/19	0928	3	X	X	X		X							-42
SB-26 (17-18)	Grab	SS	17-18	11/14/19	0929	3											Hold	
SB-26 (19-20)	Grab	SS	19-20	11/14/19	0930	3	X	X	X		X							-43
SB-27 (0-1)	Grab	SS	0-1	11/14/19	0840	3											Hold	
SB-27 (1-2)	Grab	SS	1-2	11/14/19	0841	3	X	X	X		X							-44
~~SB-27 (2-3)~~	~~Grab~~	~~SS~~	~~2-3~~	~~11/14/19~~	~~0842~~	~~3~~											~~Hold~~	
SB-27 (3-4)	Grab	SS	3-4	11/14/19	0843	3	X	X	X		X							-45

33

34

* 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: 11/15/19
Time: 1250
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
[✓ HCL] / MeoH
TBR
5

Relinquished by : (Signature)
Date: 11-15
Time: 1700
Received by: (Signature)

Temp: AGm °C
0.2-1=0.1

Bottles Received: 223

If preservation required by Login: Date/Time

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

Date: 11-16-19
Time: 9:00

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 14 of 18

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:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

Quote #

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

Immediately Packed on Ice N ___ Y X

SDG # ~~L1161974~~

Table # L1165628

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-27(4-6)	Grab	SS	4-6	11/14/19	0844	3											Hold	35
SB-27(6-8)	Grab	SS	6-8	11/14/19	0845	3	X	X	X		X							-46
SB-27(8-9)	Grab	SS	8-9	11/14/19	0846	3	X	X	X		X							-47
SB-27(9-10)	Grab	SS	9-10	11/14/19	0847	3											Hold	36
SB-27(10-11)	Grab	SS	10-11	11/14/19	0848	3	X	X	X		X							-48
SB-27(11-12)	Grab	SS	11-12	11/14/19	0849	3											Hold	
SB-27(14-15)	Grab	SS	14-15	11/14/19	0850	3											Hold	37
SB-27(16-17)	Grab	SS	16-17	11/14/19	0851	3	X	X	X		X							-49
SB-27(17-18)	Grab	SS	17-18	11/14/19	0852	3											Hold	
SB-27(19-20)	Grab	SS	19-20	11/14/19	0853	3	X	X	X		X							-50 38

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ YES] / No 5 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 11-15	Time: 19	Received by: (Signature)	Temp: Amb °C 0.2-1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Report to:
Kristi Barnette

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Pres Chk

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

Collected by (signature):

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

Immediately Packed on Ice N ___ Y X

Chain of Custody Page 18 of 18

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 # L1161924

Table # L1165627

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739846**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)	
SB-30 (1-1.5)	Grab	SS	1-1.5	11/14/19	1337	4	X	X	X	X	X							67	
SB-30 (1.5-2)	Grab	SS	1.5-2	11/14/19	1338	4	X	X	X	X	X							68	
SB-30 (3-3.5)	Grab	SS	3-3.5	11/14/19	1339	4											Hold		39
SB-30 (4.5-5)	Grab	SS	4.5-5	11/14/19	1340	4											Hold		40
SB-31 (0-0.5)	Grab	SS	0-0.5	11/14/19	1430	4	X	X	X	X	X							69	
SB-31 (0.5-1)	Grab	SS	0.5-1	11/14/19	1431	4	X	X	X	X	X							70	
SB-31 (1-1.5)	Grab	SS	1-1.5	11/14/19	1432	4	X	X	X	X	X							71	
SB-31 (1.5-2)	Grab	SS	1.5-2	11/14/19	1433	4	X	X	X	X	X							72	
SB-31 (3-3.5)	Grab	SS	3-3.5	11/14/19	1434	4											Hold		41
SB-31 (4.5-5)	Grab	SS	4.5-5	11/14/19	1435	4											Hold		42

* 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 #

Relinquished by : (Signature)	Date: 11/15/19	Time: 1220	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 1145	Time:	Received by: (Signature)	Temp: AG 2°C 2-1=0.1 · Bottles Received: 293
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) MWM	Date: 11-16-19 · Time: 9:00

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

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

Andy Vann

From: Mark Beasley
Sent: Wednesday, November 27, 2019 4:57 PM
To: Project Service; Extractions; Due VOC
Cc: Chris Johnson
Subject: L1161400 & L1161924 *TGRESHTX* hold samples ****Samples will go out of hold tonight/tomorrow****

Importance: High

Log the below samples previously on hold:

SB-15A (0-1)	NWTPHDXNOSGT, SV8270, TS
SB-15A (2-3)	NWTPHDXNOSGT, SV8270, TS
SB-15B (0-1)	NWTPHDXNOSGT, SV8270, TS
SB-15B (2-3)	NWTPHDXNOSGT, SV8270, TS
SB-15C (0-1)	NWTPHDXNOSGT, SV8270, TS
SB-15C (2-3)	NWTPHDXNOSGT, SV8270, TS
SB-15D (0-1)	NWTPHDXNOSGT, SV8270, TS
SB-15D (2-3)	NWTPHDXNOSGT, SV8270, TS
SB-16D (3-4)	NWTPHGX, SV8270, TS
SB-17 (1-2)	NWTPHDXNOSGT, SV8270, TS
SB-17 (2-3)	NWTPHDXNOSGT, SV8270, TS
SB-17 (3-4)	NWTPHDXNOSGT, SV8270, TS
SB-17B (1-2)	NWTPHDXNOSGT, SV8270, TS
SB-17B (2-3)	NWTPHDXNOSGT, SV8270, TS
SB-17B (3-4)	NWTPHDXNOSGT, SV8270, TS
SB-17D (0-1)	ASICP, TS
SB-17D (1-2)	ASICP, NWTPHDXNOSGT, SV8270, TS
SB-17D (2-3)	ASICP, NWTPHDXNOSGT, SV8270, TS
SB-17D (3-4)	NWTPHGX, NWTPHDXNOSGT, SV8270, TS
SB-17F (6-8)	NWTPHGX, SV8270, TS
SB-18 (2-3)	NWTPHGX, SV8270, TS
SB-18 (4-6)	NWTPHGX, SV8270, TS
SB-21 (4-6)	NWTPHGX, SV8270, TS
SB-22 (2-3)	NWTPHGX, SV8270, TS
SB-22 (4-6)	NWTPHGX, SV8270, TS
SB-23 (6-8)	NWTPHDXNOSGT, TS
SB-23 (9-11)	NWTPHDXNOSGT, TS
SB-23 (12-14)	NWTPHDXNOSGT, TS
SB-25 (2-3)	PBICP, TS
SB-25 (9-10)	PBICP, TS
~~SB-25 (14-15)~~	~~PBICP, TS~~
SB-25 (19-20)	PBICP, TS
SB-26 (14-15)	PBICP, TS
SB-27 (2-3)	PBICP, TS
SB-27 (4-6)	PBICP, TS
SB-27 (9-10)	PBICP, TS
SB-27 (14-15)	PBICP, TS

SB-27 (19-20)	PBICP, TS
SB-30 (3-3.5)	SV8081, ASICP, CRICP, PBICP, TS
SB-30 (4.5-5)	SV8081, ASICP, CRICP, PBICP, TS
SB-31 (3-3.5)	SV8081, ASICP, TS
SB-31 (4-4.5)	SV8081, ASICP, TS

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Wednesday, November 27, 2019 4:11 PM
To: Mark Beasley
Subject: Request Additional Federal Way Analysis and/or Extraction
Importance: High

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please run the following analysis under an expedited 2 day TAT. **Please forward back table below with pricing filled in so that a PO can be submitted.**

TGE Sample ID	Lab Sample ID	Analysis	Price (2 day TAT)
SB15 (0 – 1)	L1161924-01	SVOCs	262.50
SB15 (0 – 1)	L1161924-01	Total solids	7.50
SB15 (2-3)	L1161924-02	Total solids	7.50
SB15 (2-3)	L1161924-02	arsenic	??
SB15 (10-12)	L1161924-03	Total solids	7.50
SB15 (10-12)	L1161924-03	arsenic	??
SB15A (0-1)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	Extract only
SB15A (2-3)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB15B (0-1)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB15B (2-3)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB15C (0-1)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	

	Not assigned	SVOCS	262.50
SB15C (2-3)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB15D (0-1)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB15D (2-3)	Not assigned	Total solids	7.50
	Not assigned	NW DRO	67.50
	Not assigned	NW ORO	
	Not assigned	SVOCS	262.50
SB16D(2-3)	L1161400-09	Total solids	7.50
	L1161400-09	GRO	67.50
	Not Assigned	SVOCs	262.50
SB16D(3-4)	Not Assigned	Total solids	7.50
	Not Assigned	GRO	67.50
	Not Assigned	SVOCs	262.50
SB17(1-2)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
SB17(2-3)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
	Not assigned	Total Solids	7.50
SB17(3-4)	Not assigned	Total Solids	7.50
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
SB17A (12-13)	L1161400-15	Total solids	7.50
	L1161400-15	CR+3 and CR+6	??
SB17B(1-2)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
SB17B(2-3)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
SB17B(3-4)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
SB17C (9-10)	L1161400-17	Total solids	7.50
	L1161400-17	SVOCs	262.50
SB17C(14-15)	L1161400-18	Total solids	7.50
	L1161400-18	SVOCs	262.50
SB17D(0-1)	Not assigned	Total solids	7.50
	Not assigned	arsenic	??
SB17D(1-2)	Not assigned	Total solids	7.50
	Not assigned	arsenic	??
	Not assigned	NW ORO	67.50

	Not assigned	SVOCs	262.50
SB17D(2-3)	Not assigned	Total solids	7.50
SB17D(2-3)	Not assigned	arsenic	??
	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
SB17D(3-4)	Not assigned	Total solids	7.50
SB17D(3-4)	Not assigned	NW ORO	67.50
	Not assigned	SVOCs	262.50
	Not assigned	NW GRO	??
SB17F(6-8)	Not assigned	Total solids	7.50
SB17F(6-8)	Not assigned	GRO	??
	Not assigned	SVOCs	262.50
SB17F (24-25)	L1161924-08	Total solids	7.50
SB17F (24-25)	L1161924-08	CR+3 and CR+6	??
SB18(2-3)	Not assigned	Total solids	7.50
SB18(2-3)	Not assigned	GRO	67.50
	Not assigned	SVOCs	262.50
SB18(4-6)	Not assigned	Total solids	7.50
SB18(4-6)	Not assigned	GRO	67.50
	Not assigned	SVOCs	262.50
SB20 (2-3)	L1161924-15	Total solids	7.50
SB20 (2-3)	L1161924-15	SVOCs	262.50
SB20(4-6)	L1161924-16	Total solids	7.50
SB20(4-6)	L1161924-16	SVOCs	262.50
SB21(2-3)	L1161924-18	Total solids	7.50
SB21(2-3)	L1161924-18	GRO	67.50
	L1161924-18	SVOCs	262.50
	L1161924-18	CR+3 and CR+6	??
SB21(4-6)	Not assigned	Total solids	7.50
SB21(4-6)	Not assigned	GRO	67.50
	Not assigned	SVOCs	262.50
SB22(2-3)	Not assigned	Total solids	7.50
SB22(2-3)	Not assigned	GRO	67.50
	Not assigned	SVOCs	262.50
SB22(4-6)	Not assigned	Total solids	7.50
SB22(4-6)	Not assigned	GRO	67.50
	Not assigned	SVOCs	262.50
SB23(6-8)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
SB23(9-11))	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
SB23(12-14)	Not assigned	Total solids	7.50
	Not assigned	NW ORO	67.50
SB25(2-3)	Not assigned	Total solids	7.50
	Not assigned	Lead	??

SB25(9-10)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB25(14-15)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB25(19-20)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB26(14-15)	Not assigned	Total solids	7.50
	Not assigned	lead	??
SB27(2-3)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB27(4-6)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB27(9-10)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB27(14-15)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB27(19-20)	Not assigned	Total solids	7.50
	Not assigned	Lead	??
SB30(0-0.5)	L1161924-65	CR+3 and CR+6	??
SB30(3-3.5)	Not assigned	Total solids	7.50
	Not assigned	dieldrin	??
	Not assigned	Arsenic	??
	Not assigned	Lead	??
	Not assigned	Total chromium	??
SB30(4.5-5)	Not assigned	Total solids	7.50
	Not assigned	dieldrin	??

	Not assigned	Arsenic	??
	Not assigned	Lead	??
	Not assigned	Total chromium	??
SB31(3-3.5)	Not assigned	Total solids	7.50
	Not assigned	dieldrin	??
	Not assigned	Arsenic	??
SB31(4-4.5)	Not assigned	Total solids	7.50
	Not assigned	dieldrin	??
	Not assigned	Arsenic	??

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

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From: Mark Beasley
Sent: Monday, December 2, 2019 3:28 PM
To: Project Service
Cc: Jeremy Gupton
Subject: L1165628 *TGERESHTX*

Login:

Add CDICP to L1165628-41 & -42 and place into WG1388691.

Jeremy:

Pull old data if possible.

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Monday, December 02, 2019 2:33 PM
To: Mark Beasley
Subject: Cadmium Anaysis

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Although arsenic and dieldrin were requested last Wed for these samples, can you also please also run Cadmium?

- SB31 (3-3.5)
- SB31 (4.5-5)

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

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CAGE Code 08PQ6

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8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: Future Federal Way Hospital

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

Collected by (signature):

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

Immediately Packed on Ice N ___ Y ✓

Chain of Custody Page 3 of 18

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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 # ~~L1161924~~

Table # L1165628

Acctnum: TGERESHTX
Template: T158754
Prelogin: P740770
PM: 134 - Mark W. Beasley
PB: 11/13/19 MM
Shipped Via: FedEX Priority

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-15C(2-3)	Grab	SS	2-3	11/14/19	1402	3						Hold	06
SB-15C(3-4)	Grab	SS	3-4	11/14/19	1403	3						Hold	
SB-15C(6-8)	Grab	SS	6-8	11/14/19	1404	3						Hold	
SB-15C(10-12)	Grab	SS	10-12	11/14/19	1405	3						Hold	
SB-15D(0-1)	Grab	SS	0-1	11/14/19	1320	3						Hold	07
SB-15D(1-2)	Grab	SS	1-2	11/14/19	1321	3						Hold	
SB-15D(2-3)	Grab	SS	2-3	11/14/19	1322	3						Hold	08
SB-15D(3-4)	Grab	SS	3-4	11/14/19	1323	3						Hold	
SB-15D(6-8)	Grab	SS	6-8	11/14/19	1324	3						Hold	
SB-15D(14-15)	Grab	SS	14-15	11/14/19	1325	3						Hold	

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR 5	
Relinquished by : (Signature)	Date: 11-15	Time: 1204	Received by: (Signature)	Temp: AG2 °C 0.2-.1=0.1 Bottles Received: 223	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00	11-129 Condition: NCF / [✓ OK]

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: Future Federal Way Hospital

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project #: R13411.07

Lab Project #: TGERESHTX-R13411

Collected by (print): Tim Gramp

Site/Facility ID #:

P.O. #: 8657

Collected by (signature):

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:

Immediately Packed on Ice N___ Y ✓

Analysis / Container / Preservative

Chain of Custody Page 3 of 18

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~L1161924~~

Table # L1165628

Acctnum: TGERESHTX

Template: T158754

Prelogin: P740770

PM: 134 - Mark W. Beasley

PB: 11/13/19 mwb

Shipped Via: FedEX Priority

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-15C(2-3)	Grab	SS	2-3	11/14/19	1402	3						Hold	05
SB-15C(3-4)	Grab	SS	3-4	11/14/19	1403	3						Hold	
SB-15C(6-8)	Grab	SS	6-8	11/14/19	1404	3						Hold	
SB-15C(10-12)	Grab	SS	10-12	11/14/19	1405	3						Hold	
SB-15D(0-1)	Grab	SS	0-1	11/14/19	1320	3						Hold	07
SB-15D(1-2)	Grab	SS	1-2	11/14/19	1321	3						Hold	
SB-15D(2-3)	Grab	SS	2-3	11/14/19	1322	3						Hold	08
SB-15D(3-4)	Grab	SS	3-4	11/14/19	1323	3						Hold	
SB-15D(6-8)	Grab	SS	6-8	11/14/19	1324	3						Hold	
SB-15D(14-15)	Grab	SS	14-15	11/14/19	1325	3						Hold	

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 11-15	Time: 1700	Received by: (Signature)	Temp: Amb °C 2.2-.1=2.1 Bottles Received: 323
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-129

Condition: NCF / [✓ OK]

[redacted]

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Chain of Custody Page 3 of 18

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Fax: 615-758-5859

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

SDG # ~~L1161924~~

Table # L1165628

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: 134 - Mark W. Beasley
PB: 11/13/19 M

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

Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)	
SB-15C (2-3)	Grab	SS	2-3	11/14/19	1402	3											Hold		06
SB-15C (3-4)	Grab	SS	3-4	11/14/19	1403	3											Hold		
SB-15C (6-8)	Grab	SS	6-8	11/14/19	1404	3											Hold		
SB-15C (10-12)	Grab	SS	10-12	11/14/19	1405	3											Hold		
SB-15D (0-1)	Grab	SS	0-1	11/14/19	1320	3											Hold		07
SB-15D (1-2)	Grab	SS	1-2	11/14/19	1321	3											Hold		
SB-15D (2-3)	Grab	SS	2-3	11/14/19	1322	3											Hold		08
SB-15D (3-4)	Grab	SS	3-4	11/14/19	1323	3											Hold		
SB-15D (6-8)	Grab	SS	6-8	11/14/19	1324	3											Hold		
SB-15D (14-15)	Grab	SS	14-15	11/14/19	1325	3											Hold		

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCl] / MeoH TBR
Relinquished by : (Signature)	Date: 11-15	Time: 1204	Received by: (Signature)	Temp: Am °C 2.2-.1=2.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-129

Condition: NCF / [✓ OK]

ANALYTICAL REPORT

March 11, 2020

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

TGE Resources

Sample Delivery Group:	L1166078
Samples Received:	11/15/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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	Collected by	Collected date/time	Received date/time
SB-17 (0-1) L1166078-01 Solid	Tim Crump	11/13/19 15:20	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384252	1	11/21/19 09:12	11/21/19 09:26	JWW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1389792	20	12/02/19 23:31	12/03/19 18:19	AO	Mt. Juliet, TN

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

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.

Mark W. Beasley
Project Manager

Report Revision History

Level II Report - Version 1: 12/04/19 14:41

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1166078-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384252 and WG1389792

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1166078-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384252 and WG1389792

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1166078-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384252 and WG1389792

ER #[1]	**Description**
1	8270E WG1389792 2,4,6-Tribromophenol, 2-Fluorobiphenyl, 2-Fluorophenol, Nitrobenzene-d5, p-Terphenyl-d14, Phenol-d5 L1166078-01: Percent Recovery is outside of established control limits.
2	8270E WG1389792 Benzidine: Percent Recovery is outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.4		1	11/21/2019 09:26	WG1384252

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.137	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Acenaphthylene	U		0.144	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Anthracene	U		0.135	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Benzidine	U	J4	1.36	0.333	7.13	20	12/03/2019 18:19	WG1389792
Benzo(a)anthracene	U		0.0916	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Benzo(b)fluoranthene	U		0.149	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Benzo(k)fluoranthene	U		0.125	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Benzo(g,h,i)perylene	U		0.154	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Benzo(a)pyrene	U		0.117	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Bis(2-chlorethoxy)methane	U		0.165	0.333	7.13	20	12/03/2019 18:19	WG1389792
Bis(2-chloroethyl)ether	U		0.192	0.333	7.13	20	12/03/2019 18:19	WG1389792
2,2-Oxybis(1-Chloropropane)	U		0.163	0.333	7.13	20	12/03/2019 18:19	WG1389792
4-Bromophenyl-phenylether	U		0.244	0.333	7.13	20	12/03/2019 18:19	WG1389792
2-Chloronaphthalene	U		0.137	0.0333	0.713	20	12/03/2019 18:19	WG1389792
4-Chlorophenyl-phenylether	U		0.134	0.333	7.13	20	12/03/2019 18:19	WG1389792
Chrysene	U		0.119	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Dibenz(a,h)anthracene	U		0.176	0.0333	0.713	20	12/03/2019 18:19	WG1389792
1,2-Dichlorobenzene	U		0.197	0.333	7.13	20	12/03/2019 18:19	WG1389792
1,3-Dichlorobenzene	U		0.214	0.333	7.13	20	12/03/2019 18:19	WG1389792
1,4-Dichlorobenzene	U		0.214	0.333	7.13	20	12/03/2019 18:19	WG1389792
3,3-Dichlorobenzidine	U		1.70	0.333	7.13	20	12/03/2019 18:19	WG1389792
2,4-Dinitrotoluene	U		0.130	0.333	7.13	20	12/03/2019 18:19	WG1389792
2,6-Dinitrotoluene	U		0.158	0.333	7.13	20	12/03/2019 18:19	WG1389792
Fluoranthene	U		0.106	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Fluorene	U		0.146	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Hexachlorobenzene	U		0.183	0.333	7.13	20	12/03/2019 18:19	WG1389792
Hexachloro-1,3-butadiene	U		0.214	0.333	7.13	20	12/03/2019 18:19	WG1389792
Hexachlorocyclopentadiene	U		1.26	0.333	7.13	20	12/03/2019 18:19	WG1389792
Hexachloroethane	U		0.287	0.333	7.13	20	12/03/2019 18:19	WG1389792
Indeno(1,2,3-cd)pyrene	U		0.165	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Isophorone	U		0.112	0.333	7.13	20	12/03/2019 18:19	WG1389792
Naphthalene	U		0.190	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Nitrobenzene	U		0.149	0.333	7.13	20	12/03/2019 18:19	WG1389792
n-Nitrosodimethylamine	U		1.39	0.333	7.13	20	12/03/2019 18:19	WG1389792
n-Nitrosodiphenylamine	U		1.93	0.333	7.13	20	12/03/2019 18:19	WG1389792
n-Nitrosodi-n-propylamine	U		0.194	0.333	7.13	20	12/03/2019 18:19	WG1389792
Phenanthrene	U		0.113	0.0333	0.713	20	12/03/2019 18:19	WG1389792
Pyridine	U		1.34	0.333	7.13	20	12/03/2019 18:19	WG1389792
Benzylbutyl phthalate	U		0.221	0.333	7.13	20	12/03/2019 18:19	WG1389792
Bis(2-ethylhexyl)phthalate	U		0.257	0.333	7.13	20	12/03/2019 18:19	WG1389792
Di-n-butyl phthalate	U		0.233	0.333	7.13	20	12/03/2019 18:19	WG1389792
Diethyl phthalate	U		0.148	0.333	7.13	20	12/03/2019 18:19	WG1389792
Dimethyl phthalate	U		0.116	0.333	7.13	20	12/03/2019 18:19	WG1389792
Di-n-octyl phthalate	U		0.194	0.333	7.13	20	12/03/2019 18:19	WG1389792
Pyrene	U		0.263	0.0333	0.713	20	12/03/2019 18:19	WG1389792
1,2,4-Trichlorobenzene	U		0.188	0.333	7.13	20	12/03/2019 18:19	WG1389792
4-Chloro-3-methylphenol	U		0.102	0.333	7.13	20	12/03/2019 18:19	WG1389792
2-Chlorophenol	U		0.178	0.333	7.13	20	12/03/2019 18:19	WG1389792
2,4-Dichlorophenol	U		0.160	0.333	7.13	20	12/03/2019 18:19	WG1389792
2,4-Dimethylphenol	U		1.01	0.333	7.13	20	12/03/2019 18:19	WG1389792

SB-17 (0-1)

Collected date/time: 11/13/19 15:20

SAMPLE RESULTS - 01

L1166078

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
4,6-Dinitro-2-methylphenol	U		2.65	0.333	7.13	20	12/03/2019 18:19	WG1389792
2,4-Dinitrophenol	U		2.10	0.333	7.13	20	12/03/2019 18:19	WG1389792
2-Methylphenol	U		0.211	0.333	7.13	20	12/03/2019 18:19	WG1389792
3&4-Methyl Phenol	U		0.168	0.333	7.13	20	12/03/2019 18:19	WG1389792
2-Nitrophenol	U		0.278	0.333	7.13	20	12/03/2019 18:19	WG1389792
4-Nitrophenol	U		1.12	0.333	7.13	20	12/03/2019 18:19	WG1389792
Pentachlorophenol	U		1.03	0.333	7.13	20	12/03/2019 18:19	WG1389792
Phenol	U		0.149	0.333	7.13	20	12/03/2019 18:19	WG1389792
2,4,5-Trichlorophenol	U		0.223	0.333	7.13	20	12/03/2019 18:19	WG1389792
2,4,6-Trichlorophenol	U		0.167	0.333	7.13	20	12/03/2019 18:19	WG1389792
(S) 2-Fluorophenol	*98.9*	J7			*12.0-120*		*12/03/2019 18:19*	WG1389792
(S) Phenol-d5	*93.8*	J7			*10.0-120*		*12/03/2019 18:19*	WG1389792
(S) Nitrobenzene-d5	*81.5*	J7			*10.0-122*		*12/03/2019 18:19*	WG1389792
(S) 2-Fluorobiphenyl	*80.0*	J7			*15.0-120*		*12/03/2019 18:19*	WG1389792
(S) 2,4,6-Tribromophenol	*123*	J7			*10.0-127*		*12/03/2019 18:19*	WG1389792
(S) p-Terphenyl-d14	*89.1*	J7			*10.0-120*		*12/03/2019 18:19*	WG1389792

Sample Narrative:

L1166078-01 WG1389792: Dilution due to matrix impact during extract concentration procedure

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

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

Method Blank (MB)

(MB) R3474870-1 11/21/19 09:26

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00100			

L1161400-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1161400-11 11/21/19 09:26 • (DUP) R3474870-3 11/21/19 09:26

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	93.4	93.0	1	0.407		10

Laboratory Control Sample (LCS)

(LCS) R3474870-2 11/21/19 09:26

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) R3478403-2 12/03/19 00:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00642	0.0333
Acenaphthylene	0.0129	J	0.00671	0.0333
Anthracene	U		0.00632	0.0333
Benzidine	U		0.0637	0.333
Benzo(a)anthracene	0.0130	J	0.00428	0.0333
Benzo(b)fluoranthene	0.0150	J	0.00695	0.0333
Benzo(k)fluoranthene	0.00673	J	0.00582	0.0333
Benzo(g,h,i)perylene	0.0130	J	0.00721	0.0333
Benzo(a)pyrene	0.0144	J	0.00548	0.0333
Bis(2-chlorethoxy)methane	U		0.00770	0.333
Bis(2-chloroethyl)ether	U		0.00896	0.333
2,2-Oxybis(1-Chloropropane)	U		0.00760	0.333
4-Bromophenyl-phenylether	U		0.0114	0.333
2-Chloronaphthalene	U		0.00639	0.0333
4-Chlorophenyl-phenylether	U		0.00627	0.333
Chrysene	0.0141	J	0.00555	0.0333
Dibenz(a,h)anthracene	U		0.00821	0.0333
1,2-Dichlorobenzene	U		0.00921	0.333
1,3-Dichlorobenzene	U		0.0100	0.333
1,4-Dichlorobenzene	U		0.0100	0.333
3,3-Dichlorobenzidine	U		0.0794	0.333
2,4-Dinitrotoluene	U		0.00607	0.333
2,6-Dinitrotoluene	U		0.00737	0.333
Fluoranthene	0.0251	J	0.00496	0.0333
Fluorene	U		0.00682	0.0333
Hexachlorobenzene	U		0.00856	0.333
Hexachloro-1,3-butadiene	U		0.0100	0.333
Hexachlorocyclopentadiene	U		0.0587	0.333
Hexachloroethane	U		0.0134	0.333
Indeno(1,2,3-cd)pyrene	0.0125	J	0.00772	0.0333
Isophorone	U		0.00522	0.333
Naphthalene	0.0240	J	0.00889	0.0333
Nitrobenzene	U		0.00695	0.333
n-Nitrosodimethylamine	U		0.0647	0.333
n-Nitrosodiphenylamine	U		0.0900	0.333
n-Nitrosodi-n-propylamine	U		0.00906	0.333
Phenanthrene	0.0173	J	0.00528	0.0333
Benzylbutyl phthalate	U		0.0103	0.333
Bis(2-ethylhexyl)phthalate	U		0.0120	0.333
Di-n-butyl phthalate	U		0.0109	0.333

Method Blank (MB)

(MB) R3478403-2 12/03/19 00:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Diethyl phthalate	U		0.00691	0.333
Dimethyl phthalate	U		0.00540	0.333
Di-n-octyl phthalate	U		0.00907	0.333
Pyrene	0.0224	J	0.0123	0.0333
Pyridine	U		0.0628	0.333
1,2,4-Trichlorobenzene	U		0.00876	0.333
4-Chloro-3-methylphenol	U		0.00477	0.333
2-Chlorophenol	U		0.00831	0.333
2-Methylphenol	U		0.00986	0.333
3&4-Methyl Phenol	U		0.00783	0.333
2,4-Dichlorophenol	U		0.00746	0.333
2,4-Dimethylphenol	U		0.0471	0.333
4,6-Dinitro-2-methylphenol	U		0.124	0.333
2,4-Dinitrophenol	U		0.0980	0.333
2-Nitrophenol	U		0.0130	0.333
4-Nitrophenol	U		0.0525	0.333
Pentachlorophenol	U		0.0480	0.333
Phenol	U		0.00695	0.333
2,4,5-Trichlorophenol	U		0.0104	0.333
2,4,6-Trichlorophenol	U		0.00779	0.333
(S) Nitrobenzene-d5	*81.1*			*10.0-122*
(S) 2-Fluorobiphenyl	*82.9*			*15.0-120*
(S) p-Terphenyl-d14	*95.2*			*10.0-120*
(S) Phenol-d5	*81.2*			*10.0-120*
(S) 2-Fluorophenol	*89.0*			*12.0-120*
(S) 2,4,6-Tribromophenol	*97.3*			*10.0-127*

Laboratory Control Sample (LCS)

(LCS) R3478403-1 12/02/19 23:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.666	0.499	74.9	38.0-120	
Acenaphthylene	0.666	0.534	80.2	40.0-120	
Anthracene	0.666	0.549	82.4	42.0-120	
Benzidine	1.33	0.111	8.35	10.0-120	J4
Benzo(a)anthracene	0.666	0.617	92.6	44.0-120	
Benzo(b)fluoranthene	0.666	0.598	89.8	43.0-120	
Benzo(k)fluoranthene	0.666	0.582	87.4	44.0-120	

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

Laboratory Control Sample (LCS)

(LCS) R3478403-1 12/02/19 23:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzo(g,h,i)perylene	0.666	0.586	88.0	43.0-120	
Benzo(a)pyrene	0.666	0.608	91.3	45.0-120	
Bis(2-chlorethoxy)methane	0.666	0.390	58.6	20.0-120	
Bis(2-chloroethyl)ether	0.666	0.483	72.5	16.0-120	
2,2-Oxybis(1-Chloropropane)	0.666	0.466	70.0	23.0-120	
4-Bromophenyl-phenylether	0.666	0.598	89.8	40.0-120	
2-Chloronaphthalene	0.666	0.519	77.9	35.0-120	
4-Chlorophenyl-phenylether	0.666	0.557	83.6	40.0-120	
Chrysene	0.666	0.567	85.1	43.0-120	
Dibenz(a,h)anthracene	0.666	0.606	91.0	44.0-120	
1,2-Dichlorobenzene	0.666	0.488	73.3	32.0-120	
1,3-Dichlorobenzene	0.666	0.475	71.3	30.0-120	
1,4-Dichlorobenzene	0.666	0.486	73.0	31.0-120	
3,3-Dichlorobenzidine	1.33	1.00	75.2	28.0-120	
2,4-Dinitrotoluene	0.666	0.581	87.2	45.0-120	
2,6-Dinitrotoluene	0.666	0.584	87.7	42.0-120	
Fluoranthene	0.666	0.574	86.2	44.0-120	
Fluorene	0.666	0.528	79.3	41.0-120	
Hexachlorobenzene	0.666	0.584	87.7	39.0-120	
Hexachloro-1,3-butadiene	0.666	0.446	67.0	15.0-120	
Hexachlorocyclopentadiene	0.666	0.607	91.1	15.0-120	
Hexachloroethane	0.666	0.481	72.2	17.0-120	
Indeno(1,2,3-cd)pyrene	0.666	0.634	95.2	45.0-120	
Isophorone	0.666	0.396	59.5	23.0-120	
Naphthalene	0.666	0.407	61.1	18.0-120	
Nitrobenzene	0.666	0.406	61.0	17.0-120	
n-Nitrosodimethylamine	0.666	0.429	64.4	10.0-125	
n-Nitrosodiphenylamine	0.666	0.535	80.3	40.0-120	
n-Nitrosodi-n-propylamine	0.666	0.477	71.6	26.0-120	
Phenanthrene	0.666	0.532	79.9	42.0-120	
Benzylbutyl phthalate	0.666	0.653	98.0	40.0-120	
Bis(2-ethylhexyl)phthalate	0.666	0.644	96.7	41.0-120	
Di-n-butyl phthalate	0.666	0.601	90.2	43.0-120	
Diethyl phthalate	0.666	0.539	80.9	43.0-120	
Dimethyl phthalate	0.666	0.531	79.7	43.0-120	
Di-n-octyl phthalate	0.666	0.641	96.2	40.0-120	
Pyrene	0.666	0.572	85.9	41.0-120	
Pyridine	0.666	0.295	44.3	10.0-120	
1,2,4-Trichlorobenzene	0.666	0.431	64.7	17.0-120	
4-Chloro-3-methylphenol	0.666	0.459	68.9	28.0-120	

Laboratory Control Sample (LCS)

(LCS) R3478403-1 12/02/19 23:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Chlorophenol	0.666	0.537	80.6	28.0-120	
2-Methylphenol	0.666	0.537	80.6	35.0-120	
3&4-Methyl Phenol	0.666	0.603	90.5	42.0-120	
2,4-Dichlorophenol	0.666	0.466	70.0	25.0-120	
2,4-Dimethylphenol	0.666	0.423	63.5	15.0-120	
4,6-Dinitro-2-methylphenol	0.666	0.497	74.6	16.0-120	
2,4-Dinitrophenol	0.666	0.430	64.6	10.0-120	
2-Nitrophenol	0.666	0.492	73.9	20.0-120	
4-Nitrophenol	0.666	0.530	79.6	27.0-120	
Pentachlorophenol	0.666	0.589	88.4	29.0-120	
Phenol	0.666	0.516	77.5	28.0-120	
2,4,5-Trichlorophenol	0.666	0.579	86.9	38.0-120	
2,4,6-Trichlorophenol	0.666	0.602	90.4	37.0-120	
(S) Nitrobenzene-d5			*62.5*	*10.0-122*	
(S) 2-Fluorobiphenyl			*78.4*	*15.0-120*	
(S) p-Terphenyl-d14			*89.5*	*10.0-120*	
(S) Phenol-d5			*82.0*	*10.0-120*	
(S) 2-Fluorophenol			*89.3*	*12.0-120*	
(S) 2,4,6-Tribromophenol			*105*	*10.0-127*	

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

GLOSSARY OF TERMS

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCREDITATIONS & LOCATIONS

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

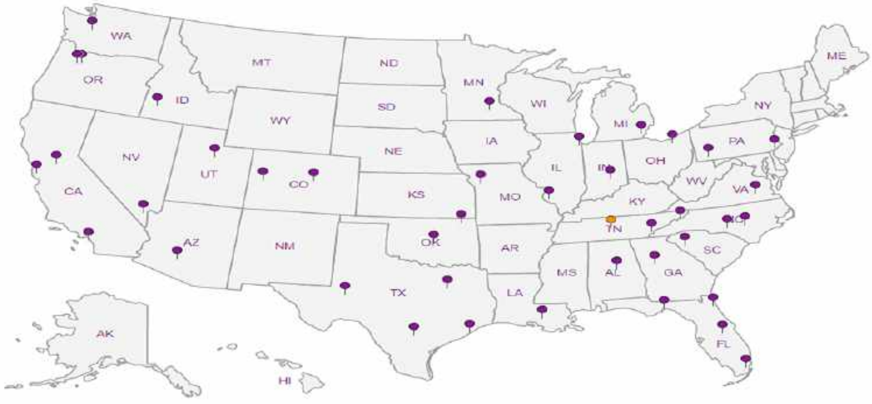
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Collected by (print): Tim Crump

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Site/Facility ID #

P.O. # 8657

Quote #

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

Chain of Custody Page 7 of 10

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 # #61400

JN 12/2/19

Table # L1166078

Acctnum: TGERESHTX
Template: T158754
Prelogin: P739844
PM: 134 - Mark W. Beasley
PB:

Shipped Via: FedEX Standard

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-16C (6-8)	Grab	SS	6-8	11/13/19	1259	3											Hold	
SB-16C (12-13)	Grab	SS	12-13	11/13/19	1300	3											Hold	
SB-16D (0-1)	Grab	SS	0-1	11/13/19	1323	3											Hold	
SB-16D (1-2)	Grab	SS	1-2	11/13/19	1324	3											Hold	
SB-16D (2-3)	Grab	SS	2-3	11/13/19	1325	3											Hold	
SB-16D (3-4)	Grab	SS	3-4	11/13/19	1326	3											Hold	
SB-16D (6-8)	Grab	SS	6-8	11/13/19	1327	3											Hold	
SB-16D (14-15)	Grab	SS	14-15	11/13/19	1328	3											Hold	
SB-17 (0-1)	Grab	SS	0-1	11/13/19	1520	3	X	X	X		X						~~H~~	-01
SB-17 (1-2)	Grab	SS	1-2	11/13/19	1521	3											Hold	

* 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: 11/14/19	Time:	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR 5	
Relinquished by : (Signature)	Date: 11-14	Time:	Received by: (Signature)	Temp: °C 0.1+.2=.3	Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/19	Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

Andy Vann

From: Mark Beasley
Sent: Monday, December 2, 2019 1:30 PM
To: Project Service; Sample Storage; Extractions
Subject: L1161400 *TGERESHTX* rush R3 relog

Relog L1161400-11 for SV8270. Transfer TS. Log as R3 due 12/4.

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Monday, December 02, 2019 1:26 PM
To: Mark Beasley
Subject: additional analysis

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Can you please let me know if L1161400-11 is one of the samples currently being run for SVOCs? If not, please add.

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

TGERESOURCES,INC.

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CAGE Code 08PQ6

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ANALYTICAL REPORT

December 04, 2019

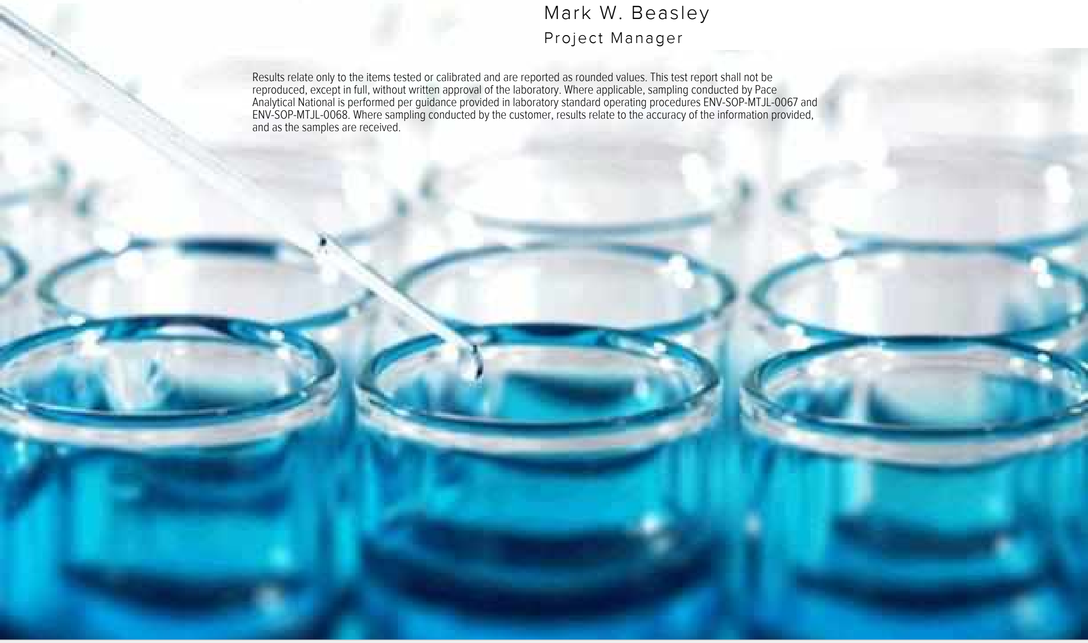
1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1166082
Samples Received:	11/16/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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	Collected by	Collected date/time	Received date/time
		11/14/19 08:57	11/16/19 09:00

SB-19(4-6) L1166082-01 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384983	1	11/22/19 16:05	11/22/19 16:23	JWW	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1390022	5	12/03/19 08:38	12/03/19 16:52	JPD	Mt. Juliet, TN

	Collected by	Collected date/time	Received date/time
		11/14/19 10:11	11/16/19 09:00

SB-21(9-11) L1166082-02 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384985	1	11/22/19 15:49	11/22/19 16:02	JWW	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1390022	5	12/03/19 08:38	12/03/19 16:55	JPD	Mt. Juliet, TN

	Collected by	Collected date/time	Received date/time
		11/14/19 10:00	11/16/19 09:00

SB-25(10-11) L1166082-03 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384986	1	11/22/19 15:27	11/22/19 15:46	JWW	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1390022	5	12/03/19 08:38	12/03/19 16:58	JPD	Mt. Juliet, TN

CASE NARRATIVE

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 12/04/2019 14:32
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1166082-01, 02 and 03
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384986, WG1384985, WG1384983 and WG1390022

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 12/04/2019 14:32
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1166082-01, 02 and 03
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384986, WG1384985, WG1384983 and WG1390022

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 12/04/2019 14:32
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1166082-01, 02 and 03
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384986, WG1384985, WG1384983 and WG1390022

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

SB-19(4-6)
Collected date/time: 11/14/19 08:57

SAMPLE RESULTS - 01

L1166082

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.5		1	11/22/2019 16:23	WG1384983

Metals (ICPMS) by Method 6020B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Selenium	U		0.225	0.100	0.592	5	12/03/2019 16:52	WG1390022

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

SB-21(9-11)

Collected date/time: 11/14/19 10:11

SAMPLE RESULTS - 02

L1166082

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	74.0		1	11/22/2019 16:02	WG1384985

Metals (ICPMS) by Method 6020B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Selenium	U		0.257	0.100	0.676	5	12/03/2019 16:55	WG1390022

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	76.2		1	11/22/2019 15:46	WG1384986

Metals (ICPMS) by Method 6020B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Selenium	U		0.249	0.100	0.657	5	12/03/2019 16:58	WG1390022

WG1384983

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1166082-01

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

Method Blank (MB)

(MB) R3475330-1 11/22/19 16:23

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00500			

L1161924-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-14 11/22/19 16:23 • (DUP) R3475330-3 11/22/19 16:23

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	84.5	82.4	1	2.55		10

Laboratory Control Sample (LCS)

(LCS) R3475330-2 11/22/19 16:23

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	49.9	99.9	85.0-115	

Method Blank (MB)

(MB) R3475326-1 11/22/19 16:02

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00300			

L1161924-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-25 11/22/19 16:02 • (DUP) R3475326-3 11/22/19 16:02

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.7	90.5	1	0.935		10

Laboratory Control Sample (LCS)

(LCS) R3475326-2 11/22/19 16:02

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) R3475325-1 11/22/19 15:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00500			

L1161924-36 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-36 11/22/19 15:46 • (DUP) R3475325-3 11/22/19 15:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	79.9	80.0	1	0.0729		10

Laboratory Control Sample (LCS)

(LCS) R3475325-2 11/22/19 15:46

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

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

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3478612-1 12/03/19 15:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Selenium	U		0.190	0.500

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

(LCS) R3478612-2 12/03/19 15:49 • (LCSD) R3478612-3 12/03/19 15:52

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 %
Selenium	100	94.0	96.0	94.0	96.0	80.0-120			2.09	20

L1165532-52 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1165532-52 12/03/19 15:56 • (MS) R3478612-6 12/03/19 16:06 • (MSD) R3478612-7 12/03/19 16:09

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Selenium	20.0	0.205	96.8	95.6	96.6	95.4	5	75.0-125			1.18	20

GLOSSARY OF TERMS

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

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

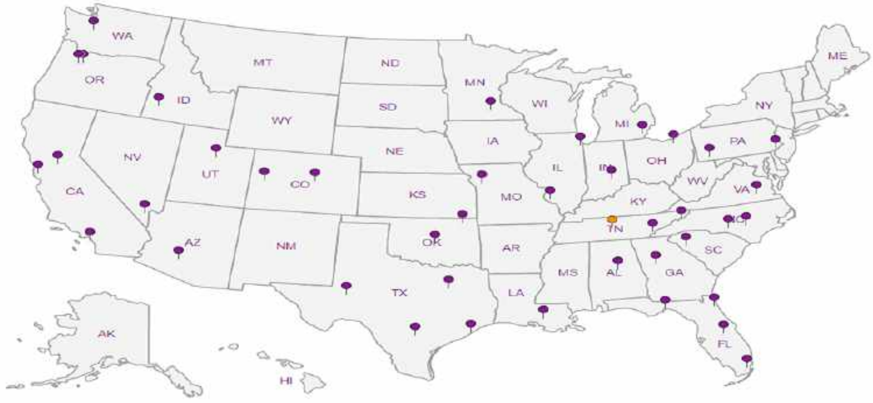
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

Collected by (signature):

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

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

Chain of Custody Page 6 of 18

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 # ~~L1161424~~ AN 12/2/19

Table # L1166082

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr							Remarks	Sample # (lab only)
SB-19(0-1)	Grab	SS	0-1	11/14/19	0853	3	X	X	X		X								~~-02~~
SB-19(1-2)	Grab	SS	1-2	11/14/19	0854	3												Hold	
SB-19(2-3)	Grab	SS	2-3	11/14/19	0855	3	X	X	X		X								~~-03~~
SB-19(3-4)	Grab	SS	3-4	11/14/19	0856	3												Hold	
SB-19(4-6)	Grab	SS	4-6	11/14/19	0857	3	X	X	X		X								~~-04~~ -01
SB-19(6-8)	Grab	SS	6-8	11/14/19	0858	3												Hold	
SB-19(9-11)	Grab	SS	9-11	11/14/19	0859	3												Hold	
SB-19(12-14)	Grab	SS	12-14	11/14/19	0900	3												Hold	
SB-20(0-1)	Grab	SS	0-1	11/14/19	0933	3												Hold	
SB-20(1-2)	Grab	SS	1-2	11/14/19	0934	3												Hold	

* 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: ___ NF ✓ 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCl] / MeoH TBR
Relinquished by : (Signature)	Date: 11/15	Time: 1730	Received by: (Signature)	Temp: ~~4~~ 2 °C 2.2-1=2.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Ho 11-126

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 8 of 18

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 # ~~L1161924~~

Table # L1166002

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-21 (4-6)	Grab	SS	4-6	11/14/19	1009	3							
SB-21 (6-8)	Grab	SS	6-8	11/14/19	1010	3	X	X	X		X	Held	
SB-21 (9-11)	Grab	SS	9-11	11/14/19	1011	3	X	X	X		X		~~19~~
SB-21 (12-14)	Grab	SS	12-14	11/14/19	1012	3							~~20~~ -02
SB-22 (0-1)	Grab	SS	0-1	11/14/19	0950	3	X	X	X		X	Held	
SB-22 (1-2)	Grab	SS	1-2	11/14/19	0951	3							21
SB-22 (2-3)	Grab	SS	2-3	11/14/19	0952	3	X	X	X		X	Held	
SB-22 (3-4)	Grab	SS	3-4	11/14/19	0953	3							~~22~~
SB-22 (4-6)	Grab	SS	4-6	11/14/19	0954	3	X	X	X		X	Held	
SB-22 (6-8)	Grab	SS	6-8	11/14/19	0955	3							~~23~~

Held

* 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 X 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: 11/15/19	Time: 1250	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp: °C 0.2-.1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

Chain of Custody Page 11 of 18

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#~~ L1161924

Table # L1166087

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-25 (2-3)	Grab	SS	2-3	11/14/19	0954	3											Hold	
SB-25 (3-4)	Grab	SS	3-4	11/14/19	0955	3	X	X	X		X							~~31~~
SB-25 (4-6)	Grab	SS	4-6	11/14/19	0956	3											Held	
SB-25 (6-8)	Grab	SS	6-8	11/14/19	0957	3	X	X	X		X							~~32~~
SB-25 (8-9)	Grab	SS	8-9	11/14/19	0958	3	X	X	X		X							~~33~~
SB-25 (9-10)	Grab	SS	9-10	11/14/19	0959	3											Held	
SB-25 (10-11)	Grab	SS	10-11	11/14/19	1000	3	X	X	X		X							~~34~~ -03
SB-25 (11-12)	Grab	SS	11-12	11/14/19	1001	3											Held	
SB-25 (14-15)	Grab	SS	14-15	11/14/19	1002	3											Held	
SB-25 (16-17)	Grab	SS	16-17	11/14/19	1003	3	X	X	X		X							~~35~~

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5	
Relinquished by : (Signature)	Date: [illegible]	Time:	Received by: (Signature)	Temp: [illegible] °C 0.2[illegible]	Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

Andy Vann

From: Mark Beasley
Sent: Monday, December 2, 2019 12:54 PM
To: Project Service; Sample Storage; Due Metals
Subject: L1161924 *TGERESHTX* relog

Relog L1161924-14, -20, & -34 for SEG. Transfer TS. Log as R3 due 12/4.

Thanks
Mark Beasley
National Account Manager

Pace Analytical National Center for Testing & Innovation
12065 Lebanon Road | Mt. Juliet, TN 37122
615.773.9672 | Cell 615.330.1602
mbeasley@pacenational.com | pacenational.com

ESC Lab Sciences is now Pace Analytical National Center for Testing & Innovation! Please make note of my new email address and website.

ANALYTICAL REPORT

December 04, 2019

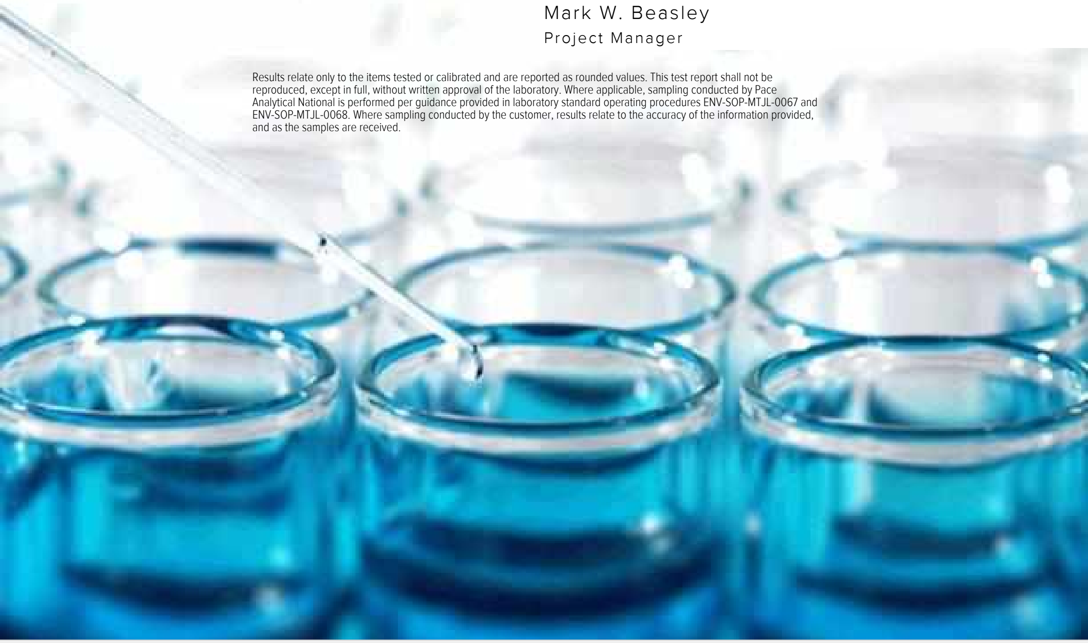
1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1166115
Samples Received:	11/16/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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    Metals (ICP) by Method 6010D 11
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	Collected by	Collected date/time	Received date/time
SB-26(11-12) L1166115-01 Solid		11/14/19 09:26	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389950	1	12/03/19 08:05	12/03/19 08:24	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1390019	1	12/03/19 08:34	12/04/19 05:37	TRB	Mt. Juliet, TN

CASE NARRATIVE

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

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 12/04/2019 09:50
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1166115-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1389950 and WG1390019

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 12/04/2019 09:50
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1166115-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1389950 and WG1390019

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 12/04/2019 09:50
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1166115-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1389950 and WG1390019

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.2		1	12/03/2019 08:24	WG1389950

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	76.5		0.228	0.500	0.601	1	12/04/2019 05:37	WG1390019

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

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

Method Blank (MB)

(MB) R3478609-1 12/03/19 08:24

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00200			

L1165278-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1165278-03 12/03/19 08:24 • (DUP) R3478609-3 12/03/19 08:24

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	87.6	87.1	1	0.504		10

Laboratory Control Sample (LCS)

(LCS) R3478609-2 12/03/19 08:24

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3478751-1 12/04/19 04:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Lead	U		0.190	0.500

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

(LCS) R3478751-2 12/04/19 04:51 • (LCSD) R3478751-3 12/04/19 04:53

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 %
Lead	100	95.6	97.2	95.6	97.2	80.0-120			1.65	20

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

GLOSSARY OF TERMS

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

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

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

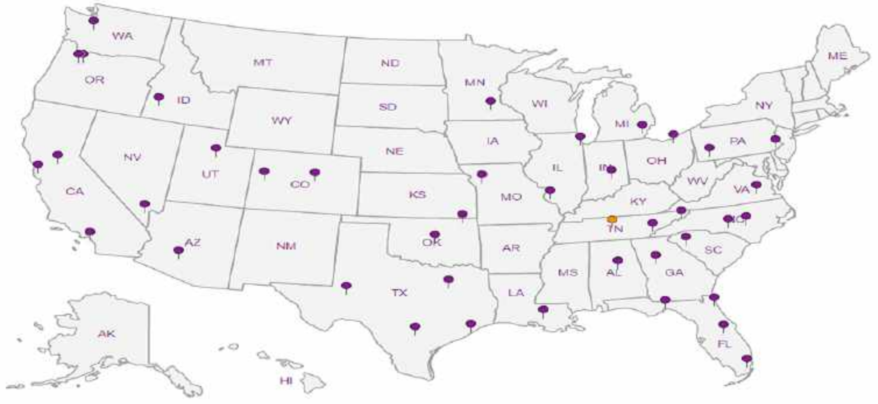
Third Party Federal Accreditations

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

[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.



TGE Resources 8048 Northcourt Road Houston, TX 77040	Billing Information: **Accounts Payable** **8048 Northcourt Road** **Houston, TX 77040**	Pres Chk
Report to: **Kristi Barnette**	Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**	
Project Description: **Future Federal Way Hospital**	City/State Collected: Federal Way, WA	Please Circle: [✓ PT] MT CT ET
Phone: **713-744-5800** Fax: **713-744-5888**	Client Project # **R13411.07**	Lab Project # **TGERESHTX-R13411**
Collected by (print): Tim Crump	Site/Facility ID #	P.O. # **8657**
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

Chain of Custody Page 13 of 18

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 # ~~L1161924~~ AV 12/2/19

Table # L1166115

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-26 (10-11)	Grab	SS	10-11	11/14/19	0925	3	X	X	X		X		41
SB-26 (11-12)	Grab	SS	11-12	11/14/19	0926	3						Hold	-01
SB-26 (14-15)	Grab	SS	14-15	11/14/19	0927	3						Hold	
SB-26 (16-17)	Grab	SS	16-17	11/14/19	0928	3	X	X	X		X		42
SB-26 (17-18)	Grab	SS	17-18	11/14/19	0929	3						Hold	
SB-26 (19-20)	Grab	SS	19-20	11/14/19	0930	3	X	X	X		X		43
SB-27 (0-1)	Grab	SS	0-1	11/14/19	0840	3						Hold	
SB-27 (1-2)	Grab	SS	1-2	11/14/19	0841	3	X	X	X		X		44
SB-27 (2-3)	Grab	SS	2-3	11/14/19	0842	3						Hold	
SB-27 (3-4)	Grab	SS	3-4	11/14/19	0843	3	X	X	X		X		45

* 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: 11/15/19	Time: 1250	Received by: (Signature)	Trip Blank Received: [✓ Yes] No [✓ HCL] MeoH TBR 5
Relinquished by : (Signature)	Date: 11-15	Time: 1700	Received by: (Signature)	Temp: Air °C 0.2-1=011 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

Andy Vann

From: Mark Beasley
Sent: Monday, December 2, 2019 3:26 PM
To: Project Service
Subject: L1161924 *TGERESHTX* rush R3 hold sample

Log sample SB-26 (11-12) for PBICP & TS. Log as R3 due 12/4.

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Monday, December 02, 2019 2:15 PM
To: Mark Beasley
Subject: Additional Samples

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Requested last Wed was SB26(14-15) for lead. The COCs say there should also be a SB26(11-12). Can you confirm? If so, that one will also need to be run for lead.

thanks

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

TGERESOURCES, INC.

WBENC & SBA Certified Woman Owned Small Business
DUNS# 929574051
CAGE Code 08PQ6

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ANALYTICAL REPORT

December 06, 2019

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

TGE Resources

Sample Delivery Group:	L1167359
Samples Received:	11/16/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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Cn: Case Narrative 4
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Sr: Sample Results 9
  SB-17E(14-15) L1167359-01 9
  SB-17F(10-11) L1167359-02 10
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	Collected by	Collected date/time	Received date/time
		11/14/19 15:05	11/16/19 09:00

SB-17E(14-15) L1167359-01 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384982	1	11/22/19 16:29	11/22/19 16:46	JAV	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1392020	5	12/05/19 23:53	12/06/19 08:50	TM	Mt. Juliet, TN

	Collected by	Collected date/time	Received date/time
		11/14/19 15:47	11/16/19 09:00

SB-17F(10-11) L1167359-02 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1384982	1	11/22/19 16:29	11/22/19 16:46	JAV	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1392020	5	12/05/19 23:53	12/06/19 10:29	TM	Mt. Juliet, TN

CASE NARRATIVE

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

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 12/06/2019 12:05
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1167359-01 and 02
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384982 and WG1392020

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 12/06/2019 12:05
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1167359-01 and 02
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384982 and WG1392020

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 12/06/2019 12:05
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1167359-01 and 02
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1384982 and WG1392020

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.6		1	11/22/2019 16:46	WG1384982

Metals (ICPMS) by Method 6020B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.255	J	0.225	0.100	0.591	5	12/06/2019 08:50	WG1392020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.0		1	11/22/2019 16:46	WG1384982

Metals (ICPMS) by Method 6020B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.321	J	0.229	0.100	0.603	5	12/06/2019 10:29	WG1392020

Method Blank (MB)

(MB) R3475332-1 11/22/19 16:46

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1161924-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1161924-02 11/22/19 16:46 • (DUP) R3475332-3 11/22/19 16:46

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.9	90.2	1	1.52		10

Laboratory Control Sample (LCS)

(LCS) R3475332-2 11/22/19 16:46

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.1	100	85.0-115	

WG1392020

Metals (ICPMS) by Method 6020B

QUALITY CONTROL SUMMARY

L1167359-01,02

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

Method Blank (MB)

(MB) R3479738-1 12/06/19 08:40

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Selenium	U		0.190	0.500

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

(LCS) R3479738-2 12/06/19 08:43 • (LCSD) R3479738-3 12/06/19 08:46

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Selenium	100	94.8	94.7	94.8	94.7	80.0-120			0.188	20

L1167359-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1167359-01 12/06/19 08:50 • (MS) R3479738-6 12/06/19 08:59 • (MSD) R3479738-7 12/06/19 09:03

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Selenium	23.6	0.255	114	110	96.5	92.7	5	75.0-125			4.06	20

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

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

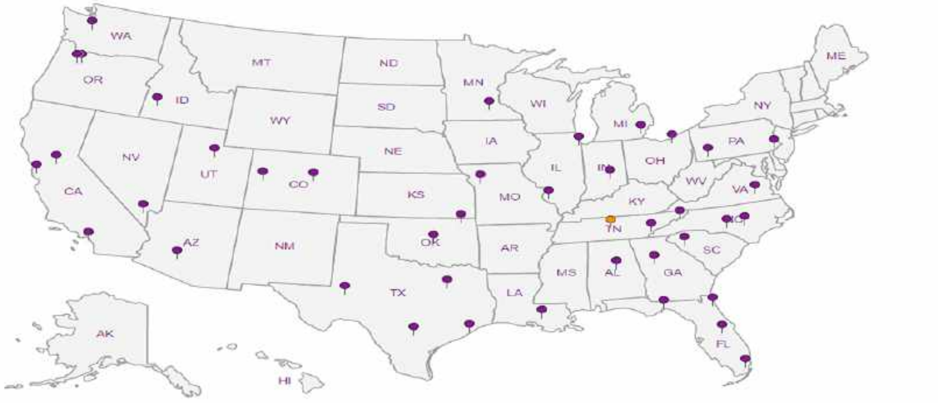
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # R13411.07

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N ___ [✓ Y]

Chain of Custody Page 4 of 18

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 # L1161924

AV 12/5/19

Table # L1167354

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB: 11/13/19 MW
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-17B (0-1)	Grab	SS	0-1	11/14/19	1430	3						Held	
SB-17B (1-2)	Grab	SS	1-2	11/14/19	1431	3						Held	
SB-17B (2-3)	Grab	SS	2-3	11/14/19	1432	3						Held	
SB-17B (3-4)	Grab	SS	3-4	11/14/19	1433	3						Held	
SB-17B (6-8)	Grab	SS	6-8	11/14/19	1434	3						Held	
SB-17B (14-15)	Grab	SS	14-15	11/14/19	1435	3						Held	
SB-17E (9-10)	Grab	SS	9-10	11/14/19	1500	3	X	X	X		X		~~04~~
SB-17E (14-15)	Grab	SS	14-15	11/14/19	1505	3	X	X	X		X		~~04~~ -01
SB-17F (6-8)	Grab	SS	6-8	11/14/19	1548	3						Held	
SB-17F (10-11)	Grab	SS	10-11	11/14/19	1547	3	X	X	X		X		~~06~~ -02

* 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: ✓ 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 11-15	Time: 1710	Received by: (Signature)	Temp: [illegible] °C 0.2+1=2.1 Bottles Received: 228
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-128

Condition: NCF / [✓ OK]

Andy Vann

From: Mark Beasley
Sent: Thursday, December 5, 2019 1:19 PM
To: Project Service; Sample Storage; Due Metals
Subject: L1161924 *TGERESHTX* rush R2 relog

Importance: High

Relog L1161924-05 & -06 for SEG. Transfer TS. Log as R2 due 12/6.

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Thursday, December 05, 2019 1:14 PM
To: Mark Beasley
Cc: Tim Crump
Subject: request re-run
Importance: High

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please re-run the following samples for confirmation of Selenium (next day). Please confirm estimated cost would be $80 for this analysis.
L1161924-05 (TGE ID SB17E[14-15])
L1161924-06 (TGE ID SB17F[10-11])

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

TGERESOURCES,INC.

WBENC & SBA Certified Woman Owned Small Business
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CAGE Code 08PQ6

certified
WBENC
WOMEN'S BUSINESS ENTERPRISE

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

December 10, 2019

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

TGE Resources

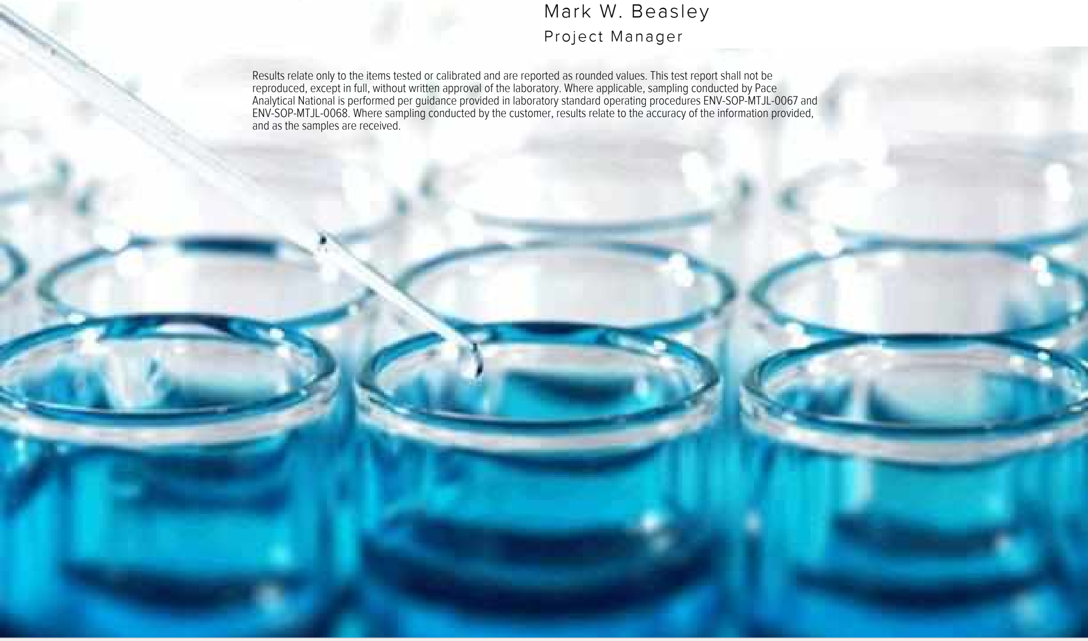
Sample Delivery Group:	L1168120
Samples Received:	11/16/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital

Report To:
Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SB-15A (0-1) L1168120-01 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 11:25	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	JAV	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1392806	1	12/07/19 11:16	12/07/19 18:53	EL	Mt. Juliet, TN

SB-15A (2-3) L1168120-02 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 11:27	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	JAV	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1392806	1	12/07/19 11:16	12/07/19 18:55	EL	Mt. Juliet, TN

SB-15B (0-1) L1168120-03 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:10	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	JAV	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1392806	1	12/07/19 11:16	12/07/19 18:58	EL	Mt. Juliet, TN

SB-15B (2-3) L1168120-04 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:12	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	JAV	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1392806	1	12/07/19 11:16	12/07/19 19:00	EL	Mt. Juliet, TN

SB-15C (0-1) L1168120-05 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 14:00	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	JAV	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1392806	1	12/07/19 11:16	12/07/19 19:03	EL	Mt. Juliet, TN

SB-15C (2-3) L1168120-06 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 14:02	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	JAV	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1392806	1	12/07/19 11:16	12/07/19 19:05	EL	Mt. Juliet, TN

SB-15D (0-1) L1168120-07 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:20	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	JAV	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1392806	1	12/07/19 11:16	12/07/19 18:24	EL	Mt. Juliet, TN

SAMPLE SUMMARY

SB-15D (2-3) L1168120-08 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:22	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389702	1	12/03/19 11:22	12/03/19 11:32	JAV	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1392806	1	12/07/19 11:16	12/07/19 19:08	EL	Mt. Juliet, TN

SB-15B (3-4) L1168120-09 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:13	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1392706	1	12/09/19 07:27	12/09/19 07:40	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1392806	1	12/07/19 11:16	12/07/19 19:11	EL	Mt. Juliet, TN

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

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 12/10/2019 16:26
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1168120-01, 02, 03, 04, 05, 06, 07, 08 and 09
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1389700, WG1389702, WG1392806 and WG1392706

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			1
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 12/10/2019 16:26
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1168120-01, 02, 03, 04, 05, 06, 07, 08 and 09
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1389700, WG1389702, WG1392806 and WG1392706

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 12/10/2019 16:26
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1168120-01, 02, 03, 04, 05, 06, 07, 08 and 09
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1389700, WG1389702, WG1392806 and WG1392706

ER #[1]	**Description**
1	6010D WG1392806 Arsenic: Percent Recovery is outside of established control limits.

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	94.7		1	12/03/2019 09:50	WG1389700

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	15.7		0.486	2.00	2.11	1	12/07/2019 18:53	WG1392806

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.3		1	12/03/2019 09:50	WG1389700

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.50	J	0.509	2.00	2.21	1	12/07/2019 18:55	WG1392806

SB-15B (0-1)

Collected date/time: 11/14/19 13:10

SAMPLE RESULTS - 03

L1168120

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.0		1	12/03/2019 09:50	WG1389700

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	36.4		0.484	2.00	2.10	1	12/07/2019 18:58	WG1392806

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.3		1	12/03/2019 09:50	WG1389700

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.96		0.488	2.00	2.12	1	12/07/2019 19:00	WG1392806

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.4		1	12/03/2019 09:50	WG1389700

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	16.8		0.487	2.00	2.12	1	12/07/2019 19:03	WG1392806

SB-15C (2-3)

Collected date/time: 11/14/19 14:02

SAMPLE RESULTS - 06

L1168120

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.9		1	12/03/2019 09:50	WG1389700

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.67		0.490	2.00	2.13	1	12/07/2019 19:05	WG1392806

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB-15D (0-1)

Collected date/time: 11/14/19 13:20

SAMPLE RESULTS - 07

L1168120

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.6		1	12/03/2019 09:50	WG1389700

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	18.2	J6	0.492	2.00	2.14	1	12/07/2019 18:24	WG1392806

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.1		1	12/03/2019 11:32	WG1389702

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.96		0.494	2.00	2.15	1	12/07/2019 19:08	WG1392806

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.4		1	12/09/2019 07:40	WG1392706

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	22.6		0.503	2.00	2.19	1	12/07/2019 19:11	WG1392806

WG1389700

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1168120-01,02,03,04,05,06,07

Method Blank (MB)

(MB) R3478795-1 12/03/19 09:50

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1165628-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1165628-04 12/03/19 09:50 • (DUP) R3478795-3 12/03/19 09:50

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.3	95.2	1	0.919		10

Laboratory Control Sample (LCS)

(LCS) R3478795-2 12/03/19 09:50

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) R3478907-1 12/03/19 11:32

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1165628-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1165628-13 12/03/19 11:32 • (DUP) R3478907-3 12/03/19 11:32

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.3	92.6	1	1.43		10

Laboratory Control Sample (LCS)

(LCS) R3478907-2 12/03/19 11:32

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) R3480708-1 12/09/19 07:40

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1168120-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1168120-09 12/09/19 07:40 • (DUP) R3480708-3 12/09/19 07:40

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.4	93.6	1	2.40		10

Laboratory Control Sample (LCS)

(LCS) R3480708-2 12/09/19 07:40

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) R3480298-1 12/08/19 15:28

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3480298-2 12/08/19 15:31 • (LCSD) R3480298-3 12/08/19 15:33

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 %
Arsenic	100	97.8	95.2	97.8	95.2	80.0-120			2.72	20

L1168120-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1168120-07 12/07/19 18:24 • (MS) R3480301-3 12/07/19 18:32 • (MSD) R3480301-4 12/07/19 18:34

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 %
Arsenic	107	18.2	96.8	104	73.6	80.4	1	75.0-125	J6		7.31	20

GLOSSARY OF TERMS

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1,6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T104704245-18-15
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

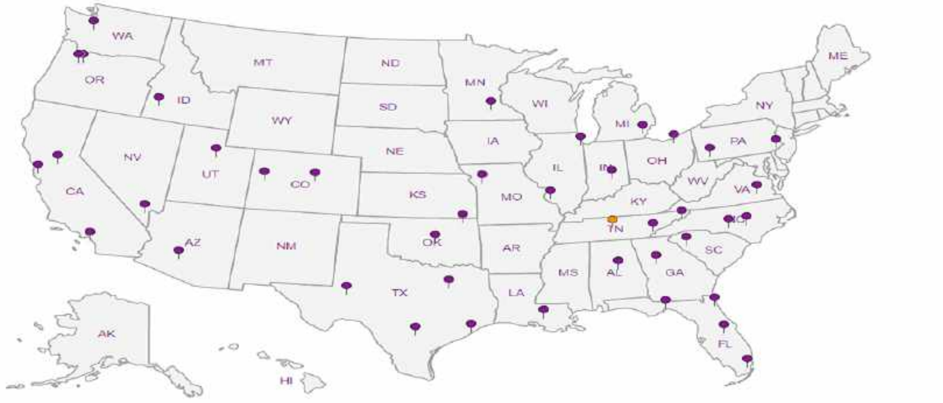
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-15 (0-1)	Grab	SS	0-1	11/14/19	1145	~~3~~ 2	X	X	X		X							~~01~~
SB-15 (1-2)	Grab	SS	1-2	11/14/19	1146	3											Hold	
SB-15 (2-3)	Grab	SS	2-3	11/14/19	1147	2	X	X	X		X							~~02~~
SB-15 (3-4)	Grab	SS	3-4	11/14/19	1148	3											Hold	
SB-15 (6-8)	Grab	SS	6-8	11/14/19	1149	3											Hold	
SB-15 (10-12)	Grab	SS	10-12	11/14/19	1150	2	X	X	X		X							~~03~~
SB-15A (0-1)	Grab	SS	0-1	11/14/19	1125	3											Hold	-01
SB-15A (1-2)	Grab	SS	1-2	11/14/19	1126	3											Hold	
SB-15A (2-3)	Grab	SS	2-3	11/14/19	1127	3											Hold	-02
SB-15A (3-4)	Grab	SS	3-4	11/14/19	1128	3											Hold	

→ 01

02

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ______

Remarks: 4510 1662 0396/0411/0536/0514/ 0488/0400/ 0503/0422/0444/0433/0477/0525/ 0466/ 0455

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
___ UPS X FedEx ___ Courier ______

Tracking # 4686 6470 7042

Chain of Custody Page 1 of 8

Pace Analytical®

L1168120

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~L1164924~~ D212 ~~L1165678~~

KO 12/6

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: 134 - Mark W. Beasley

PB: 11/13/19 MWB

Shipped Via: **FedEX Priority**

Relinquished by : (Signature)	Date: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] No HCL / MeoH TBR	5
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp: °C 02-1.0	Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

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

If preservation required by Login: Date/Time

11-131

Condition: NCF [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

Collected by (signature):

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

Immediately Packed on Ice N ___ Y ✓

Chain of Custody Page 2 of 15

Pace Analytical®
National Center for Testing & Innovation

L1168120

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~L1161924~~
Table # ~~L1166638~~

Acctnum: TGERESHTX
Template: T158754
Prelogin: P740770
PM: 134 - Mark W. Beasley
PB: 11/13/19 MWB
Shipped Via: FedEX Priority

KO 12/6

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-15A (6-8)	Grab	SS	6-8	11/14/19	1129	3											Held	
SB-15A (10-12)	Grab	SS	10-12	11/14/19	1130	3											Held	
SB-15B (0-1)	Comp	SS	0-1	11/14/19	1310	3											Held	-03
SB-15B (1-2)	Grab	SS	1-2	11/14/19	1311	3											Held	
SB-15B (2-3)	Grab	SS	2-3	11/14/19	1312	3											Held	-04
SB-15B (3-4)	Grab	SS	3-4	11/14/19	1313	3											Held	-09
SB-15B (6-8)	Grab	SS	6-8	11/14/19	1314	3											Held	
SB-15B (14-15)	Grab	SS	14-15	11/14/19	1315	3											Held	
SB-15C (0-1)	Grab	SS	0-1	11/14/19	1400	3											Held	-05
SB-15C (1-2)	Grab	SS	1-2	11/14/19	1401	3											Held	

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 HCl / MeoH TBR
Relinquished by: (Signature)	Date: 11-15	Time: 1220	Received by: (Signature)	Temp: Amb °C 0.2-1=0.1 Bottles Received: 223
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-130

Condition: NCF / [✓ OK]

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: Future Federal Way Hospital

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project #: R13411.07

Lab Project #: TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #:

P.O. #: 8657

Collected by (signature):

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:

Immediately Packed on Ice N ___ Y ✓

Chain of Custody Page 3 of 18

Pace Analytical®
National Center for Testing & Innovation

L1168120

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~L1161924~~

Table # L1165628

Acctnum: TGERESHTX
Template: T158754
Prelogin: P740770
PM: 134 - Mark W. Beasley
PB: 11/13/19 MW
Shipped Via: FedEX Priority

MO 12/6

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-15C (2-3)	Grab	SS	2-3	11/14/19	1402	3											Hold	06
SB-15C (3-4)	Grab	SS	3-4	11/14/19	1403	3											Hold	
SB-15C (6-8)	Grab	SS	6-8	11/14/19	1404	3											Hold	
SB-15C (10-12)	Grab	SS	10-12	11/14/19	1405	3											Hold	
SB-15D (0-1)	Grab	SS	0-1	11/14/19	1320	3											Hold	07
SB-15D (1-2)	Grab	SS	1-2	11/14/19	1321	3											Hold	
SB-15D (2-3)	Grab	SS	2-3	11/14/19	1322	3											Hold	08
SB-15D (3-4)	Grab	SS	3-4	11/14/19	1723	3											Hold	
SB-15D (6-8)	Grab	SS	6-8	11/14/19	1324	3											Hold	
SB-15D (14-15)	Grab	SS	14-15	11/14/19	1325	3											Hold	

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11-15	Time: 1700	Received by: (Signature)	Temp: AGA °C 2.2-1=2.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-129

Condition: NCF / [✓ OK]

L1168120

From: Mark Beasley
Sent: Friday, December 6, 2019 11:22 AM
To: Project Service; Sample Storage; Due Metals
Subject: L1165628 *TGERESHTX* rush R3 relog

Relog L1165628-01 thru -08 and SB-15B (3-4) previously on hold for ASICP & TS. Log as R3 due 12/10. Use PO# 8728.

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Friday, December 06, 2019 9:50 AM
To: Mark Beasley
Subject: Additional Analyses request

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please analyze the following under an expedited 2 day TAT. PO attached

Pace ID Number	TGE ID Number	Analysis
L1165628-01	SB15A(0-1)	Arsenic & Total Solids only
L1165628-02	SB15A(2-3)	Arsenic & Total Solids only
L1165628-03	SB15B(0-1)	Arsenic & Total Solids only
L1165628-04	SB15B(2-3)	Arsenic & Total Solids only
L1165628-05	SB15C(0-1)	Arsenic & Total Solids only
L1165628-06	SB15C(2-3)	Arsenic & Total Solids only
L1165628-07	SB15D(0-1)	Arsenic & Total Solids only
L1165628-08	SB15D (2-3)	Arsenic & Total Solids only
Not assigned yet	SB15B (3-4)	Arsenic & Total Solids only

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

TGERESOURCES,INC.

L1168120

WBENC & SBA Certified Woman Owned Small Business
DUNS# 929574051
CAGE Code 08PQ6

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ANALYTICAL REPORT

December 11, 2019

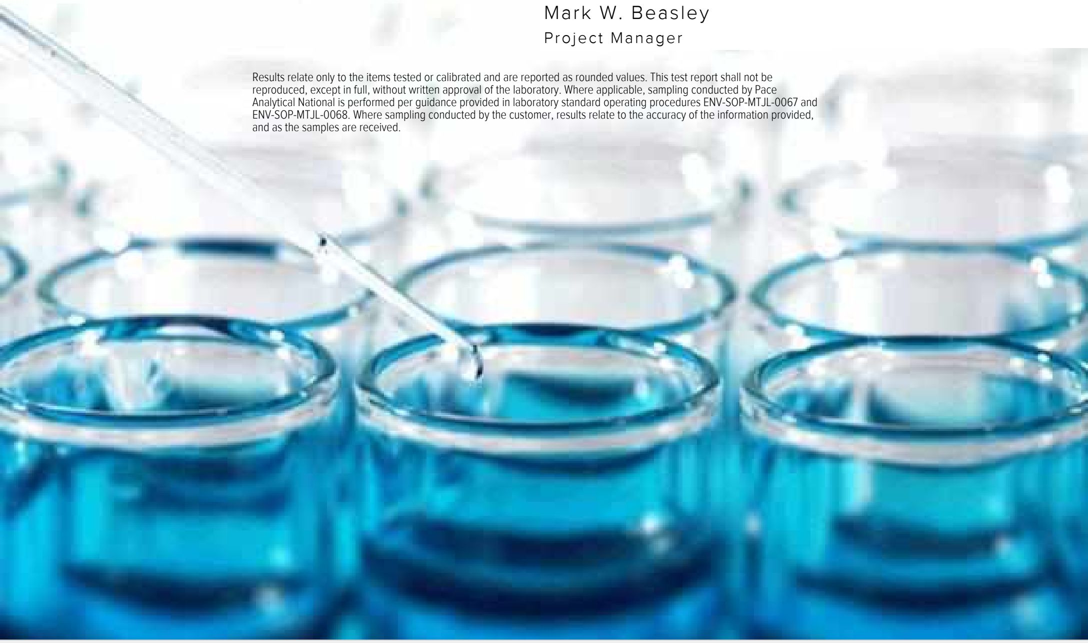
1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1168403
Samples Received:	11/15/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SB-17C (9-10) L1168403-01 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 14:20	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1388889	1	11/29/19 21:23	11/29/19 21:37	JAV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393212	50	12/09/19 07:15	12/09/19 17:23	KME	Mt. Juliet, TN

SB-14 (1-2) L1168403-02 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 09:47	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393314	1	12/10/19 07:04	12/10/19 07:17	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393212	10	12/09/19 07:15	12/09/19 16:45	KME	Mt. Juliet, TN

SB-14A (0-1) L1168403-03 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 08:50	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393314	1	12/10/19 07:04	12/10/19 07:17	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393212	50	12/09/19 07:15	12/09/19 19:21	KME	Mt. Juliet, TN

SB-14A (1-2) L1168403-04 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 08:51	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393314	1	12/10/19 07:04	12/10/19 07:17	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393212	1	12/09/19 07:15	12/10/19 11:33	KME	Mt. Juliet, TN

SB-14B (0-1) L1168403-05 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 10:34	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393315	1	12/10/19 06:50	12/10/19 07:03	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393212	50	12/09/19 07:15	12/09/19 19:34	KME	Mt. Juliet, TN

SB-14B (1-2) L1168403-06 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 10:35	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393315	1	12/10/19 06:50	12/10/19 07:03	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393212	50	12/09/19 07:15	12/09/19 16:32	KME	Mt. Juliet, TN

SB-14C (0-1) L1168403-07 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 09:20	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393315	1	12/10/19 06:50	12/10/19 07:03	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393212	50	12/09/19 07:15	12/09/19 17:36	KME	Mt. Juliet, TN

SB-14C (1-2) L1168403-08 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 09:21	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393315	1	12/10/19 06:50	12/10/19 07:03	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393212	10	12/09/19 07:15	12/09/19 17:10	KME	Mt. Juliet, TN

SB-14D (0-1) L1168403-09 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 10:08	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393315	1	12/10/19 06:50	12/10/19 07:03	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393212	20	12/09/19 07:15	12/09/19 18:01	KME	Mt. Juliet, TN

SB-14D (1-2) L1168403-10 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 10:09	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393315	1	12/10/19 06:50	12/10/19 07:03	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393212	10	12/09/19 07:15	12/09/19 17:48	KME	Mt. Juliet, TN

SB-16 (1-2) L1168403-11 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 12:31	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393315	1	12/10/19 06:50	12/10/19 07:03	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393212	20	12/09/19 07:15	12/09/19 16:58	KME	Mt. Juliet, TN

SB-16A (0-1) L1168403-12 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 11:10	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393315	1	12/10/19 06:50	12/10/19 07:03	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	20	12/09/19 08:14	12/10/19 03:16	KME	Mt. Juliet, TN

SB-16A (1-2) L1168403-13 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 11:11	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393315	1	12/10/19 06:50	12/10/19 07:03	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	10	12/09/19 08:14	12/10/19 01:22	KME	Mt. Juliet, TN

SB-16B (0-1) L1168403-14 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 11:32	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393315	1	12/10/19 06:50	12/10/19 07:03	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	50	12/09/19 08:14	12/10/19 04:19	KME	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB-16B (1-2) L1168403-15 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 11:33	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393316	1	12/09/19 13:52	12/09/19 14:06	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	10	12/09/19 08:14	12/10/19 02:51	KME	Mt. Juliet, TN

SB-16C (0-1) L1168403-16 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 12:55	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393316	1	12/09/19 13:52	12/09/19 14:06	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	100	12/09/19 08:14	12/10/19 04:45	KME	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	50	12/09/19 08:14	12/10/19 12:11	KME	Mt. Juliet, TN

SB-16C (1-2) L1168403-17 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 12:56	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393316	1	12/09/19 13:52	12/09/19 14:06	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	10	12/09/19 08:14	12/10/19 02:38	KME	Mt. Juliet, TN

SB-16D (0-1) L1168403-18 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 13:23	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393316	1	12/09/19 13:52	12/09/19 14:06	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	2	12/09/19 08:14	12/10/19 01:09	KME	Mt. Juliet, TN

SB-16D (1-2) L1168403-19 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 13:24	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393316	1	12/09/19 13:52	12/09/19 14:06	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	20	12/09/19 08:14	12/10/19 02:25	KME	Mt. Juliet, TN

SB-17A (0-1) L1168403-20 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 14:57	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393316	1	12/09/19 13:52	12/09/19 14:06	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	50	12/09/19 08:14	12/10/19 04:32	KME	Mt. Juliet, TN

SB-17A (1-2) L1168403-21 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 14:58	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393316	1	12/09/19 13:52	12/09/19 14:06	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	10	12/09/19 08:14	12/10/19 02:00	KME	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB-17C (0-1) L1168403-22 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 14:00	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393316	1	12/09/19 13:52	12/09/19 14:06	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	50	12/09/19 08:14	12/10/19 03:54	KME	Mt. Juliet, TN

SB-17C (1-2) L1168403-23 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/13/19 14:01	11/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393316	1	12/09/19 13:52	12/09/19 14:06	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	50	12/09/19 08:14	12/10/19 04:07	KME	Mt. Juliet, TN

SB-15A (1-2) L1168403-24 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 11:25	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393316	1	12/09/19 13:52	12/09/19 14:06	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	5	12/09/19 08:14	12/10/19 12:23	KME	Mt. Juliet, TN

SB-15B (1-2) L1168403-25 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:11	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393742	1	12/10/19 15:29	12/10/19 15:51	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	2	12/09/19 08:14	12/10/19 00:57	KME	Mt. Juliet, TN

SB-15C (1-2) L1168403-26 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 14:01	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393742	1	12/10/19 15:29	12/10/19 15:51	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	20	12/09/19 08:14	12/10/19 03:29	KME	Mt. Juliet, TN

SB-15D (1-2) L1168403-27 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 13:21	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393742	1	12/10/19 15:29	12/10/19 15:51	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	10	12/09/19 08:14	12/10/19 03:03	KME	Mt. Juliet, TN

SB-17B (0-1) L1168403-28 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 14:30	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393742	1	12/10/19 15:29	12/10/19 15:51	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	20	12/09/19 08:14	12/10/19 03:41	KME	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB-20 (0-1) L1168403-29 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 09:33	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393742	1	12/10/19 15:29	12/10/19 15:51	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	10	12/09/19 08:14	12/10/19 02:13	KME	Mt. Juliet, TN

SB-20 (1-2) L1168403-30 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 09:34	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393742	1	12/10/19 15:29	12/10/19 15:51	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	10	12/09/19 08:14	12/10/19 01:47	KME	Mt. Juliet, TN

SB-22 (1-2) L1168403-31 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 09:51	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393742	1	12/10/19 15:29	12/10/19 15:51	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393213	10	12/09/19 08:14	12/10/19 01:35	KME	Mt. Juliet, TN

SB-24 (1-2) L1168403-32 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 11:59	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1393742	1	12/10/19 15:29	12/10/19 15:51	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1393216	5	12/08/19 22:02	12/09/19 11:38	KME	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 12/11/2019 15:34
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1168403-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1388889, WG1393216, WG1393212, WG1393213, WG1393316, WG1393315, WG1393314 and WG1393742

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?		X			1
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			2
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 12/11/2019 15:34
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1168403-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1388889, WG1393216, WG1393212, WG1393213, WG1393316, WG1393315, WG1393314 and WG1393742

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 12/11/2019 15:34
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1168403-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1388889, WG1393216, WG1393212, WG1393213, WG1393316, WG1393315, WG1393314 and WG1393742

ER #[1]	**Description**
1	NWTPHDX-NO SGT WG1393212 L1168403-01, 02, 03, 04, 05, 06, 07, 08, 09, 10 and 11: Prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values. NWTPHDX-NO SGT WG1393213 L1168403-12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 and 31: Prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values. NWTPHDX-NO SGT WG1393216 L1168403-32: Prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.
2	NWTPHDX-NO SGT WG1393212 o-Terphenyl L1168403-01, 03, 05, 06, 07, 09 and 11: Percent Recovery is outside of established control limits. NWTPHDX-NO SGT WG1393213 o-Terphenyl L1168403-12, 14, 16, 19, 20, 22, 23, 26, 28 and 30: Percent Recovery is outside of established control limits.

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

SB-17C (9-10)

Collected date/time: 11/13/19 14:20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.8		1	11/29/2019 21:37	WG1388889

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	96.7	J T8	73.2	4.00	220	50	12/09/2019 17:23	WG1393212
Residual Range Organics (RRO)	1010	T8	183	10.0	551	50	12/09/2019 17:23	WG1393212
(S) o-Terphenyl	*84.6*	J7			*18.0-148*		*12/09/2019 17:23*	WG1393212

Sample Narrative:

L1168403-01 WG1393212: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.2		1	12/10/2019 07:17	WG1393314

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	27.5	J T8	15.1	4.00	45.3	10	12/09/2019 16:45	WG1393212
Residual Range Organics (RRO)	163	T8	37.7	10.0	113	10	12/09/2019 16:45	WG1393212
(S) o-Terphenyl	*72.0*				*18.0-148*		*12/09/2019 16:45*	WG1393212

Sample Narrative:

L1168403-02 WG1393212: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.2		1	12/10/2019 07:17	WG1393314

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	482	T8	72.1	4.00	217	50	12/09/2019 19:21	WG1393212
Residual Range Organics (RRO)	1330	T8	181	10.0	542	50	12/09/2019 19:21	WG1393212
(S) o-Terphenyl	*140*	J7			*18.0-148*		*12/09/2019 19:21*	WG1393212

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.9		1	12/10/2019 07:17	WG1393314

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	12.4	T8	1.53	4.00	4.60	1	12/10/2019 11:33	WG1393212
Residual Range Organics (RRO)	55.4	T8	3.83	10.0	11.5	1	12/10/2019 11:33	WG1393212
(S) o-Terphenyl	*64.2*				*18.0-148*		*12/10/2019 11:33*	WG1393212

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.2		1	12/10/2019 07:03	WG1393315

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	547	T8	71.4	4.00	215	50	12/09/2019 19:34	WG1393212
Residual Range Organics (RRO)	2300	T8	179	10.0	537	50	12/09/2019 19:34	WG1393212
(S) o-Terphenyl	*80.8*	J7			*18.0-148*		*12/09/2019 19:34*	WG1393212

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.3		1	12/10/2019 07:03	WG1393315

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	111	J T8	77.1	4.00	232	50	12/09/2019 16:32	WG1393212
Residual Range Organics (RRO)	597	T8	193	10.0	580	50	12/09/2019 16:32	WG1393212
(S) o-Terphenyl	*89.2*	J7			*18.0-148*		*12/09/2019 16:32*	WG1393212

Sample Narrative:

L1168403-06 WG1393212: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.6		1	12/10/2019 07:03	WG1393315

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	228	T8	71.8	4.00	216	50	12/09/2019 17:36	WG1393212
Residual Range Organics (RRO)	1110	T8	180	10.0	540	50	12/09/2019 17:36	WG1393212
(S) o-Terphenyl	*76.1*	J7			*18.0-148*		*12/09/2019 17:36*	WG1393212

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.4		1	12/10/2019 07:03	WG1393315

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	49.4	T8	14.9	4.00	44.7	10	12/09/2019 17:10	WG1393212
Residual Range Organics (RRO)	241	T8	37.3	10.0	112	10	12/09/2019 17:10	WG1393212
(S) o-Terphenyl	*71.4*				*18.0-148*		*12/09/2019 17:10*	WG1393212

SB-14D (0-1)

Collected date/time: 11/13/19 10:08

SAMPLE RESULTS - 09

L1168403

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.1		1	12/10/2019 07:03	WG1393315

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	122	T8	28.9	4.00	86.8	20	12/09/2019 18:01	WG1393212
Residual Range Organics (RRO)	638	T8	72.3	10.0	217	20	12/09/2019 18:01	WG1393212
(S) o-Terphenyl	*82.9*	J7			*18.0-148*		*12/09/2019 18:01*	WG1393212

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.4		1	12/10/2019 07:03	WG1393315

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	46.3	T8	15.0	4.00	45.2	10	12/09/2019 17:48	WG1393212
Residual Range Organics (RRO)	244	T8	37.7	10.0	113	10	12/09/2019 17:48	WG1393212
(S) o-Terphenyl	*72.9*				*18.0-148*		*12/09/2019 17:48*	WG1393212

SB-16 (1-2)

Collected date/time: 11/13/19 12:31

SAMPLE RESULTS - 11

L1168403

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.0		1	12/10/2019 07:03	WG1393315

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	76.9	J T8	30.6	4.00	91.9	20	12/09/2019 16:58	WG1393212
Residual Range Organics (RRO)	445	T8	76.5	10.0	230	20	12/09/2019 16:58	WG1393212
(S) o-Terphenyl	*78.9*	J7			*18.0-148*		*12/09/2019 16:58*	WG1393212

Sample Narrative:

L1168403-11 WG1393212: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.8		1	12/10/2019 07:03	WG1393315

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	84.3	J T8	29.6	4.00	89.1	20	12/10/2019 03:16	WG1393213
Residual Range Organics (RRO)	400	T8	74.2	10.0	223	20	12/10/2019 03:16	WG1393213
(S) o-Terphenyl	*82.4*	J7			*18.0-148*		*12/10/2019 03:16*	WG1393213

Sample Narrative:

L1168403-12 WG1393213: Cannot run at lower dilution due to viscosity of extract

SB-16A (1-2)

Collected date/time: 11/13/19 11:11

SAMPLE RESULTS - 13

L1168403

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.3		1	12/10/2019 07:03	WG1393315

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	40.8	J T8	15.4	4.00	46.4	10	12/10/2019 01:22	WG1393213
Residual Range Organics (RRO)	196	T8	38.6	10.0	116	10	12/10/2019 01:22	WG1393213
(S) o-Terphenyl	*77.4*				*18.0-148*		*12/10/2019 01:22*	WG1393213

Sample Narrative:

L1168403-13 WG1393213: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.1		1	12/10/2019 07:03	WG1393315

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	235	T8	74.6	4.00	224	50	12/10/2019 04:19	WG1393213
Residual Range Organics (RRO)	1070	T8	187	10.0	561	50	12/10/2019 04:19	WG1393213
(S) o-Terphenyl	*94.8*	J7			*18.0-148*		*12/10/2019 04:19*	WG1393213

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.5		1	12/09/2019 14:06	WG1393316

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	38.9	J T8	14.9	4.00	44.7	10	12/10/2019 02:51	WG1393213
Residual Range Organics (RRO)	174	T8	37.2	10.0	112	10	12/10/2019 02:51	WG1393213
(S) o-Terphenyl	*67.6*				*18.0-148*		*12/10/2019 02:51*	WG1393213

Sample Narrative:

L1168403-15 WG1393213: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.2		1	12/09/2019 14:06	WG1393316

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	405	T8	71.3	4.00	215	50	12/10/2019 12:11	WG1393213
Residual Range Organics (RRO)	1530	T8	357	10.0	1070	100	12/10/2019 04:45	WG1393213
(S) o-Terphenyl	*98.4*	J7			*18.0-148*		*12/10/2019 04:45*	WG1393213
(S) o-Terphenyl	*73.6*	J7			*18.0-148*		*12/10/2019 12:11*	WG1393213

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.5		1	12/09/2019 14:06	WG1393316

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	69.9	T8	14.5	4.00	43.7	10	12/10/2019 02:38	WG1393213
Residual Range Organics (RRO)	299	T8	36.4	10.0	109	10	12/10/2019 02:38	WG1393213
(S) o-Terphenyl	*81.2*				*18.0-148*		*12/10/2019 02:38*	WG1393213

SB-16D (0-1)

Collected date/time: 11/13/19 13:23

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.6		1	12/09/2019 14:06	WG1393316

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	27.0	T8	2.97	4.00	8.93	2	12/10/2019 01:09	WG1393213
Residual Range Organics (RRO)	113	T8	7.43	10.0	22.3	2	12/10/2019 01:09	WG1393213
(S) o-Terphenyl	*58.8*				*18.0-148*		*12/10/2019 01:09*	WG1393213

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB-16D (1-2)

Collected date/time: 11/13/19 13:24

SAMPLE RESULTS - 19

L1168403

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	89.3		1	12/09/2019 14:06	WG1393316

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	143	T8	29.8	4.00	89.6	20	12/10/2019 02:25	WG1393213
Residual Range Organics (RRO)	664	T8	74.6	10.0	224	20	12/10/2019 02:25	WG1393213
(S) o-Terphenyl	*88.3*	J7			*18.0-148*		*12/10/2019 02:25*	WG1393213

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.8		1	12/09/2019 14:06	WG1393316

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	164	J T8	73.3	4.00	220	50	12/10/2019 04:32	WG1393213
Residual Range Organics (RRO)	1080	T8	183	10.0	551	50	12/10/2019 04:32	WG1393213
(S) o-Terphenyl	*97.2*	J7			*18.0-148*		*12/10/2019 04:32*	WG1393213

Sample Narrative:

L1168403-20 WG1393213: Cannot run at lower dilution due to viscosity of extract

SB-17A (1-2)

Collected date/time: 11/13/19 14:58

SAMPLE RESULTS - 21

L1168403

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.4		1	12/09/2019 14:06	WG1393316

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	58.8	T8	14.6	4.00	43.8	10	12/10/2019 02:00	WG1393213
Residual Range Organics (RRO)	396	T8	36.4	10.0	109	10	12/10/2019 02:00	WG1393213
(S) o-Terphenyl	*79.5*				*18.0-148*		*12/10/2019 02:00*	WG1393213

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.3		1	12/09/2019 14:06	WG1393316

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	371	T8	71.3	4.00	214	50	12/10/2019 03:54	WG1393213
Residual Range Organics (RRO)	2160	T8	179	10.0	536	50	12/10/2019 03:54	WG1393213
(S) o-Terphenyl	*82.5*	J7			*18.0-148*		*12/10/2019 03:54*	WG1393213

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.2		1	12/09/2019 14:06	WG1393316

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	326	T8	72.1	4.00	217	50	12/10/2019 04:07	WG1393213
Residual Range Organics (RRO)	1400	T8	181	10.0	542	50	12/10/2019 04:07	WG1393213
(S) o-Terphenyl	*89.6*	J7			*18.0-148*		*12/10/2019 04:07*	WG1393213

SB-15A (1-2)

Collected date/time: 11/14/19 11:25

SAMPLE RESULTS - 24

L1168403

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.7		1	12/09/2019 14:06	WG1393316

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	438	T8	7.33	4.00	22.0	5	12/10/2019 12:23	WG1393213
Residual Range Organics (RRO)	815	T8	18.4	10.0	55.1	5	12/10/2019 12:23	WG1393213
(S) o-Terphenyl	*79.1*				*18.0-148*		*12/10/2019 12:23*	WG1393213

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	12/10/2019 15:51	WG1393742

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	371	T8	2.87	4.00	8.63	2	12/10/2019 00:57	WG1393213
Residual Range Organics (RRO)	265	T8	7.19	10.0	21.6	2	12/10/2019 00:57	WG1393213
(S) o-Terphenyl	*119*				*18.0-148*		*12/10/2019 00:57*	WG1393213

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.8		1	12/10/2019 15:51	WG1393742

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	118	T8	29.9	4.00	90.1	20	12/10/2019 03:29	WG1393213
Residual Range Organics (RRO)	789	T8	75.0	10.0	225	20	12/10/2019 03:29	WG1393213
(S) o-Terphenyl	*85.2*	J7			*18.0-148*		*12/10/2019 03:29*	WG1393213

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.8		1	12/10/2019 15:51	WG1393742

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	35.1	J T8	14.3	4.00	43.1	10	12/10/2019 03:03	WG1393213
Residual Range Organics (RRO)	180	T8	35.9	10.0	108	10	12/10/2019 03:03	WG1393213
(S) o-Terphenyl	*82.7*				*18.0-148*		*12/10/2019 03:03*	WG1393213

Sample Narrative:

L1168403-27 WG1393213: Cannot run at lower dilution due to viscosity of extract

SB-17B (0-1)
Collected date/time: 11/14/19 14:30

SAMPLE RESULTS - 28

L1168403

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	92.9		1	12/10/2019 15:51	WG1393742

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	59.7	J T8	28.6	4.00	86.1	20	12/10/2019 03:41	WG1393213
Residual Range Organics (RRO)	405	T8	71.7	10.0	215	20	12/10/2019 03:41	WG1393213
(S) o-Terphenyl	*91.8*	J7			*18.0-148*		*12/10/2019 03:41*	WG1393213

Sample Narrative:

L1168403-28 WG1393213: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.7		1	12/10/2019 15:51	WG1393742

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	908	T8	14.7	4.00	44.1	10	12/10/2019 02:13	WG1393213
Residual Range Organics (RRO)	393	T8	36.7	10.0	110	10	12/10/2019 02:13	WG1393213
(S) o-Terphenyl	*126*				*18.0-148*		*12/10/2019 02:13*	WG1393213

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.5		1	12/10/2019 15:51	WG1393742

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	962	T8	15.0	4.00	45.2	10	12/10/2019 01:47	WG1393213
Residual Range Organics (RRO)	238	T8	37.6	10.0	113	10	12/10/2019 01:47	WG1393213
(S) o-Terphenyl	*165*	J1			*18.0-148*		*12/10/2019 01:47*	WG1393213

Sample Narrative:

L1168403-30 WG1393213: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.1		1	12/10/2019 15:51	WG1393742

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	39.7	J T8	14.4	4.00	43.5	10	12/10/2019 01:35	WG1393213
Residual Range Organics (RRO)	230	T8	36.2	10.0	109	10	12/10/2019 01:35	WG1393213
(S) o-Terphenyl	*82.0*				*18.0-148*		*12/10/2019 01:35*	WG1393213

Sample Narrative:

L1168403-31 WG1393213: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.8		1	12/10/2019 15:51	WG1393742

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	9.63	J T8	7.32	4.00	22.0	5	12/09/2019 11:38	WG1393216
Residual Range Organics (RRO)	96.6	T8	18.3	10.0	55.1	5	12/09/2019 11:38	WG1393216
(S) o-Terphenyl	*62.4*				*18.0-148*		*12/09/2019 11:38*	WG1393216

Sample Narrative:

L1168403-32 WG1393216: Cannot run at lower dilution due to viscosity of extract

Method Blank (MB)

(MB) R3477897-1 11/29/19 21:37

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1165494-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1165494-06 11/29/19 21:37 • (DUP) R3477897-3 11/29/19 21:37

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	67.0	66.8	1	0.197		10

Laboratory Control Sample (LCS)

(LCS) R3477897-2 11/29/19 21:37

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	49.8	99.6	85.0-115	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3481090-1 12/10/19 07:17

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00300			

L1168386-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1168386-01 12/10/19 07:17 • (DUP) R3481090-3 12/10/19 07:17

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	86.4	83.6	1	3.28		10

Laboratory Control Sample (LCS)

(LCS) R3481090-2 12/10/19 07:17

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	49.9	99.7	85.0-115	

WG1393315

Total Solids by Method 2540 G-2011

Method Blank (MB)

(MB) R3481080-1 12/10/19 07:03

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00400			

L1168403-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1168403-11 12/10/19 07:03 • (DUP) R3481080-3 12/10/19 07:03

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	87.0	87.0	1	0.0338		10

Laboratory Control Sample (LCS)

(LCS) R3481080-2 12/10/19 07:03

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	49.9	99.9	85.0-115	

WG1393316

Total Solids by Method 2540 G-2011

Method Blank (MB)

(MB) R3480778-1 12/09/19 14:06

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00200			

L1168403-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1168403-21 12/09/19 14:06 • (DUP) R3480778-3 12/09/19 14:06

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	91.4	90.8	1	0.595		10

Laboratory Control Sample (LCS)

(LCS) R3480778-2 12/09/19 14:06

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3481148-1 12/10/19 15:51

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1168403-29 Original Sample (OS) • Duplicate (DUP)

(OS) L1168403-29 12/10/19 15:51 • (DUP) R3481148-3 12/10/19 15:51

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	90.7	90.8	1	0.151		10

Laboratory Control Sample (LCS)

(LCS) R3481148-2 12/10/19 15:51

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.2	100	85.0-115	

Method Blank (MB)

(MB) R3480509-1 12/09/19 13:22

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	*78.8*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3480509-2 12/09/19 13:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	49.9	99.8	50.0-150	
(S) o-Terphenyl			*98.5*	*18.0-148*	

L1168306-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1168306-01 12/09/19 15:16 • (MS) R3480509-3 12/09/19 15:29 • (MSD) R3480509-4 12/09/19 15:42

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	49.2	12.9	54.5	52.3	84.6	80.7	1	50.0-150			4.12	20
(S) o-Terphenyl					*84.9*	*82.5*		*18.0-148*				

Method Blank (MB)

(MB) R3480725-1 12/10/19 00:05

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	*73.1*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3480725-2 12/10/19 00:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	50.9	102	50.0-150	
(S) o-Terphenyl			*99.4*	*18.0-148*	

Method Blank (MB)

(MB) R3480341-1 12/09/19 01:45

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	*71.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3480341-2 12/09/19 01:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	37.8	75.6	50.0-150	
(S) o-Terphenyl			*74.9*	*18.0-148*	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia[1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky[1, 6]	90010
Kentucky[2]	16
Louisiana	AI30792
Louisiana[1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico[1]	n/a
New York	11742
North Carolina	Env375
North Carolina[1]	DW21704
North Carolina[3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee[1, 4]	2006
Texas	T104704245-18-15
Texas[5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025[5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.

WA
MT
ND
MN
ME
OR
ID
SD
WI
NY
WY
MI
PA
NV
UT
NE
IA
OH
IL
IN
CO
WV
VA
CA
KS
MO
KY
TN
NC
AZ
NM
OK
AR
SC
MS
AL
GA
TX
LA
AK
FL
HI

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: Future Federal Way Hospital

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

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

Quote #

Date Results Needed

Chain of Custody Page 9 of 10

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 # ~~#61770~~ L1168403

Table # L1165678

Acctnum: TGERESHTX
Template: T158754
Prelogin: P739844
PM: 134 - Mark W. Beasley
PB:
Shipped Via: FedEX Standard

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-17C (0-1)	Grab	SS	0-1	11/13/19	1400	3						Hold	
SB-17C (1-2)	Grab	SS	1-2	11/13/19	1401	3						Hold	
SB-17C (2-3)	Grab	SS	2-3	11/13/19	1402	3	X	X	X		X		16
SB-17C (6-7)	Grab	SS	6-7	11/13/19	1403	3						Hold	
SB-17C (9-10)	Grab	SS	9-10	11/13/19	1404	3	X	X	X		X		17
SB-17C (14-15)	Grab	SS	14-15	11/13/19	1405	3	X	X	X		X		15
SB-17D (0-1)	Grab	SS	0-1	11/13/19	1420	3						Hold	
SB-17D (1-2)	Grab	SS	1-2	11/13/19	1421	3						Hold	
SB-17D (2-3)	Grab	SS	2-3	11/13/19	1422	3						Hold	
SB-17D (3-4)	Grab	SS	3-4	11/13/19	1423	3						Hold	

17 -01
18
19
20

* 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: 11/14/19	Time:	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR S
Relinquished by : (Signature)	Date: 11-14	Time: 1700	Received by: (Signature)	Temp: AG2 °C 1+.2=.3 Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 18

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:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

SDG # ~~116 1400~~

Table # L1168403

Collected by (print): TIM CRUMP

Site/Facility ID #

P.O. # **8657**

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: **134 - Mark W. Beasley**
PB:

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

Quote #

Date Results Needed

Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-13(0-1)	Grab	SS	0-1	11/13/19	0811	3	X	X	X		X							-01
SB-13(1-2)	Grab	SS	1-2	11/13/19	0812	3											Hold	
SB-13(2-3)	Grab	SS	2-3	11/13/19	0813	3	X	X	X		X							-02
SB-13(3-4)	Grab	SS	3-4	11/13/19	0814	3											Hold	
SB-13(4-6)	Grab	SS	4-6	11/13/19	0815	3	X	X	X		X							03
SB-13(6-8)	Grab	SS	6-8	11/13/19	0816	3											Hold	
SB-13(8-9)	Grab	SS	8-9	11/13/19	0817	3	X	X	X		X							04
SB-13(9-10)	Grab	SS	9-10	11/13/19	0818	3											Hold	
SB-14(0-1)	Grab	SS	0-1	11/13/19	0946	3	X	X	X		X							-05
SB-14(1-2)	Grab	SS	1-2	11/13/19	0947	3											Hold	-02

Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other___

Remarks:
4510 1661 9352/ 9885/9841/9874/ 9856/9863/9900

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: 11/14/19	Time: 1400	Received by: (Signature)
Relinquished by : (Signature)	Date: 11-14	Time: 1700	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: [✓ Yes] / No 5
HCL / MeoH 8
TBR

Temp: [illegible] °C 0.1+.2=0.3

Bottles Received: 286

Date: 11/15/19 Time: 830

11-106
11-107
11-108
11-109

Condition: NCF / [✓ OK]

TGE Resources

048 Northcourt Road
ouston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

eport to:
risti Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

roject
escription: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

hone: **713-744-5800**
ax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

ollected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

ollected by (signature):

mmediately
acked 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

Chain of Custody Page 2 of 10

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 # ~~1161400~~

Table # L1168403

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P739844**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-14(2-3)	Grab	SS	2-3	11/13/19	0948	3	X	X	X		X		06
SB-14(3-4)	Grab	SS	3-4	11/13/19	0949	3						Hold	
SB-14(6-8)	Grab	SS	6-8	11/13/19	0950	3						Hold	
SB-14(10-12)	Grab	SS	10-12	11/13/19	0951	3	X	X	X		X		07
SB-14A(0-1)	Grab	SS	0-1	11/13/19	0850	3						Hold	-03
SB-14A(1-2)	Grab	SS	1-2	11/13/19	0851	3						Hold	-04
SB-14A(2-3)	Grab	SS	2-3	11/13/19	0852	3						Hold	
SB-14A(3-4)	Grab	SS	3-4	11/13/19	0853	3						Hold	
SB-14A(6-8)	Grab	SS	6-8	11/13/19	0854	3						Hold	
SB-14A(10-12)	Grab	SS	10-12	11/13/19	0855	3						Hold	

Matrix:
S - Soil AIR - Air F - Filter
W - Groundwater B - Bioassay
W - WasteWater
W - Drinking Water
T - 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)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5
	11/14/19	1400		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: AS °C 0.1+.2=.3 Bottles Received: 285
	11-14	170		
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Harley	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

11-110

Condition: NCF / [✓ OK]

GE Resources

048 Northcourt Road
ouston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

eport to:
risti Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

oject
escription: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

hone: **713-744-5800**
ax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

ollected by (print): TIM CRUMP

Site/Facility ID #

P.O. #
8657

ollected by (signature):

Quote #

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

nmediately
acked on Ice N ___ Y X

Chain of Custody Page 3 of 10

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~[illegible]~~

Table # L1165403

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-14B(0-1)	Grab	SS	0-1	11/13/19	1034	3											Hold	-05
SB-14B(1-2)	Grab	SS	1-2	11/13/19	1035	3											Hold	-06
SB-14B(2-3)	Grab	SS	2-3	11/13/19	1036	3											Hold	
SB-14B(3-4)	Grab	SS	3-4	11/13/19	1037	3											Hold	
SB-14B(6-8)	Grab	SS	6-8	11/13/19	1038	3											Hold	
SB-14B(14-15)	Grab	SS	14-15	11/13/19	1039	3											Hold	
SB-14C(0-1)	Grab	SS	0-1	11/13/19	0920	3											Hold	-07
SB-14C(1-2)	Grab	SS	1-2	11/13/19	0921	3											Hold	-08
SB-14C(2-3)	Grab	SS	2-3	11/13/19	0922	3											Hold	
SB-14C(3-4)	Grab	SS	3-4	11/13/19	0923	3											Hold	

Matrix:
S - Soil AIR - Air F - Filter
W - Groundwater B - Bioassay
W - WasteWater
W - Drinking Water
T - 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: 11/14/19	Time: 1140	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 58	
Relinquished by : (Signature)	Date: 11-14	Time: 1720	Received by: (Signature)	Temp: 4.5 °C .1+.2=.3	Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Harley M	Date: 11/15/19	Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

GE Resources
048 Northcourt Road
ouston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

eport to: Kristi Barnette

roject Description: Future Federal Way Hospital

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Site/Facility ID #

P.O. # 8657

Quote #

Collected by (print): Tim Crump

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

Chain of Custody Page 4 of 10

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Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~[illegible]~~

Table # L1168403

Acctnum: TGERESHTX
Template: T158754
Prelogin: P739844
PM: 134 - Mark W. Beasley
PB:

Shipped Via: FedEX Standard

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-14C(6-8)	Grab	SS	6-8	0924	11/13/19	3											Hold	
SB-14C(10-12)	Grab	SS	10-12	0925	11/13/19	3											Hold	
SB-14D(0-1)	Grab	SS	0-1	11/13/19	1008	3											Hold	-09
SB-14D(1-2)	Grab	SS	1-2	11/13/19	1009	3											Hold	-10
SB-14D(2-3)	Grab	SS	2-3	11/13/19	1010	3											Hold	
SB-14D(3-4)	Grab	SS	3-4	11/13/19	1011	3											Hold	
SB-14D(6-8)	Grab	SS	6-8	11/13/19	1012	3											Hold	
SB-14D(14-15)	Grab	SS	14-15	11/13/19	1013	3											Hold	
SB-16(0-1)	Grab	SS	0-1	11/13/19	1230	3	X	X	X		X							-08
SB-16(1-2)	Grab	SS	1-2	11/13/19	1231	3											Hold	-11

* 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: 11/14/19	Time: 1400	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No S [✓ HCl] / MeoH TBR
Relinquished by : (Signature)	Date: 11-14	Time: 1700	Received by: (Signature)	Temp: A5 °C 1.1+.2=1.3 Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Hanley M	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

GE Resources

048 Northcourt Road
louston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

eport to:
risti Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

roject
escription: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

hone: **713-744-5800**
ax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

ollected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

ollected by (signature):

Quote #

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

mmediately
acked on ice N___ Y X

Chain of Custody Page 5 of 10

Pace Analytical®
National Center for Testing & Innovation

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~[illegible]~~

Table # L1168403

Acctnum: TGERESHTX
Template: T158754
Prelogin: P739844
PM: 134 - Mark W. Beasley
PB:

Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-16 (2-3)	Grab	SS	2-3	11/13/19	1232	3	X	X	X		X							-09
SB-16 (3-4)	Grab	SS	3-4	11/13/19	1233	3											Hold	
SB-16 (6-8)	Grab	SS	6-8	11/13/19	1234	3											Hold	
SB-16 (10-12)	Grab	SS	10-12	11/13/19	1235	3	X	X	X		X							-10
SB-16A (0-1)	Grab	SS	0-1	11/13/19	1110	3											Hold	-12
SB-16A (1-2)	Grab	SS	1-2	11/13/19	1111	3											Hold	-13
SB-16A (2-3)	Grab	SS	2-3	11/13/19	1112	3											Hold	
SB-16A (3-4)	Grab	SS	3-4	11/13/19	1113	5											Hold	
SB-16A (6-8)	Grab	SS	6-8	11/13/19	1114	3											Hold	
SB-16A (10-12)	Grab	SS	10-12	11/13/19	1115	3											Hold	

* Matrix:
S - Soil AIR - Air F - Filter
W - Groundwater B - Bioassay
W - WasteWater
W - Drinking Water
T - 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: 11/14/19	Time: 1400	Received by: (Signature)	Trip Blank Received: [✓ Yes] No [✓ HCL] / MeoH TBR 5
Relinquished by : (Signature)	Date: 1114	Time: [illegible]	Received by: (Signature)	Temp: [illegible] °C alt, 2=03 Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Harley [illegible]	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

Chain of Custody Page 6 of 10

Pace Analytical
National Center for Testing & Innovation

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Phone: 800-767-5859
Fax: 615-758-5859

GE Resources

48 Northcourt Road
ouston, TX 77040

Billing Information:
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Houston, TX 77040

Pres Chk

port to:
risti Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

oject
escription: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

hone: **713-744-5800**
ax: **713-744-5888**

Site/Facility ID #

P.O. #
8657

Quote #

Collected by (print): Tim Crump

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

SDG # ~~[illegible]~~

Table # L1168403

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-16B (0-1)	Grab	SS	0-1	11/13/19	1132	3						Hold	-14
SB-16B (1-2)	Grab	SS	1-2	11/13/19	1133	3						Hold	-15
SB-16B (2-3)	Grab	SS	2-3	11/13/19	1134	3						Hold	
SB-16B (3-4)	Grab	SS	3-4	11/13/19	1135	3						Hold	
SB-16B (6-8)	Grab	SS	6-8	11/13/19	1136	3						Hold	
SB-16B (14-15)	Grab	SS	14-15	11/13/19	1137	3						Hold	
SB-16C (0-1)	Grab	SS	0-1	11/13/19	1255	3						Hold	-16
SB-16C (1-2)	Grab	SS	1-2	11/13/19	1256	3						Hold	-17
SB-16C (2-3)	Grab	SS	2-3	11/13/19	1257	3						Hold	
SB-16C (3-4)	Grab	SS	3-4	11/13/19	1258	3						Hold	

* 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: 11/14/19	Time: 1400	Received by: (Signature)	Trip Blank Received: [✓ Yes] No [✓ HCl] MeoH TBR 5
Relinquished by : (Signature)	Date: 11-14	Time: 1700	Received by: (Signature)	Temp: [illegible]°C 0.1+.2=0.3 Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

GE Resources

48 Northcourt Road
ouston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 7 of 10

Pace Analytical®
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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

port to: **isti Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

oject
escription: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

one: **713-744-5800**
x: **713-744-5888**

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

ollected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

ollected by (signature):

mmediately
acked 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

SDG # ~~16~~1400

Table # L1168403

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-16C(6-8)	Grab	SS	6-8	11/13/19	1259	3											Hold	
SB-16C(12-13)	Grab	SS	12-13	11/13/19	1300	3											Hold	
SB-16D(0-1)	Grab	SS	0-1	11/13/19	1323	3											Hold	-18
SB-16D(1-2)	Grab	SS	1-2	11/13/19	1324	3											Hold	-19
SB-16D(2-3)	Grab	SS	2-3	11/13/19	1325	3											Hold	
SB-16D(3-4)	Grab	SS	3-4	11/13/19	1326	3											Hold	
SB-16D(6-8)	Grab	SS	6-8	11/13/19	1327	3											Hold	
SB-16D(14-15)	Grab	SS	14-15	11/13/19	1328	3											Hold	
SB-17(0-1)	Grab	SS	0-1	11/13/19	1520	3	X	X	X		X							4
SB-17(1-2)	Grab	SS	1-2	11/13/19	1521	3											Hold	

* 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: 11/14/19	Time:	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCL / MeoH TBR S
Relinquished by : (Signature)	Date: 11-14	Time:	Received by: (Signature)	Temp: [illegible] °C 0.1+.2=0.3 Bottles Received: 285
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Harley Mill	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources 048 Northcourt Road ouston, TX 77040	Billing Information: **Accounts Payable** **8048 Northcourt Road** **Houston, TX 77040**	Pres Chk
eport to: **risti Barnette**	Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**	
roject escription: **Future Federal Way Hospital**	City/State Collected: Federal Way, WA	Please Circle: [✓ PT] MT CT ET
hone: **713-744-5800** ax: **713-744-5888**	Client Project # **R13411.07**	Lab Project # **TGERESHTX-R13411**
ollected by (print): Tim Crump	Site/Facility ID #	P.O. # **8657**
ollected by (signature): mmediately acked 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 8 of 10

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 1111400

Table # L1168403

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-17(2-3)	Grab	SS	2-3	11/13/19	1522	3											Hold	
SB-17(3-4)	Grab	SS	3-4	11/13/19	1523	3											Hold	
SB-17(6-8)	Grab	SS	6-8	11/13/19	1524	3	X	X	X		X							12
SB-17(14-15)	Grab	SS	14-15	11/13/19	1525	3	X	X	X		X							13
SB-17A(0-1)	Grab	SS	0-1	11/13/19	1457	3											Hold	-20
SB-17A(1-2)	Grab	SS	1-2	11/13/19	1458	3											Hold	-21
SB-17A(2-3)	Grab	SS	2-3	11/13/19	1459	3											Hold	
SB-17A(3-4)	Grab	SS	3-4	11/13/19	1500	3											Hold	
SB-17A(7-8)	Grab	SS	7-8	11/13/19	1501	3	X	X	X		X							14
SB-17A(12-13)	Grab	SS	12-13	11/13/19	1502	3	X	X	X		X							15

Matrix:
S - Soil AIR - Air F - Filter
W - Groundwater B - Bioassay
VW - WasteWater
W - Drinking Water
T - Other________

Remarks:

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: _NF ✓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

elinquished by : (Signature)	Date: 11/14/19	Time:	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR
elinquished by : (Signature)	Date: 11/14	Time: 1700	Received by: (Signature)	Temp: 1.3 °C Bottles Received: 0.1+.2=.3 285
elinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

048 Northcourt Road
ouston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

eport to:
risti Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

roject
escription: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

hone: **713-744-5800**
ax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

ollected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

ollected by (signature):

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

mmediately
acked on Ice N ___ Y ✗

Chain of Custody Page 9 of 10

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Mount Juliet, TN 37122
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Phone: 800-767-5859
Fax: 615-758-5859

SDG # J1614~~80~~

Table # L1168403

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739844**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-17C (0-1)	Grab	SS	0-1	11/13/19	1400	3											Hold	-22
SB-17C (1-2)	Grab	SS	1-2	11/13/19	1401	3											Hold	-23
SB-17C (2-3)	Grab	SS	2-3	11/13/19	1402	3	X	X	X		X							16
SB-17C (6-7)	Grab	SS	6-7	11/13/19	1403	3											Hold	
SB-17C (9-10)	Grab	SS	9-10	11/13/19	1404	3	X	X	X		X							17
SB-17C (14-15)	Grab	SS	14-15	11/13/19	1405	3	X	X	X		X							18
SB-17D (0-1)	Grab	SS	0-1	11/13/19	1420	3											Hold	[illegible]
SB-17D (1-2)	Grab	SS	1-2	11/13/19	1421	3											Hold	
SB-17D (2-3)	Grab	SS	2-3	11/13/19	1422	3											Hold	
SB-17D (3-4)	Grab	SS	3-4	11/13/19	1423	3											Hold	

Matrix:
S - Soil AIR - Air F - Filter
W - Groundwater B - Bioassay
W - WasteWater
W - Drinking Water
T - 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

elinquished by : (Signature)	Date: 11/14/19	Time:	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCl] / MeoH TBR
elinquished by : (Signature)	Date: 11-14	Time: 1700	Received by: (Signature)	Temp: [illegible] °C 2.1+.2=2.3 Bottles Received: 285
elinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/19 Time: 830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

Chain of Custody Page 1 of 8

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~L1116424~~
D212
L1168403

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB: 11/13/19 MWB
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-15 (0-1)	Grab	SS	0-1	11/14/19	1145	~~3~~ 2	X	X	X		X		-01
SB-15 (1-2)	Grab	SS	1-2	11/14/19	1146	3						Hold	
SB-15 (2-3)	Grab	SS	2-3	11/14/19	1147	2	X	X	X		X		-02
SB-15 (3-4)	Grab	SS	3-4	11/14/19	1148	3						Hold	
SB-15 (6-8)	Grab	SS	6-8	11/14/19	1149	3						Hold	
SB-15 (10-12)	Grab	SS	10-12	11/14/19	1150	2	X	X	X		X		-03
SB-15A (0-1)	Grab	SS	0-1	11/14/19	1125	3						Hold	
SB-15A (1-2)	Grab	SS	1-2	11/14/19	1126	3						Hold	-24
SB-15A (2-3)	Grab	SS	2-3	11/14/19	1127	3						Hold	
SB-15A (3-4)	Grab	SS	3-4	11/14/19	1128	3						Hold	

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ______

Remarks: 4510 1662 0396/0411/0536/0514/ 0488/0400/ 0503/0422/0444/0433/0477/0525/0466/0455

pH ______ Temp ______
Flow ______ Other ______

Samples returned via: ___ UPS X FedEx ___ Courier ______

Tracking # 4686 6470 7042

Sample Receipt Checklist
COC Seal Present/Intact: _NF ✓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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] No 5 [✓ HCl] / MeoH TBR	
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp 4.2 °C 02-1=01	Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

11-131

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #
8657

Collected by (signature):

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

Immediately Packed on Ice N___ Y ✓

Chain of Custody Page 2 of 18

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~L1161924~~
Table # L1168403
Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: 134 - Mark W. Beasley
PB: 11/13/19 MB
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-15A(6-8)	Grab	SS	6-8	11/14/19	1129	3						Hold	
SB-15A(10-12)	Grab	SS	10-12	11/14/19	1130	3						Hold	
SB-15B(0-1)	Grab	SS	0-1	11/14/19	1310	3						Hold	
SB-15B(1-2)	Grab	SS	1-2	11/14/19	1311	3						Hold	-25
SB-15B(2-3)	Grab	SS	2-3	11/14/19	1312	3						Hold	
SB-15B(3-4)	Grab	SS	3-4	11/14/19	1313	3						Hold	
SB-15B(6-8)	Grab	SS	6-8	11/14/19	1314	3						Hold	
SB-15B(14-15)	Grab	SS	14-15	11/14/19	1315	3						Hold	
SB-15C(0-1)	Grab	SS	0-1	11/14/19	1400	3						Hold	
SB-15C(1-2)	Grab	SS	1-2	11/14/19	1401	3						Hold	-26

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5	
Relinquished by : (Signature)	Date: 11-15	Time: 12[illegible]	Received by: (Signature)	Temp: [illegible] °C 0.2-1=0.1	Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

11-130

Condition: NCF / [✓ OK]

[redacted]

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 3 of 18

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

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N___ Y ✓

SDG # ~~L1161424~~

Table # L1168403

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB: 11/13/19 mb
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-15C(2-3)	Grab	SS	2-3	11/14/19	1402	3											Hold	
SB-15C(3-4)	Grab	SS	3-4	11/14/19	1403	3											Hold	
SB-15C(6-8)	Grab	SS	6-8	11/14/19	1404	3											Hold	
SB-15C(10-12)	Grab	SS	10-12	11/14/19	1405	3											Hold	
SB-15D(0-1)	Grab	SS	0-1	11/14/19	1320	3											Hold	
SB-15D(1-2)	Grab	SS	1-2	11/14/19	1321	3											Hold	
SB-15D(2-3)	Grab	SS	2-3	11/14/19	1322	3											Hold	-27
SB-15D(3-4)	Grab	SS	3-4	11/14/19	1323	3											Hold	
SB-15D(6-8)	Grab	SS	6-8	11/14/19	1324	3											Hold	
SB-15D(14-15)	Grab	SS	14-15	11/14/19	1325	3											Hold	

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11-15	Time: 1700	Received by: (Signature)	Temp: [illegible] °C 2.2-.1=2.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-129

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Chain of Custody Page 4 of 18

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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 # ~~L1161924~~

Table # L1168403

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB: 11/13/19 MW
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-17B (0-1)	Grab	SS	0-1	11/14/19	1430	3						Held	-28
SB-17B (1-2)	Grab	SS	1-2	11/14/19	1431	3						Held	
SB-17B (2-3)	Grab	SS	2-3	11/14/19	1432	3						Held	
SB-17B (3-4)	Grab	SS	3-4	11/14/19	1433	3						Held	
SB-17B (6-8)	Grab	SS	6-8	11/14/19	1434	3						Held	
SB-17B (14-15)	Grab	SS	14-15	11/14/19	1435	3						Held	
SB-17E (9-10)	Grab	SS	9-10	11/14/19	1500	3	X	X	X		X		-04
SB-17E (14-15)	Grab	SS	14-15	11/14/19	1505	3	X	X	X		X		-05
SB-17F (6-8)	Grab	SS	6-8	11/14/19	1548	3						Held	
SB-17F (10-11)	Grab	SS	10-11	11/14/19	1547	3	X	X	X		X		-06

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 11-15	Time: 170	Received by: (Signature)	Temp: 0.2-1=0.1 °C Bottles Received: 228	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00	11-128 Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Chain of Custody Page 6 of 18

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 # ~~L1161924~~

Table # L1168403

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-19 (0-1)	Grab	SS	0-1	11/14/19	0853	3	X	X	X		X							-12
SB-19 (1-2)	Grab	SS	1-2	11/14/19	0854	3											Hold	
SB-19 (2-3)	Grab	SS	2-3	11/14/19	0855	3	X	X	X		X							-13
SB-19 (3-4)	Grab	SS	3-4	11/14/19	0856	3											Hold	
SB-19 (4-6)	Grab	SS	4-6	11/14/19	0857	3	X	X	X		X							-14
SB-19 (6-8)	Grab	SS	6-8	11/14/19	0858	3											Hold	
SB-19 (9-11)	Grab	SS	9-11	11/14/19	0859	3											Hold	
SB-19 (12-14)	Grab	SS	12-14	11/14/19	0900	3											Hold	
SB-20 (0-1)	Grab	SS	0-1	11/14/19	0933	3											Hold	-29
SB-20 (1-2)	Grab	SS	1-2	11/14/19	0934	3											Hold	-30

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11/15	Time: 1700	Received by: (Signature)	Temp: [illegible] °C 0.2-.1=0.1 Bottles Received 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9.00

If preservation required by Login: Date/Time

Ho

11-126

Condition: CF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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)
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___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 8 of 15

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Fax: 615-758-5859

SDG # L1161924

Table # L11684D3

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-21 (4-6)	Grab	SS	4-6	11/14/19	1009	3											Held	
SB-21 (6-8)	Grab	SS	6-8	11/14/19	1010	3	X	X	X		X							-19
SB-21 (9-11)	Grab	SS	9-11	11/14/19	1011	3	X	X	X		X							20
SB-21 (12-14)	Grab	SS	12-14	11/14/19	1012	3											Held	
SB-22 (0-1)	Grab	SS	0-1	11/14/19	0950	3	X	X	X		X							-21
SB-22 (1-2)	Grab	SS	1-2	11/14/19	0951	3											Held	-31
SB-22 (2-3)	Grab	SS	2-3	11/14/19	0952	3	X	X	X		X							22
SB-22 (3-4)	Grab	SS	3-4	11/14/19	0953	3											Held	
SB-22 (4-6)	Grab	SS	4-6	11/14/19	0954	3	X	X	X		X							-23
SB-22 (6-8)	Grab	SS	6-8	11/14/19	0955	3											Held	

* 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: 11/15/19	Time: 1250	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp: °C 0.2-.1=0.1 Bottles Received: 223	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00	Hold: Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 10 of 18

Pace Analytical®
National Center for Testing & Innovation

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Mount Juliet, TN 37122
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Phone: 800-767-5859
Fax: 615-758-5859

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

SDG # L1161924

Table # L1168403

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-24 (0-1)	Grab	SS	0-1	11/14/19	1158	3	X	X	X		X							-27
SB-24 (1-2)	Grab	SS	1-2	11/14/19	1159	3											Held	-32
SB-24 (2-3)	Grab	SS	2-3	11/14/19	1200	3	X	X	X		X							-28
SB-24 (3-4)	Grab	SS	3-4	11/14/19	1201	3											Held	
SB-24 (4-6)	Grab	SS	4-6	11/14/19	1202	3	X	X	X		X							-29
SB-24 (6-8)	Grab	SS	6-8	11/14/19	1203	3											Held	
SB-24 (9-11)	Grab	SS	9-11	11/14/19	1204	3											Held	
SB-24 (12-14)	Grab	SS	12-14	11/14/19	1205	3											Held	
SB-25 (0-1)	Grab	SS	0-1	11/14/19	0952	3											Held	
SB-25 (1-2)	Grab	SS	1-2	11/14/19	0953	3	X	X	X		X							-30

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5	
Relinquished by : (Signature)	Date: 11-15-19	Time:	Received by: (Signature)	Temp: [illegible] °C 0.2-.1=0.1	Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

L1168403

Katie Ingram

From: Mark Beasley <MBeasley@pacenational.com>
Sent: Saturday, December 7, 2019 11:20 AM
To: Project Service <ProjServ@pacenational.com>; Extractions <Extractions@pacenational.com>; Due SVOC <duesvoc@pacenational.com>
Subject: L1161400 & L1161924 *TGERESHTX* rush R3 hold samples

Log the below samples previously on hold for NWTPHDXNOSGT & TS. Log as R3 due 12/11. Run OOH per client. Use PO#8730.

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Friday, December 06, 2019 7:44 PM
To: Mark Beasley
Subject: FW: Additional Analysis Requested for Federal Way -- ADDITIONAL SAMPLES ADDED

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Added 9 more samples (in red) to original email I submitted. Attached PO has been revised as well. Yes...run even though they are out of hold time.

Pace ID Number	TGE ID Number	Analysis
Not assigned	SB15A(1-2)	DRO/RRO & Total Solids
Not assigned	SB15B(1-2)	DRO/RRO & Total Solids
Not assigned	SB15C(1-2)	DRO/RRO & Total Solids
Not assigned	SB15D(1-2)	DRO/RRO & Total Solids
Not assigned	SB17A(0-1)	DRO/RRO & Total Solids
Not assigned	SB17A(1-2)	DRO/RRO & Total Solids
Not assigned	SB17B(0-1)	DRO/RRO & Total Solids
Not assigned	SB17C(0-1)	DRO/RRO & Total Solids
Not assigned	SB17C(1-2)	DRO/RRO & Total Solids
L1165628-17	SB17D(0-1)	DRO/RRO & Total Solids
Not assigned	SB24(1-2)	DRO/RRO & Total Solids
Not assigned	SB20(0-1)	DRO/RRO & Total Solids
Not assigned	SB20(1-2)	DRO/RRO & Total Solids
Not assigned	SB22(1-2)	DRO/RRO & Total Solids
Not assigned	SB14(1-2)	DRO/RRO & Total Solids
Not assigned	SB14A(0-1)	DRO/RRO & Total Solids
Not assigned	SB14A(1-2)	DRO/RRO & Total Solids
Not assigned	SB14B(0-1)	DRO/RRO & Total Solids
Not assigned	SB14B(1-2)	DRO/RRO & Total Solids
Not assigned	SB14C(0-1)	DRO/RRO & Total Solids
Not assigned	SB14C(1-2)	DRO/RRO & Total Solids
Not assigned	SB14D(0-1)	DRO/RRO & Total Solids

L1168403

Not assigned	SB14D(1-2)	DRO/RRO & Total Solids
Not assigned	SB16(1-2)	DRO/RRO & Total Solids
Not assigned	SB16A(0-1)	DRO/RRO & Total Solids
Not assigned	SB16A(1-2)	DRO/RRO & Total Solids
Not assigned	SB16B(0-1)	DRO/RRO & Total Solids
Not assigned	SB16B(1-2)	DRO/RRO & Total Solids
Not assigned	SB16C(0-1)	DRO/RRO & Total Solids
Not assigned	SB16C(1-2)	DRO/RRO & Total Solids
Not assigned	SB16D(0-1)	DRO/RRO & Total Solids
Not assigned	SB16D(1-2)	DRO/RRO & Total Solids

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

TGERESOURCES, INC.

WBENC & SBA Certified Woman Owned Small Business
DUNS# 929574051
CAGE Code 08PQ6

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Matt Shacklock

Pace Analytical®
National Center for Testing & Innovation

Login #:L1168403	**Client:TGERESHTX**	**Date:12/7/19**	**Evaluated by:Myra "Katie" Ingram**

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 / Cour
	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:**
X	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:

One of two vials for ID: SB-17B (0-1) removed from hold broken.

Client informed by:		Call		Email		Voice Mail	Date: 12/9/19	Time: 0850
TSR Initials: MB	Client Contact:							

Login Instructions:

Run from unbroken vial

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

December 13, 2019

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1169561
Samples Received:	11/16/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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Cn: Case Narrative 4

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Sr: Sample Results 9

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  SB-15B (14-15) L1169561-02 10

Qc: Quality Control Summary 11

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  Metals (ICP) by Method 6010D 12

Gl: Glossary of Terms 13

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SAMPLE SUMMARY

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Collected by	Collected date/time	Received date/time
	11/14/19 13:14	11/16/19 09:00

SB-15B (6-8) L1169561-01 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1395160	1	12/12/19 07:50	12/12/19 08:05	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1395090	1	12/11/19 20:27	12/12/19 01:26	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
	11/14/19 13:15	11/16/19 09:00

SB-15B (14-15) L1169561-02 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1395160	1	12/12/19 07:50	12/12/19 08:05	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1395090	1	12/11/19 20:27	12/12/19 01:35	EL	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 12/13/2019 08:46
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1169561-01 and 02
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1395090 and WG1395160

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 12/13/2019 08:46
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1169561-01 and 02
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1395090 and WG1395160

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 12/13/2019 08:46
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1169561-01 and 02
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1395090 and WG1395160

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

SB-15B (6-8)

Collected date/time: 11/14/19 13:14

SAMPLE RESULTS - 01

L1169561

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5		1	12/12/2019 08:05	WG1395160

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.64		0.492	2.00	2.14	1	12/12/2019 01:26	WG1395090

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.4		1	12/12/2019 08:05	WG1395160

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.73	J	0.498	2.00	2.16	1	12/12/2019 01:35	WG1395090

Method Blank (MB)

(MB) R3481885-1 12/12/19 08:05

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1168019-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1168019-25 12/12/19 08:05 • (DUP) R3481885-3 12/12/19 08:05

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	96.1	96.1	1	0.0843		10

Laboratory Control Sample (LCS)

(LCS) R3481885-2 12/12/19 08:05

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	49.9	99.8	85.0-115	

WG1395090

Metals (ICP) by Method 6010D

QUALITY CONTROL SUMMARY

L1169561-01,02

Method Blank (MB)

(MB) R3481530-1 12/12/19 01:01

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3481530-2 12/12/19 01:04 • (LCSD) R3481530-3 12/12/19 01:06

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 %
Arsenic	100	94.3	92.5	94.3	92.5	80.0-120			1.92	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1,6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T104704245-18-15
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

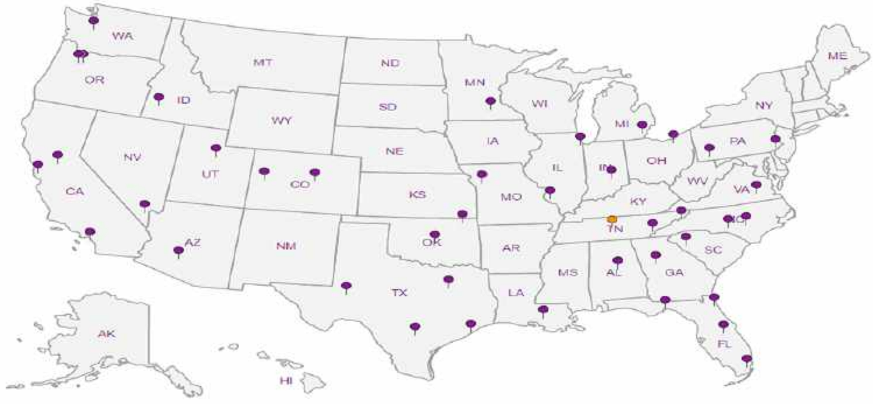
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Chain of Custody Page 2 of 15

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 # ~~L1161524~~ L1169561

G036

IV 12/11/19

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB: 11/13/19 MB
Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr					Remarks	Sample # (lab only)
SB-15A(6-8)	Grab	SS	6-8	11/14/19	1129	3										Hold	
SB-15A(10-12)	Grab	SS	10-12	11/14/19	1130	3										Hold	
SB-15B(0-1)	Grab	SS	0-1	11/14/19	1310	3										Hold	
SB-15B(1-2)	Grab	SS	1-2	11/14/19	1311	3										Hold	
SB-15B(2-3)	Grab	SS	2-3	11/14/19	1312	3										Hold	
SB-15B(3-4)	Grab	SS	3-4	11/14/19	1313	3										Hold	
SB-15B(6-8)	Grab	SS	6-8	11/14/19	1314	3										Hold	-01
SB-15B(14-15)	Grab	SS	14-15	11/14/19	1315	3										Hold	-02
SB-15C(0-1)	Grab	SS	0-1	11/14/19	1400	3										Hold	
SB-15C(1-2)	Grab	SS	1-2	11/14/19	1401	3										Hold	

* 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)		
	11/15/19	1230		Trip Blank Received: [✓ Yes] / No 5	[✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 11-15	Time: 1220	Received by: (Signature)	Temp: ~~AE~~ °C 0.2-.1=0.1	Bottles Received 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

11-130

Condition: NCF / [✓ OK]

Andy Vann

From: Mark Beasley
Sent: Wednesday, December 11, 2019 11:03 AM
To: Project Service
Subject: L1161924 *TGERESHTX* R3 rush hold samples

Relog the below samples previously on hold for ASICP & TS. Log as R3 due 12/12. Use PO# 8739

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Tuesday, December 10, 2019 5:41 PM
To: Mark Beasley
Subject: Request additional samples

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please run the following samples at Federal Way project under an expedited 2 day TAT for arsenic and total solids. PO is attached.

SB15B(6-8)
SB15B(14-15)

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

TGERESOURCES,INC.

WBENC & SBA Certified Woman Owned Small Business
DUNS# 929574051
CAGE Code 08PQ6

certified
WBENC
WOMEN'S BUSINESS ENTERPRISE

ANALYTICAL REPORT

December 13, 2019

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

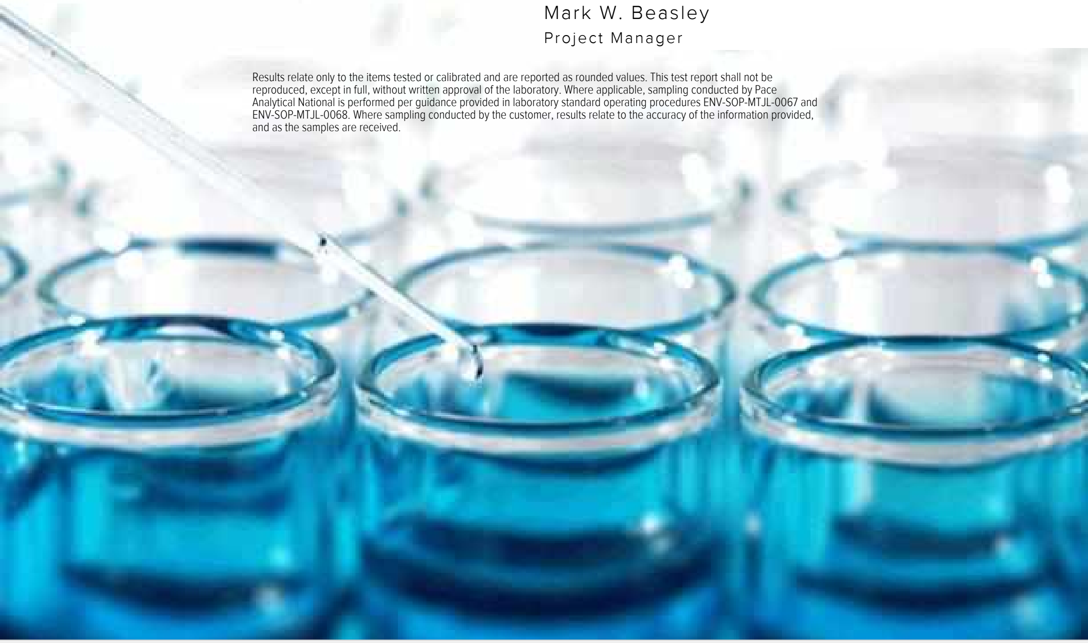
Sample Delivery Group:	L1169568
Samples Received:	11/16/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital

Report To:

Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SB-15 (3-4) L1169568-01 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 11:48	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1395160	1	12/12/19 07:50	12/12/19 08:05	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1395090	1	12/11/19 20:27	12/12/19 01:37	EL	Mt. Juliet, TN

SB-15 (6-8) L1169568-02 Solid

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 11:49	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1395160	1	12/12/19 07:50	12/12/19 08:05	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1395090	1	12/11/19 20:27	12/12/19 01:40	EL	Mt. Juliet, TN

CASE NARRATIVE

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 12/13/2019 08:47
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1169568-01 and 02
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1395090 and WG1395160

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 12/13/2019 08:47
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1169568-01 and 02
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1395090 and WG1395160

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 12/13/2019 08:47
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1169568-01 and 02
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1395090 and WG1395160

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.1		1	12/12/2019 08:05	WG1395160

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.52		0.510	2.00	2.22	1	12/12/2019 01:37	WG1395090

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.1		1	12/12/2019 08:05	WG1395160

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.18		0.517	2.00	2.25	1	12/12/2019 01:40	WG1395090

Method Blank (MB)

(MB) R3481885-1 12/12/19 08:05

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1168019-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1168019-25 12/12/19 08:05 • (DUP) R3481885-3 12/12/19 08:05

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	96.1	96.1	1	0.0843		10

Laboratory Control Sample (LCS)

(LCS) R3481885-2 12/12/19 08:05

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	49.9	99.8	85.0-115	

Method Blank (MB)

(MB) R3481530-1 12/12/19 01:01

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3481530-2 12/12/19 01:04 • (LCSD) R3481530-3 12/12/19 01:06

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 %
Arsenic	100	94.3	92.5	94.3	92.5	80.0-120			1.92	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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

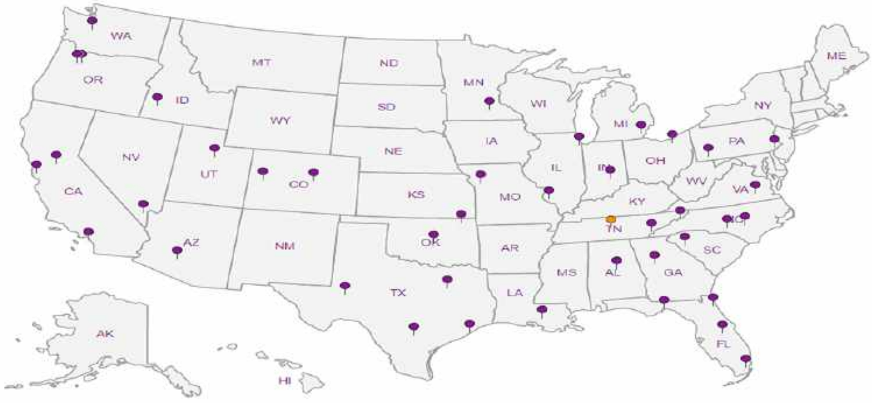
Third Party Federal Accreditations

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 Page 1 of 8

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 # ~~L1111424~~ G035 L1169568
AJ 12/11/19

Acctnum: TGERESHTX
Template: T158754
Prelogin: P740770
PM: 134 - Mark W. Beasley
PB: 11/13/19 MWB
Shipped Via: FedEX Priority

TGE Resources
8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: Future Federal Way Hospital

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

Collected by (signature):

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

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-15 (0-1)	Grab	SS	0-1	11/14/19	1145	2	X	X	X		X		-01
SB-15 (1-2)	Grab	SS	1-2	11/14/19	1146	3						Hold	
SB-15 (2-3)	Grab	SS	2-3	11/14/19	1147	3	X	X	X		X		-02
SB-15 (3-4)	Grab	SS	3-4	11/14/19	1148	3						Hold	-01
SB-15 (6-8)	Grab	SS	6-8	11/14/19	1149	3						Hold	-02
SB-15 (10-12)	Grab	SS	10-12	11/14/19	1150	3	X	X	X		X		-03
SB-15A (0-1)	Grab	SS	0-1	11/14/19	1125	3						Hold	
SB-15A (1-2)	Grab	SS	1-2	11/14/19	1126	3						Hold	
SB-15A (2-3)	Grab	SS	2-3	11/14/19	1127	3						Hold	
SB-15A (3-4)	Grab	SS	3-4	11/14/19	1128	3						Hold	

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ______

Remarks: 4510 1662 0396/0411/0536/0514/ 0488/0400/ 0503/0422/0444/0433/0477/0525/0466/0455

pH ______ Temp ______
Flow ______ Other ______

Samples returned via: ___ UPS X FedEx ___ Courier ______

Tracking # 4686 6470 7042

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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] No [✓ HCl] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp Ah °C 0.2-.1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-131

Condition: NCF / [✓ OK]

Andy Vann

From: Mark Beasley
Sent: Wednesday, December 11, 2019 11:05 AM
To: Project Service; Due Metals
Subject: L1161924 *TGERESHTX* rush R3 hold samples

Log the below samples previously on hold for ASICP & TS. Log as R3 due 12/13. Use PO# 8742.

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Wednesday, December 11, 2019 10:01 AM
To: Mark Beasley
Subject: Additional Arsenic Sample

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Need 2 more samples analyzed under 2 day TAT please. Made a separate PO b/c I wasn't sure if you had already logged in the 2 I requested from last night. If you can combine them into a single report, that is fine.

Please run SB15(3-4) and SB15(6-8) for arsenic and total solids only please.

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

TGERESOURCES,INC.

WBENC & SBA Certified Woman Owned Small Business
DUNS# 929574051
CAGE Code 08PQ6

certified
WBENC
WOMEN'S BUSINESS ENTERPRISE

ANALYTICAL REPORT

January 11, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1177542
Samples Received:	01/09/2020
Project Number:	R13411.08
Description:	Future Federal Way Hospital

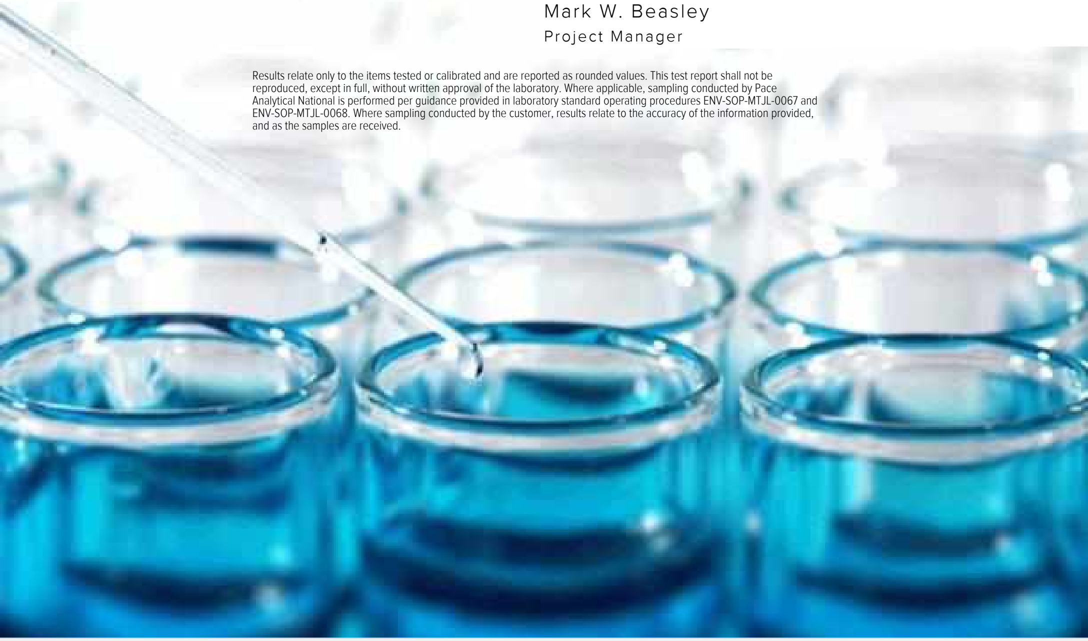
Report To:

Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB32 (.5-1) L1177542-01 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 10:16	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408433	1	01/09/20 13:49	01/09/20 13:59	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 03:51	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 19:20	ADF	Mt. Juliet, TN

SB32 (1-1.5) L1177542-02 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 10:17	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408433	1	01/09/20 13:49	01/09/20 13:59	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:04	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 19:35	ADF	Mt. Juliet, TN

SB32 (1.5-2) L1177542-03 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 10:19	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408433	1	01/09/20 13:49	01/09/20 13:59	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:06	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 19:50	ADF	Mt. Juliet, TN

SB32 (5-6) L1177542-04 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 10:21	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408433	1	01/09/20 13:49	01/09/20 13:59	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:15	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 20:04	ADF	Mt. Juliet, TN

SB32 (8-9) L1177542-05 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 10:24	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408433	1	01/09/20 13:49	01/09/20 13:59	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:17	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 20:19	ADF	Mt. Juliet, TN

SB32 (10-11) L1177542-06 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 10:26	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408433	1	01/09/20 13:49	01/09/20 13:59	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:20	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 20:34	ADF	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB33 (0.5-1) L1177542-07 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 08:56	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408433	1	01/09/20 13:49	01/09/20 13:59	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:23	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 20:48	ADF	Mt. Juliet, TN

SB33 (1-1.5) L1177542-08 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 08:57	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408433	1	01/09/20 13:49	01/09/20 13:59	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:25	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 21:03	ADF	Mt. Juliet, TN

SB33 (1.5-2) L1177542-09 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 08:58	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408433	1	01/09/20 13:49	01/09/20 13:59	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:28	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 18:36	ADF	Mt. Juliet, TN

SB33 (5-6) L1177542-10 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:01	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408433	1	01/09/20 13:49	01/09/20 13:59	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:31	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 21:18	ADF	Mt. Juliet, TN

SB33 (8-9) L1177542-11 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:04	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408434	1	01/09/20 16:38	01/09/20 17:06	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:33	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 21:32	ADF	Mt. Juliet, TN

SB33 (10-11) L1177542-12 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:06	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408434	1	01/09/20 16:38	01/09/20 17:06	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:36	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 21:47	ADF	Mt. Juliet, TN

SAMPLE SUMMARY

SB34 (.5-1) L1177542-13 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 10:54	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408434	1	01/09/20 16:38	01/09/20 17:06	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:39	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 22:02	ADF	Mt. Juliet, TN

SB34 (1-1.5) L1177542-14 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 10:55	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408434	1	01/09/20 16:38	01/09/20 17:06	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:47	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/10/20 16:59	RP	Mt. Juliet, TN

SB34 (1.5-2) L1177542-15 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 10:56	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408434	1	01/09/20 16:38	01/09/20 17:06	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:50	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 22:31	ADF	Mt. Juliet, TN

SB34 (5-6) L1177542-16 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 10:59	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408434	1	01/09/20 16:38	01/09/20 17:06	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:52	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 22:46	ADF	Mt. Juliet, TN

SB34 (8-9) L1177542-17 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 11:02	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408434	1	01/09/20 16:38	01/09/20 17:06	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:55	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 23:01	ADF	Mt. Juliet, TN

SB34 (10-11) L1177542-18 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 11:04	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408434	1	01/09/20 16:38	01/09/20 17:06	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 04:58	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/09/20 23:15	ADF	Mt. Juliet, TN

SB35 (.5-1) L1177542-19 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:09	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408434	1	01/09/20 16:38	01/09/20 17:06	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 05:01	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/10/20 17:13	RP	Mt. Juliet, TN

SB35 (1-1.5) L1177542-20 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:10	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408434	1	01/09/20 16:38	01/09/20 17:06	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408497	1	01/09/20 14:17	01/10/20 05:03	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408513	1	01/09/20 16:02	01/10/20 17:28	RP	Mt. Juliet, TN

SB35 (1.5-2) L1177542-21 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:11	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408435	1	01/09/20 15:42	01/09/20 16:02	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 05:33	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 21:22	RP	Mt. Juliet, TN

SB35 (5-6) L1177542-22 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:14	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408435	1	01/09/20 15:42	01/09/20 16:02	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 05:35	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 20:45	RP	Mt. Juliet, TN

SB35 (8-9) L1177542-23 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:17	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408435	1	01/09/20 15:42	01/09/20 16:02	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 05:44	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 21:34	RP	Mt. Juliet, TN

SB35 (10-11) L1177542-24 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:19	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408435	1	01/09/20 15:42	01/09/20 16:02	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 05:46	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 21:46	RP	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB36 (.5-1) L1177542-25 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 11:06	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408435	1	01/09/20 15:42	01/09/20 16:02	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 05:49	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 21:59	RP	Mt. Juliet, TN

SB36 (1-1.5) L1177542-26 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 11:07	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408435	1	01/09/20 15:42	01/09/20 16:02	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 05:52	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 22:11	RP	Mt. Juliet, TN

SB36 (1.5-2) L1177542-27 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 11:08	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408435	1	01/09/20 15:42	01/09/20 16:02	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 05:20	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 22:24	RP	Mt. Juliet, TN

SB36 (5-6) L1177542-28 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 11:11	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408435	1	01/09/20 15:42	01/09/20 16:02	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 05:54	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 22:36	RP	Mt. Juliet, TN

SB36 (8-9) L1177542-29 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 11:14	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408435	1	01/09/20 15:42	01/09/20 16:02	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 05:57	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 22:48	RP	Mt. Juliet, TN

SB36 (10-11) L1177542-30 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 11:16	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408435	1	01/09/20 15:42	01/09/20 16:02	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 06:00	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 23:01	RP	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB37 (.5-1) L1177542-31 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 08:28	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408442	1	01/09/20 17:15	01/09/20 17:33	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 06:03	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 23:13	RP	Mt. Juliet, TN

SB37 (1-1.5) L1177542-32 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 08:29	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408442	1	01/09/20 17:15	01/09/20 17:33	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 06:05	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 23:25	RP	Mt. Juliet, TN

SB37 (1.5-2) L1177542-33 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 08:30	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408442	1	01/09/20 17:15	01/09/20 17:33	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 06:08	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 23:38	RP	Mt. Juliet, TN

SB37 (5-6) L1177542-34 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 08:33	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408442	1	01/09/20 17:15	01/09/20 17:33	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 06:16	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/09/20 23:50	RP	Mt. Juliet, TN

SB37 (8-9) L1177542-35 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 08:36	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408442	1	01/09/20 17:15	01/09/20 17:33	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 06:19	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/10/20 00:03	RP	Mt. Juliet, TN

SB37 (10-11) L1177542-36 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 08:38	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408442	1	01/09/20 17:15	01/09/20 17:33	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 06:22	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/10/20 00:15	RP	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB38 (.5-1) L1177542-37 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:51	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408442	1	01/09/20 17:15	01/09/20 17:33	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:09	01/09/20 23:52	EL	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/10/20 00:27	RP	Mt. Juliet, TN

SB38 (1-1.5) L1177542-38 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:52	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408442	1	01/09/20 17:15	01/09/20 17:33	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 06:24	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/10/20 00:40	RP	Mt. Juliet, TN

SB38 (5-6) L1177542-39 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:56	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408442	1	01/09/20 17:15	01/09/20 17:33	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 06:27	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/10/20 00:52	RP	Mt. Juliet, TN

SB38 (8-9) L1177542-40 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:59	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408442	1	01/09/20 17:15	01/09/20 17:33	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408501	1	01/09/20 14:22	01/10/20 06:30	TRB	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408516	1	01/09/20 16:11	01/10/20 01:04	RP	Mt. Juliet, TN

SB38 (10-11) L1177542-41 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 10:01	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408444	1	01/09/20 13:30	01/09/20 13:41	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:09	01/09/20 23:54	EL	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408518	1	01/09/20 17:59	01/10/20 08:23	RP	Mt. Juliet, TN

SB39 (.5-1) L1177542-42 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:28	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408444	1	01/09/20 13:30	01/09/20 13:41	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:09	01/10/20 00:02	EL	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408518	1	01/09/20 17:59	01/10/20 09:00	RP	Mt. Juliet, TN

SB39 (1-1.5) L1177542-43 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:29	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408444	1	01/09/20 13:30	01/09/20 13:41	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:09	01/10/20 00:05	EL	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408518	1	01/09/20 17:59	01/10/20 09:12	RP	Mt. Juliet, TN

SB39 (5-6) L1177542-45 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:32	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408444	1	01/09/20 13:30	01/09/20 13:41	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:09	01/10/20 00:07	EL	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408518	1	01/09/20 17:59	01/10/20 09:25	RP	Mt. Juliet, TN

SB39 (8-9) L1177542-46 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:35	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408444	1	01/09/20 13:30	01/09/20 13:41	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:09	01/10/20 00:10	EL	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408518	1	01/09/20 17:59	01/10/20 09:37	RP	Mt. Juliet, TN

SB39 (10-11) L1177542-47 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:37	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408444	1	01/09/20 13:30	01/09/20 13:41	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:09	01/10/20 00:12	EL	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408518	1	01/09/20 17:59	01/10/20 09:49	RP	Mt. Juliet, TN

SB44 (2-3) L1177542-48 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 14:47	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408444	1	01/09/20 13:30	01/09/20 13:41	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:09	01/10/20 00:15	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1408315	1.09	01/07/20 14:47	01/09/20 21:43	BMB	Mt. Juliet, TN

SB44 (6-8) L1177542-49 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 14:50	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408444	1	01/09/20 13:30	01/09/20 13:41	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:09	01/10/20 00:17	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1408315	1.54	01/07/20 14:50	01/09/20 22:04	BMB	Mt. Juliet, TN

SB44 (9-11) L1177542-50 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 14:51	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408444	1	01/09/20 13:30	01/09/20 13:41	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:09	01/10/20 00:20	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1408315	1.16	01/07/20 14:51	01/09/20 22:26	BMB	Mt. Juliet, TN

SB44 (15-16) L1177542-51 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 14:53	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408444	1	01/09/20 13:30	01/09/20 13:41	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:09	01/10/20 00:22	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1408822	1.13	01/07/20 14:53	01/10/20 01:05	ADM	Mt. Juliet, TN

SB47 (0-1) L1177542-52 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 12:30	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408466	1	01/09/20 14:18	01/09/20 14:28	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	25	01/07/20 12:30	01/09/20 16:03	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	100	01/10/20 10:21	01/10/20 18:12	CLG	Mt. Juliet, TN

SB47 (1-2) L1177542-53 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 12:31	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408466	1	01/09/20 14:18	01/09/20 14:28	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	25	01/07/20 12:31	01/09/20 16:24	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	1	01/10/20 10:21	01/10/20 19:15	CLG	Mt. Juliet, TN

SB48 (0-1) L1177542-54 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 14:00	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408466	1	01/09/20 14:18	01/09/20 14:28	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	38.3	01/07/20 14:00	01/09/20 16:44	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	100	01/10/20 10:21	01/10/20 17:09	CLG	Mt. Juliet, TN

SB48 (1-2) L1177542-55 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 14:01	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408466	1	01/09/20 14:18	01/09/20 14:28	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	25	01/07/20 14:01	01/09/20 17:05	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	50	01/10/20 10:21	01/10/20 15:41	CLG	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB49 (0-1) L1177542-56 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 12:50	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408466	1	01/09/20 14:18	01/09/20 14:28	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	25	01/07/20 12:50	01/09/20 17:25	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	50.5	01/10/20 10:21	01/10/20 17:22	CLG	Mt. Juliet, TN

SB49 (1-2) L1177542-57 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 12:51	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408466	1	01/09/20 14:18	01/09/20 14:28	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	32.8	01/07/20 12:51	01/09/20 17:46	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	50	01/10/20 10:21	01/10/20 16:06	CLG	Mt. Juliet, TN

SB50 (0-1) L1177542-58 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 13:20	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408466	1	01/09/20 14:18	01/09/20 14:28	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	25	01/07/20 13:20	01/09/20 18:07	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	50	01/10/20 10:21	01/10/20 17:34	CLG	Mt. Juliet, TN

SB50 (1-2) L1177542-59 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 13:21	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408466	1	01/09/20 14:18	01/09/20 14:28	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	27	01/07/20 13:21	01/09/20 18:27	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	5.05	01/10/20 10:21	01/10/20 15:53	CLG	Mt. Juliet, TN

SB51 (0-1) L1177542-60 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 12:58	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408466	1	01/09/20 14:18	01/09/20 14:28	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	25	01/07/20 12:58	01/09/20 18:48	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	50	01/10/20 10:21	01/10/20 17:47	CLG	Mt. Juliet, TN

SB51 (1-2) L1177542-61 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 12:59	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408466	1	01/09/20 14:18	01/09/20 14:28	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	42.8	01/07/20 12:59	01/09/20 19:08	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	20.3	01/10/20 10:21	01/10/20 16:19	CLG	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB52 (0-1) L1177542-62 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 13:30	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408468	1	01/09/20 14:05	01/09/20 14:15	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	25.3	01/07/20 13:30	01/09/20 19:29	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	50	01/10/20 10:21	01/10/20 19:03	CLG	Mt. Juliet, TN

SB52 (1-2) L1177542-63 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 13:31	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408468	1	01/09/20 14:05	01/09/20 14:15	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	25	01/07/20 13:31	01/09/20 19:49	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	20.1	01/10/20 10:21	01/10/20 16:31	CLG	Mt. Juliet, TN

SB53 (0-1) L1177542-64 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 13:10	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408468	1	01/09/20 14:05	01/09/20 14:15	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	28.7	01/07/20 13:10	01/09/20 20:10	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	50	01/10/20 10:21	01/10/20 18:50	CLG	Mt. Juliet, TN

SB53 (1-2) L1177542-65 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 13:11	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408468	1	01/09/20 14:05	01/09/20 14:15	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1408430	25	01/07/20 13:11	01/09/20 20:30	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1408977	20	01/10/20 10:21	01/10/20 16:56	CLG	Mt. Juliet, TN

SB-39 (1.5-2) L1177542-66 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:30	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408846	1	01/10/20 08:53	01/10/20 09:05	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:36	01/10/20 00:25	EL	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408518	1	01/09/20 19:57	01/10/20 10:02	RP	Mt. Juliet, TN

SB-38 (1.5-2) L1177542-67 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:53	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408846	1	01/10/20 08:53	01/10/20 09:05	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1408493	1	01/09/20 19:36	01/09/20 23:39	EL	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1408518	1	01/09/20 19:57	01/10/20 10:14	RP	Mt. Juliet, TN

CASE NARRATIVE

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,
b. dilution factors,
c. preparation methods,
d. cleanup methods, and
e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and
b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,
b. Calculated %R for each analyte, and
c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,
b. MS/MSD spiking amounts,
c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
d. Calculated %Rs and relative percent differences (RPDs), and
e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,
b. The calculated RPD, and
c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 01/11/2020 16:00
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1177542-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66 and 67
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1408430, WG1408315, WG1408493, WG1408497, WG1408501, WG1408516, WG1408444, WG1408433, WG1408468, WG1408466, WG1408435, WG1408434, WG1408442, WG1408822, WG1408846, WG1408518, WG1408513 and WG1408977

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?		X			2
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			3
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?		X			4
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			5
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 01/11/2020 16:00
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1177542-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66 and 67
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1408430, WG1408315, WG1408493, WG1408497, WG1408501, WG1408516, WG1408444, WG1408433, WG1408468, WG1408466, WG1408435, WG1408434, WG1408442, WG1408822, WG1408846, WG1408518, WG1408513 and WG1408977

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 01/11/2020 16:00
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1177542-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66 and 67
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1408430, WG1408315, WG1408493, WG1408497, WG1408501, WG1408516, WG1408444, WG1408433, WG1408468, WG1408466, WG1408435, WG1408434, WG1408442, WG1408822, WG1408846, WG1408518, WG1408513 and WG1408977

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 01/11/2020 16:00
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1177542-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66 and 67
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1408430, WG1408315, WG1408493, WG1408497, WG1408501, WG1408516, WG1408444, WG1408433, WG1408468, WG1408466, WG1408435, WG1408434, WG1408442, WG1408822, WG1408846, WG1408518, WG1408513 and WG1408977

ER #[1]	**Description**
1	NWTPHDX-NO SGT WG1408977 o-Terphenyl L1177542-52, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64 and 65: Percent Recovery is outside of established control limits.
2	8260D WG1408315 2-Butanone (MEK) L1177542-48, 49 and 50: Concentration in the Blank >MQL.
3	8260D WG1408822 2-Chlorotoluene, 1,2-Dibromo-3-Chloropropane, 1,1,1,2-Tetrachloroethane, 1,3,5-Trimethylbenzene: Percent Recovery is outside of established control limits.
4	8260D WG1408315 1,2,3-Trichlorobenzene: Relative Percent Difference is outside of established control limits. 8260D WG1408822 Acetone: Relative Percent Difference is outside of established control limits.
5	8081 WG1408513 Aldrin, Dieldrin: Percent Recovery is outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.2		1	01/09/2020 13:59	WG1408433

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	13.7		0.494	2.00	2.15	1	01/10/2020 03:51	WG1408497
Cadmium	0.293	J	0.0751	0.500	0.537	1	01/10/2020 03:51	WG1408497
Lead	20.5		0.204	0.500	0.537	1	01/10/2020 03:51	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00145	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Alpha BHC	U		0.00146	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Beta BHC	U		0.00172	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Delta BHC	U		0.00153	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Gamma BHC	U		0.00156	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Chlordane	U		0.0419	0.200	0.215	1	01/09/2020 19:20	WG1408513
4,4-DDD	U		0.00167	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
4,4-DDE	U		0.00165	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
4,4-DDT	U		0.00215	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Dieldrin	U		0.00163	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Endosulfan I	U		0.00160	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Endosulfan II	U		0.00172	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Endosulfan sulfate	U		0.00162	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Endrin	U		0.00168	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Endrin aldehyde	U		0.00138	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Endrin ketone	U		0.00177	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Hexachlorobenzene	U		0.00133	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Heptachlor	U		0.00165	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Heptachlor epoxide	U		0.00173	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Methoxychlor	U		0.00191	0.0200	0.0215	1	01/09/2020 19:20	WG1408513
Toxaphene	U		0.0386	0.400	0.429	1	01/09/2020 19:20	WG1408513
(S) Decachlorobiphenyl	*72.7*				*10.0-135*		*01/09/2020 19:20*	WG1408513
(S) Tetrachloro-m-xylene	*82.9*				*10.0-139*		*01/09/2020 19:20*	WG1408513

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.9		1	01/09/2020 13:59	WG1408433

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	26.8		0.512	2.00	2.22	1	01/10/2020 04:04	WG1408497
Cadmium	0.234	J	0.0779	0.500	0.556	1	01/10/2020 04:04	WG1408497
Lead	37.7		0.211	0.500	0.556	1	01/10/2020 04:04	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00150	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Alpha BHC	U		0.00151	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Beta BHC	U		0.00178	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Delta BHC	U		0.00159	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Gamma BHC	U		0.00161	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Chlordane	U		0.0434	0.200	0.222	1	01/09/2020 19:35	WG1408513
4,4-DDD	U		0.00174	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
4,4-DDE	U		0.00171	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
4,4-DDT	U		0.00222	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Dieldrin	U		0.00169	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Endosulfan I	U		0.00166	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Endosulfan II	U		0.00178	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Endosulfan sulfate	U		0.00168	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Endrin	U		0.00175	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Endrin aldehyde	U		0.00143	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Endrin ketone	U		0.00184	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Hexachlorobenzene	U		0.00138	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Heptachlor	U		0.00171	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Heptachlor epoxide	U		0.00179	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Methoxychlor	U		0.00198	0.0200	0.0222	1	01/09/2020 19:35	WG1408513
Toxaphene	U		0.0400	0.400	0.445	1	01/09/2020 19:35	WG1408513
(S) Decachlorobiphenyl	*74.4*				*10.0-135*		*01/09/2020 19:35*	WG1408513
(S) Tetrachloro-m-xylene	*75.4*				*10.0-139*		*01/09/2020 19:35*	WG1408513

SB32 (1.5-2)

Collected date/time: 01/07/20 10:19

SAMPLE RESULTS - 03

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	01/09/2020 13:59	WG1408433

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	29.5		0.496	2.00	2.16	1	01/10/2020 04:06	WG1408497
Cadmium	0.234	J	0.0755	0.500	0.539	1	01/10/2020 04:06	WG1408497
Lead	40.6		0.205	0.500	0.539	1	01/10/2020 04:06	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00146	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Alpha BHC	U		0.00147	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Beta BHC	U		0.00173	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Delta BHC	U		0.00154	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Gamma BHC	U		0.00156	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Chlordane	U		0.0421	0.200	0.216	1	01/09/2020 19:50	WG1408513
4,4-DDD	U		0.00168	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
4,4-DDE	U		0.00166	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
4,4-DDT	U		0.00216	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Dieldrin	U		0.00164	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Endosulfan I	U		0.00161	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Endosulfan II	U		0.00173	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Endosulfan sulfate	U		0.00163	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Endrin	U		0.00169	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Endrin aldehyde	U		0.00139	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Endrin ketone	U		0.00178	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Hexachlorobenzene	U		0.00134	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Heptachlor	U		0.00166	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Heptachlor epoxide	U		0.00174	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Methoxychlor	U		0.00192	0.0200	0.0216	1	01/09/2020 19:50	WG1408513
Toxaphene	U		0.0388	0.400	0.431	1	01/09/2020 19:50	WG1408513
(S) Decachlorobiphenyl	*72.2*				*10.0-135*		*01/09/2020 19:50*	WG1408513
(S) Tetrachloro-m-xylene	*74.7*				*10.0-139*		*01/09/2020 19:50*	WG1408513

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	93.0		1	01/09/2020 13:59	WG1408433

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	6.51		0.495	2.00	2.15	1	01/10/2020 04:15	WG1408497
Cadmium	0.143	J	0.0753	0.500	0.538	1	01/10/2020 04:15	WG1408497
Lead	8.18		0.204	0.500	0.538	1	01/10/2020 04:15	WG1408497

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00145	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Alpha BHC	U		0.00146	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Beta BHC	U		0.00172	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Delta BHC	U		0.00154	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Gamma BHC	U		0.00156	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Chlordane	U		0.0419	0.200	0.215	1	01/09/2020 20:04	WG1408513
4,4-DDD	U		0.00168	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
4,4-DDE	U		0.00166	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
4,4-DDT	U		0.00215	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Dieldrin	U		0.00163	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Endosulfan I	U		0.00160	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Endosulfan II	U		0.00172	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Endosulfan sulfate	U		0.00162	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Endrin	U		0.00169	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Endrin aldehyde	U		0.00139	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Endrin ketone	U		0.00177	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Hexachlorobenzene	U		0.00133	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Heptachlor	U		0.00166	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Heptachlor epoxide	U		0.00173	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Methoxychlor	U		0.00191	0.0200	0.0215	1	01/09/2020 20:04	WG1408513
Toxaphene	U		0.0387	0.400	0.430	1	01/09/2020 20:04	WG1408513
(S) Decachlorobiphenyl	*92.5*				*10.0-135*		*01/09/2020 20:04*	WG1408513
(S) Tetrachloro-m-xylene	*109*				*10.0-139*		*01/09/2020 20:04*	WG1408513

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	89.3		1	01/09/2020 13:59	WG1408433

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	2.35		0.515	2.00	2.24	1	01/10/2020 04:17	WG1408497
Cadmium	0.0971	J	0.0784	0.500	0.560	1	01/10/2020 04:17	WG1408497
Lead	0.846		0.213	0.500	0.560	1	01/10/2020 04:17	WG1408497

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00151	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Alpha BHC	U		0.00152	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Beta BHC	U		0.00179	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Delta BHC	U		0.00160	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Gamma BHC	U		0.00162	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Chlordane	U		0.0437	0.200	0.224	1	01/09/2020 20:19	WG1408513
4,4-DDD	U		0.00175	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
4,4-DDE	U		0.00172	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
4,4-DDT	U		0.00224	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Dieldrin	U		0.00170	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Endosulfan I	U		0.00167	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Endosulfan II	U		0.00179	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Endosulfan sulfate	U		0.00169	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Endrin	U		0.00176	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Endrin aldehyde	U		0.00144	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Endrin ketone	U		0.00185	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Hexachlorobenzene	U		0.00139	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Heptachlor	U		0.00172	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Heptachlor epoxide	U		0.00180	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Methoxychlor	U		0.00199	0.0200	0.0224	1	01/09/2020 20:19	WG1408513
Toxaphene	U		0.0403	0.400	0.448	1	01/09/2020 20:19	WG1408513
(S) Decachlorobiphenyl	*73.3*				*10.0-135*		*01/09/2020 20:19*	WG1408513
(S) Tetrachloro-m-xylene	*99.4*				*10.0-139*		*01/09/2020 20:19*	WG1408513

SB32 (10-11)

Collected date/time: 01/07/20 10:26

SAMPLE RESULTS - 06

L1177542

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	93.3		1	01/09/2020 13:59	WG1408433

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	1.81	J	0.493	2.00	2.14	1	01/10/2020 04:20	WG1408497
Cadmium	0.0755	J	0.0751	0.500	0.536	1	01/10/2020 04:20	WG1408497
Lead	1.28		0.204	0.500	0.536	1	01/10/2020 04:20	WG1408497

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00145	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Alpha BHC	U		0.00146	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Beta BHC	U		0.00172	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Delta BHC	U		0.00153	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Gamma BHC	U		0.00155	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Chlordane	U		0.0418	0.200	0.214	1	01/09/2020 20:34	WG1408513
4,4-DDD	U		0.00167	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
4,4-DDE	U		0.00165	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
4,4-DDT	U		0.00214	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Dieldrin	U		0.00163	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Endosulfan I	U		0.00160	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Endosulfan II	U		0.00172	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Endosulfan sulfate	U		0.00162	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Endrin	U		0.00168	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Endrin aldehyde	U		0.00138	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Endrin ketone	U		0.00177	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Hexachlorobenzene	U		0.00133	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Heptachlor	U		0.00165	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Heptachlor epoxide	U		0.00173	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Methoxychlor	U		0.00191	0.0200	0.0214	1	01/09/2020 20:34	WG1408513
Toxaphene	U		0.0386	0.400	0.429	1	01/09/2020 20:34	WG1408513
(S) Decachlorobiphenyl	*95.0*				*10.0-135*		*01/09/2020 20:34*	WG1408513
(S) Tetrachloro-m-xylene	*118*				*10.0-139*		*01/09/2020 20:34*	WG1408513

SB33 (0.5-1)
Collected date/time: 01/07/20 08:56

SAMPLE RESULTS - 07

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.0		1	01/09/2020 13:59	WG1408433

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	69.1		0.506	2.00	2.20	1	01/10/2020 04:23	WG1408497
Cadmium	0.241	J	0.0769	0.500	0.549	1	01/10/2020 04:23	WG1408497
Lead	52.0		0.209	0.500	0.549	1	01/10/2020 04:23	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00148	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Alpha BHC	U		0.00149	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Beta BHC	U		0.00176	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Delta BHC	U		0.00157	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Gamma BHC	U		0.00159	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Chlordane	U		0.0429	0.200	0.220	1	01/09/2020 20:48	WG1408513
4,4-DDD	U		0.00171	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
4,4-DDE	U		0.00169	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
4,4-DDT	U		0.00220	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Dieldrin	0.0443		0.00167	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Endosulfan I	U		0.00164	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Endosulfan II	U		0.00176	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Endosulfan sulfate	U		0.00166	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Endrin	U		0.00173	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Endrin aldehyde	U		0.00142	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Endrin ketone	U		0.00181	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Hexachlorobenzene	U		0.00136	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Heptachlor	U		0.00169	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Heptachlor epoxide	U		0.00177	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Methoxychlor	U		0.00196	0.0200	0.0220	1	01/09/2020 20:48	WG1408513
Toxaphene	U		0.0396	0.400	0.440	1	01/09/2020 20:48	WG1408513
(S) Decachlorobiphenyl	*76.8*				*10.0-135*		*01/09/2020 20:48*	WG1408513
(S) Tetrachloro-m-xylene	*88.9*				*10.0-139*		*01/09/2020 20:48*	WG1408513

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.7		1	01/09/2020 13:59	WG1408433

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	64.9		0.502	2.00	2.18	1	01/10/2020 04:25	WG1408497
Cadmium	0.206	J	0.0763	0.500	0.545	1	01/10/2020 04:25	WG1408497
Lead	59.7		0.207	0.500	0.545	1	01/10/2020 04:25	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00147	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Alpha BHC	U		0.00148	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Beta BHC	U		0.00175	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Delta BHC	U		0.00156	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Gamma BHC	U		0.00158	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Chlordane	U		0.0425	0.200	0.218	1	01/09/2020 21:03	WG1408513
4,4-DDD	U		0.00170	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
4,4-DDE	U		0.00168	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
4,4-DDT	U		0.00218	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Dieldrin	0.0743		0.00166	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Endosulfan I	U		0.00163	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Endosulfan II	U		0.00175	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Endosulfan sulfate	U		0.00165	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Endrin	U		0.00171	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Endrin aldehyde	U		0.00141	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Endrin ketone	U		0.00180	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Hexachlorobenzene	U		0.00135	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Heptachlor	U		0.00168	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Heptachlor epoxide	U		0.00176	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Methoxychlor	U		0.00194	0.0200	0.0218	1	01/09/2020 21:03	WG1408513
Toxaphene	U		0.0393	0.400	0.436	1	01/09/2020 21:03	WG1408513
(S) Decachlorobiphenyl	*74.6*				*10.0-135*		*01/09/2020 21:03*	WG1408513
(S) Tetrachloro-m-xylene	*83.3*				*10.0-139*		*01/09/2020 21:03*	WG1408513

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.7		1	01/09/2020 13:59	WG1408433

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	117		0.502	2.00	2.18	1	01/10/2020 04:28	WG1408497
Cadmium	0.413	J	0.0764	0.500	0.546	1	01/10/2020 04:28	WG1408497
Lead	120		0.207	0.500	0.546	1	01/10/2020 04:28	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U	J5	0.00147	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Alpha BHC	U		0.00148	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Beta BHC	U		0.00175	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Delta BHC	U		0.00156	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Gamma BHC	U		0.00158	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Chlordane	U		0.0426	0.200	0.218	1	01/09/2020 18:36	WG1408513
4,4-DDD	U		0.00170	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
4,4-DDE	U		0.00168	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
4,4-DDT	U		0.00218	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Dieldrin	0.0594	J5	0.00166	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Endosulfan I	U		0.00163	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Endosulfan II	U		0.00175	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Endosulfan sulfate	U		0.00165	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Endrin	U		0.00171	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Endrin aldehyde	U		0.00141	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Endrin ketone	U		0.00180	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Hexachlorobenzene	U		0.00135	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Heptachlor	U		0.00168	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Heptachlor epoxide	U		0.00176	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Methoxychlor	U		0.00194	0.0200	0.0218	1	01/09/2020 18:36	WG1408513
Toxaphene	U		0.0393	0.400	0.436	1	01/09/2020 18:36	WG1408513
(S) Decachlorobiphenyl	*93.7*				*10.0-135*		*01/09/2020 18:36*	WG1408513
(S) Tetrachloro-m-xylene	*97.7*				*10.0-139*		*01/09/2020 18:36*	WG1408513

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	92.9		1	01/09/2020 13:59	WG1408433

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	52.8		0.495	2.00	2.15	1	01/10/2020 04:31	WG1408497
Cadmium	0.253	J	0.0753	0.500	0.538	1	01/10/2020 04:31	WG1408497
Lead	55.8		0.204	0.500	0.538	1	01/10/2020 04:31	WG1408497

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00145	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Alpha BHC	U		0.00146	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Beta BHC	U		0.00172	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Delta BHC	U		0.00154	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Gamma BHC	U		0.00156	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Chlordane	U		0.0420	0.200	0.215	1	01/09/2020 21:18	WG1408513
4,4-DDD	U		0.00168	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
4,4-DDE	U		0.00166	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
4,4-DDT	U		0.00215	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Dieldrin	0.0794		0.00164	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Endosulfan I	U		0.00160	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Endosulfan II	U		0.00172	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Endosulfan sulfate	U		0.00162	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Endrin	U		0.00169	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Endrin aldehyde	U		0.00139	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Endrin ketone	U		0.00178	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Hexachlorobenzene	U		0.00133	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Heptachlor	U		0.00166	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Heptachlor epoxide	U		0.00173	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Methoxychlor	U		0.00192	0.0200	0.0215	1	01/09/2020 21:18	WG1408513
Toxaphene	U		0.0387	0.400	0.430	1	01/09/2020 21:18	WG1408513
(S) Decachlorobiphenyl	*91.6*				*10.0-135*		*01/09/2020 21:18*	WG1408513
(S) Tetrachloro-m-xylene	*108*				*10.0-139*		*01/09/2020 21:18*	WG1408513

SB33 (8-9)

Collected date/time: 01/07/20 09:04

SAMPLE RESULTS - 11

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.3		1	01/09/2020 17:06	WG1408434

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	40.6		0.499	2.00	2.17	1	01/10/2020 04:33	WG1408497
Cadmium	0.186	J	0.0759	0.500	0.542	1	01/10/2020 04:33	WG1408497
Lead	38.3		0.206	0.500	0.542	1	01/10/2020 04:33	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00146	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Alpha BHC	U		0.00147	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Beta BHC	U		0.00173	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Delta BHC	U		0.00155	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Gamma BHC	U		0.00157	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Chlordane	U		0.0423	0.200	0.217	1	01/09/2020 21:32	WG1408513
4,4-DDD	U		0.00169	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
4,4-DDE	U		0.00167	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
4,4-DDT	U		0.00217	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Dieldrin	0.0496		0.00165	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Endosulfan I	U		0.00162	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Endosulfan II	U		0.00173	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Endosulfan sulfate	U		0.00164	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Endrin	U		0.00170	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Endrin aldehyde	U		0.00140	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Endrin ketone	U		0.00179	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Hexachlorobenzene	U		0.00134	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Heptachlor	U		0.00167	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Heptachlor epoxide	U		0.00175	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Methoxychlor	U		0.00193	0.0200	0.0217	1	01/09/2020 21:32	WG1408513
Toxaphene	U		0.0390	0.400	0.434	1	01/09/2020 21:32	WG1408513
(S) Decachlorobiphenyl	*73.9*				*10.0-135*		*01/09/2020 21:32*	WG1408513
(S) Tetrachloro-m-xylene	*85.7*				*10.0-139*		*01/09/2020 21:32*	WG1408513

SB33 (10-11)

Collected date/time: 01/07/20 09:06

SAMPLE RESULTS - 12

L1177542

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.1		1	01/09/2020 17:06	WG1408434

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.56	J	0.500	2.00	2.17	1	01/10/2020 04:36	WG1408497
Cadmium	0.0960	J	0.0760	0.500	0.543	1	01/10/2020 04:36	WG1408497
Lead	1.23		0.206	0.500	0.543	1	01/10/2020 04:36	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00147	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Alpha BHC	U		0.00148	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Beta BHC	U		0.00174	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Delta BHC	U		0.00155	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Gamma BHC	U		0.00157	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Chlordane	U		0.0423	0.200	0.217	1	01/09/2020 21:47	WG1408513
4,4-DDD	U		0.00169	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
4,4-DDE	U		0.00167	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
4,4-DDT	U		0.00217	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Dieldrin	0.00290	J	0.00165	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Endosulfan I	U		0.00162	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Endosulfan II	U		0.00174	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Endosulfan sulfate	U		0.00164	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Endrin	U		0.00170	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Endrin aldehyde	U		0.00140	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Endrin ketone	U		0.00179	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Hexachlorobenzene	U		0.00135	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Heptachlor	U		0.00167	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Heptachlor epoxide	U		0.00175	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Methoxychlor	U		0.00193	0.0200	0.0217	1	01/09/2020 21:47	WG1408513
Toxaphene	U		0.0391	0.400	0.434	1	01/09/2020 21:47	WG1408513
(S) Decachlorobiphenyl	*96.7*				*10.0-135*		*01/09/2020 21:47*	WG1408513
(S) Tetrachloro-m-xylene	*108*				*10.0-139*		*01/09/2020 21:47*	WG1408513

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.4		1	01/09/2020 17:06	WG1408434

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	35.1		0.482	2.00	2.10	1	01/10/2020 04:39	WG1408497
Cadmium	0.220	J	0.0733	0.500	0.524	1	01/10/2020 04:39	WG1408497
Lead	39.7		0.199	0.500	0.524	1	01/10/2020 04:39	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00141	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Alpha BHC	U		0.00142	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Beta BHC	U		0.00168	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Delta BHC	U		0.00150	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Gamma BHC	U		0.00152	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Chlordane	U		0.0409	0.200	0.210	1	01/09/2020 22:02	WG1408513
4,4-DDD	U		0.00163	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
4,4-DDE	U		0.00161	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
4,4-DDT	U		0.00210	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Dieldrin	U		0.00159	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Endosulfan I	U		0.00156	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Endosulfan II	U		0.00168	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Endosulfan sulfate	U		0.00158	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Endrin	U		0.00164	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Endrin aldehyde	U		0.00135	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Endrin ketone	U		0.00173	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Hexachlorobenzene	U		0.00130	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Heptachlor	U		0.00161	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Heptachlor epoxide	U		0.00169	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Methoxychlor	U		0.00186	0.0200	0.0210	1	01/09/2020 22:02	WG1408513
Toxaphene	U		0.0377	0.400	0.419	1	01/09/2020 22:02	WG1408513
(S) Decachlorobiphenyl	*85.3*				*10.0-135*		*01/09/2020 22:02*	WG1408513
(S) Tetrachloro-m-xylene	*89.8*				*10.0-139*		*01/09/2020 22:02*	WG1408513

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.9		1	01/09/2020 17:06	WG1408434

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	44.7		0.485	2.00	2.11	1	01/10/2020 04:47	WG1408497
Cadmium	0.293	J	0.0737	0.500	0.527	1	01/10/2020 04:47	WG1408497
Lead	43.2		0.200	0.500	0.527	1	01/10/2020 04:47	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00142	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Alpha BHC	U		0.00143	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Beta BHC	U		0.00169	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Delta BHC	U		0.00151	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Gamma BHC	U		0.00153	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Chlordane	U		0.0411	0.200	0.211	1	01/10/2020 16:59	WG1408513
4,4-DDD	U		0.00164	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
4,4-DDE	U		0.00162	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
4,4-DDT	U		0.00211	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Dieldrin	U		0.00160	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Endosulfan I	U		0.00157	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Endosulfan II	U		0.00169	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Endosulfan sulfate	U		0.00159	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Endrin	U		0.00165	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Endrin aldehyde	U		0.00136	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Endrin ketone	U		0.00174	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Hexachlorobenzene	U		0.00131	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Heptachlor	U		0.00162	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Heptachlor epoxide	U		0.00170	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Methoxychlor	U		0.00188	0.0200	0.0211	1	01/10/2020 16:59	WG1408513
Toxaphene	U		0.0379	0.400	0.421	1	01/10/2020 16:59	WG1408513
(S) Decachlorobiphenyl	*83.7*				*10.0-135*		*01/10/2020 16:59*	WG1408513
(S) Tetrachloro-m-xylene	*93.6*				*10.0-139*		*01/10/2020 16:59*	WG1408513

SB34 (1.5-2)

Collected date/time: 01/07/20 10:56

SAMPLE RESULTS - 15

L1177542

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.2		1	01/09/2020 17:06	WG1408434

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.22		0.489	2.00	2.12	1	01/10/2020 04:50	WG1408497
Cadmium	0.163	J	0.0743	0.500	0.531	1	01/10/2020 04:50	WG1408497
Lead	15.0		0.202	0.500	0.531	1	01/10/2020 04:50	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00143	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Alpha BHC	U		0.00144	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Beta BHC	U		0.00170	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Delta BHC	U		0.00152	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Gamma BHC	U		0.00154	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Chlordane	U		0.0414	0.200	0.212	1	01/09/2020 22:31	WG1408513
4,4-DDD	U		0.00166	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
4,4-DDE	U		0.00164	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
4,4-DDT	U		0.00212	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Dieldrin	U		0.00161	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Endosulfan I	U		0.00158	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Endosulfan II	U		0.00170	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Endosulfan sulfate	U		0.00160	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Endrin	U		0.00167	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Endrin aldehyde	U		0.00137	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Endrin ketone	U		0.00175	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Hexachlorobenzene	U		0.00132	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Heptachlor	U		0.00164	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Heptachlor epoxide	U		0.00171	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Methoxychlor	U		0.00189	0.0200	0.0212	1	01/09/2020 22:31	WG1408513
Toxaphene	U		0.0382	0.400	0.425	1	01/09/2020 22:31	WG1408513
(S) Decachlorobiphenyl	*75.3*				*10.0-135*		*01/09/2020 22:31*	WG1408513
(S) Tetrachloro-m-xylene	*87.3*				*10.0-139*		*01/09/2020 22:31*	WG1408513

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB34 (5-6)
Collected date/time: 01/07/20 10:59

SAMPLE RESULTS - 16

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.7		1	01/09/2020 17:06	WG1408434

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.94		0.570	2.00	2.48	1	01/10/2020 04:52	WG1408497
Cadmium	0.142	J	0.0867	0.500	0.619	1	01/10/2020 04:52	WG1408497
Lead	6.78		0.235	0.500	0.619	1	01/10/2020 04:52	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00167	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Alpha BHC	U		0.00168	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Beta BHC	U		0.00198	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Delta BHC	U		0.00177	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Gamma BHC	U		0.00180	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Chlordane	U		0.0483	0.200	0.248	1	01/09/2020 22:46	WG1408513
4,4-DDD	U		0.00193	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
4,4-DDE	U		0.00191	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
4,4-DDT	U		0.00248	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Dieldrin	U		0.00188	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Endosulfan I	U		0.00185	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Endosulfan II	U		0.00198	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Endosulfan sulfate	U		0.00187	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Endrin	U		0.00194	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Endrin aldehyde	U		0.00160	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Endrin ketone	U		0.00204	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Hexachlorobenzene	U		0.00154	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Heptachlor	U		0.00191	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Heptachlor epoxide	U		0.00199	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Methoxychlor	U		0.00220	0.0200	0.0248	1	01/09/2020 22:46	WG1408513
Toxaphene	U		0.0446	0.400	0.495	1	01/09/2020 22:46	WG1408513
(S) Decachlorobiphenyl	*92.4*				*10.0-135*		*01/09/2020 22:46*	WG1408513
(S) Tetrachloro-m-xylene	*109*				*10.0-139*		*01/09/2020 22:46*	WG1408513

SB34 (8-9)

Collected date/time: 01/07/20 11:02

SAMPLE RESULTS - 17

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	88.0		1	01/09/2020 17:06	WG1408434

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	1.61	J	0.523	2.00	2.27	1	01/10/2020 04:55	WG1408497
Cadmium	U		0.0795	0.500	0.568	1	01/10/2020 04:55	WG1408497
Lead	0.502	J	0.216	0.500	0.568	1	01/10/2020 04:55	WG1408497

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00153	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Alpha BHC	U		0.00154	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Beta BHC	U		0.00182	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Delta BHC	U		0.00162	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Gamma BHC	U		0.00165	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Chlordane	U		0.0443	0.200	0.227	1	01/09/2020 23:01	WG1408513
4,4-DDD	U		0.00177	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
4,4-DDE	U		0.00175	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
4,4-DDT	U		0.00227	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Dieldrin	U		0.00173	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Endosulfan I	U		0.00169	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Endosulfan II	U		0.00182	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Endosulfan sulfate	U		0.00172	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Endrin	U		0.00178	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Endrin aldehyde	U		0.00147	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Endrin ketone	U		0.00187	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Hexachlorobenzene	U		0.00141	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Heptachlor	U		0.00175	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Heptachlor epoxide	U		0.00183	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Methoxychlor	U		0.00202	0.0200	0.0227	1	01/09/2020 23:01	WG1408513
Toxaphene	U		0.0409	0.400	0.454	1	01/09/2020 23:01	WG1408513
(S) Decachlorobiphenyl	*84.9*				*10.0-135*		*01/09/2020 23:01*	WG1408513
(S) Tetrachloro-m-xylene	*97.4*				*10.0-139*		*01/09/2020 23:01*	WG1408513

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	92.3		1	01/09/2020 17:06	WG1408434

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	1.85	J	0.498	2.00	2.17	1	01/10/2020 04:58	WG1408497
Cadmium	0.112	J	0.0758	0.500	0.542	1	01/10/2020 04:58	WG1408497
Lead	1.89		0.206	0.500	0.542	1	01/10/2020 04:58	WG1408497

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00146	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Alpha BHC	U		0.00147	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Beta BHC	U		0.00173	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Delta BHC	U		0.00155	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Gamma BHC	U		0.00157	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Chlordane	U		0.0422	0.200	0.217	1	01/09/2020 23:15	WG1408513
4,4-DDD	U		0.00169	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
4,4-DDE	U		0.00167	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
4,4-DDT	U		0.00217	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Dieldrin	U		0.00165	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Endosulfan I	U		0.00161	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Endosulfan II	U		0.00173	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Endosulfan sulfate	U		0.00164	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Endrin	U		0.00170	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Endrin aldehyde	U		0.00140	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Endrin ketone	U		0.00179	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Hexachlorobenzene	U		0.00134	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Heptachlor	U		0.00167	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Heptachlor epoxide	U		0.00174	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Methoxychlor	U		0.00193	0.0200	0.0217	1	01/09/2020 23:15	WG1408513
Toxaphene	U		0.0390	0.400	0.433	1	01/09/2020 23:15	WG1408513
(S) Decachlorobiphenyl	*91.5*				*10.0-135*		*01/09/2020 23:15*	WG1408513
(S) Tetrachloro-m-xylene	*97.7*				*10.0-139*		*01/09/2020 23:15*	WG1408513

SB35 (.5-1)
Collected date/time: 01/07/20 09:09

SAMPLE RESULTS - 19

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.4		1	01/09/2020 17:06	WG1408434

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	231		0.515	2.00	2.24	1	01/10/2020 05:01	WG1408497
Cadmium	0.712		0.0783	0.500	0.559	1	01/10/2020 05:01	WG1408497
Lead	185		0.213	0.500	0.559	1	01/10/2020 05:01	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00151	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Alpha BHC	U		0.00152	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Beta BHC	U		0.00179	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Delta BHC	U		0.00160	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Gamma BHC	U		0.00162	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Chlordane	U		0.0436	0.200	0.224	1	01/10/2020 17:13	WG1408513
4,4-DDD	U		0.00175	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
4,4-DDE	U		0.00172	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
4,4-DDT	U		0.00224	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Dieldrin	U		0.00170	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Endosulfan I	U		0.00167	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Endosulfan II	U		0.00179	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Endosulfan sulfate	U		0.00169	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Endrin	U		0.00176	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Endrin aldehyde	U		0.00144	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Endrin ketone	U		0.00185	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Hexachlorobenzene	U		0.00139	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Heptachlor	U		0.00172	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Heptachlor epoxide	U		0.00180	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Methoxychlor	U		0.00199	0.0200	0.0224	1	01/10/2020 17:13	WG1408513
Toxaphene	U		0.0403	0.400	0.447	1	01/10/2020 17:13	WG1408513
(S) Decachlorobiphenyl	*73.7*				*10.0-135*		*01/10/2020 17:13*	WG1408513
(S) Tetrachloro-m-xylene	*86.9*				*10.0-139*		*01/10/2020 17:13*	WG1408513

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.4		1	01/09/2020 17:06	WG1408434

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	214		0.498	2.00	2.16	1	01/10/2020 05:03	WG1408497
Cadmium	0.477	J	0.0758	0.500	0.541	1	01/10/2020 05:03	WG1408497
Lead	187		0.206	0.500	0.541	1	01/10/2020 05:03	WG1408497

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00146	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Alpha BHC	U		0.00147	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Beta BHC	U		0.00173	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Delta BHC	U		0.00155	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Gamma BHC	U		0.00157	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Chlordane	U		0.0422	0.200	0.216	1	01/10/2020 17:28	WG1408513
4,4-DDD	U		0.00169	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
4,4-DDE	U		0.00167	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
4,4-DDT	U		0.00216	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Dieldrin	U		0.00165	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Endosulfan I	U		0.00161	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Endosulfan II	U		0.00173	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Endosulfan sulfate	U		0.00163	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Endrin	U		0.00170	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Endrin aldehyde	U		0.00140	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Endrin ketone	U		0.00179	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Hexachlorobenzene	U		0.00134	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Heptachlor	U		0.00167	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Heptachlor epoxide	U		0.00174	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Methoxychlor	U		0.00193	0.0200	0.0216	1	01/10/2020 17:28	WG1408513
Toxaphene	U		0.0390	0.400	0.433	1	01/10/2020 17:28	WG1408513
(S) Decachlorobiphenyl	*75.4*				*10.0-135*		*01/10/2020 17:28*	WG1408513
(S) Tetrachloro-m-xylene	*77.7*				*10.0-139*		*01/10/2020 17:28*	WG1408513

SB35 (1.5-2)
Collected date/time: 01/07/20 09:11

SAMPLE RESULTS - 21

L1177542

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	91.3		1	01/09/2020 16:02	WG1408435

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	223		0.504	2.00	2.19	1	01/10/2020 05:33	WG1408501
Cadmium	0.446	J	0.0766	0.500	0.547	1	01/10/2020 05:33	WG1408501
Lead	164		0.208	0.500	0.547	1	01/10/2020 05:33	WG1408501

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00148	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Alpha BHC	U		0.00149	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Beta BHC	U		0.00175	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Delta BHC	U		0.00157	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Gamma BHC	U		0.00159	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Chlordane	U		0.0427	0.200	0.219	1	01/09/2020 21:22	WG1408516
4,4-DDD	U		0.00171	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
4,4-DDE	U		0.00169	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
4,4-DDT	U		0.00219	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Dieldrin	U		0.00166	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Endosulfan I	U		0.00163	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Endosulfan II	U		0.00175	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Endosulfan sulfate	U		0.00165	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Endrin	U		0.00172	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Endrin aldehyde	U		0.00141	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Endrin ketone	U		0.00181	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Hexachlorobenzene	U		0.00136	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Heptachlor	U		0.00169	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Heptachlor epoxide	U		0.00176	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Methoxychlor	U		0.00195	0.0200	0.0219	1	01/09/2020 21:22	WG1408516
Toxaphene	U		0.0394	0.400	0.438	1	01/09/2020 21:22	WG1408516
(S) Decachlorobiphenyl	*83.2*				*10.0-135*		*01/09/2020 21:22*	WG1408516
(S) Tetrachloro-m-xylene	*86.5*				*10.0-139*		*01/09/2020 21:22*	WG1408516

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB35 (5-6)

Collected date/time: 01/07/20 09:14

SAMPLE RESULTS - 22

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.9		1	01/09/2020 16:02	WG1408435

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	70.0		0.495	2.00	2.15	1	01/10/2020 05:35	WG1408501
Cadmium	0.197	J	0.0754	0.500	0.538	1	01/10/2020 05:35	WG1408501
Lead	57.9		0.205	0.500	0.538	1	01/10/2020 05:35	WG1408501

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00145	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Alpha BHC	U		0.00146	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Beta BHC	U		0.00172	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Delta BHC	U		0.00154	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Gamma BHC	U		0.00156	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Chlordane	U		0.0420	0.200	0.215	1	01/09/2020 20:45	WG1408516
4,4-DDD	U		0.00168	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
4,4-DDE	U		0.00166	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
4,4-DDT	U		0.00215	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Dieldrin	U		0.00164	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Endosulfan I	U		0.00160	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Endosulfan II	U		0.00172	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Endosulfan sulfate	U		0.00163	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Endrin	U		0.00169	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Endrin aldehyde	U		0.00139	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Endrin ketone	U		0.00178	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Hexachlorobenzene	U		0.00134	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Heptachlor	U		0.00166	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Heptachlor epoxide	U		0.00173	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Methoxychlor	U		0.00192	0.0200	0.0215	1	01/09/2020 20:45	WG1408516
Toxaphene	U		0.0388	0.400	0.431	1	01/09/2020 20:45	WG1408516
(S) Decachlorobiphenyl	*90.8*				*10.0-135*		*01/09/2020 20:45*	WG1408516
(S) Tetrachloro-m-xylene	*99.8*				*10.0-139*		*01/09/2020 20:45*	WG1408516

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.8		1	01/09/2020 16:02	WG1408435

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.79		0.495	2.00	2.15	1	01/10/2020 05:44	WG1408501
Cadmium	0.0973	J	0.0754	0.500	0.539	1	01/10/2020 05:44	WG1408501
Lead	3.71		0.205	0.500	0.539	1	01/10/2020 05:44	WG1408501

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00145	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Alpha BHC	U		0.00146	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Beta BHC	U		0.00172	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Delta BHC	U		0.00154	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Gamma BHC	U		0.00156	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Chlordane	U		0.0420	0.200	0.215	1	01/09/2020 21:34	WG1408516
4,4-DDD	U		0.00168	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
4,4-DDE	U		0.00166	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
4,4-DDT	U		0.00215	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Dieldrin	U		0.00164	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Endosulfan I	U		0.00160	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Endosulfan II	U		0.00172	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Endosulfan sulfate	U		0.00163	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Endrin	U		0.00169	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Endrin aldehyde	U		0.00139	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Endrin ketone	U		0.00178	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Hexachlorobenzene	U		0.00134	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Heptachlor	U		0.00166	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Heptachlor epoxide	U		0.00173	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Methoxychlor	U		0.00192	0.0200	0.0215	1	01/09/2020 21:34	WG1408516
Toxaphene	U		0.0388	0.400	0.431	1	01/09/2020 21:34	WG1408516
(S) Decachlorobiphenyl	*77.6*				*10.0-135*		*01/09/2020 21:34*	WG1408516
(S) Tetrachloro-m-xylene	*86.3*				*10.0-139*		*01/09/2020 21:34*	WG1408516

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	92.3		1	01/09/2020 16:02	WG1408435

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	3.40		0.498	2.00	2.17	1	01/10/2020 05:46	WG1408501
Cadmium	0.0970	J	0.0759	0.500	0.542	1	01/10/2020 05:46	WG1408501
Lead	2.22		0.206	0.500	0.542	1	01/10/2020 05:46	WG1408501

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00146	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Alpha BHC	U		0.00147	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Beta BHC	U		0.00173	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Delta BHC	U		0.00155	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Gamma BHC	U		0.00157	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Chlordane	U		0.0423	0.200	0.217	1	01/09/2020 21:46	WG1408516
4,4-DDD	U		0.00169	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
4,4-DDE	U		0.00167	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
4,4-DDT	U		0.00217	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Dieldrin	U		0.00165	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Endosulfan I	U		0.00161	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Endosulfan II	U		0.00173	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Endosulfan sulfate	U		0.00164	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Endrin	U		0.00170	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Endrin aldehyde	U		0.00140	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Endrin ketone	U		0.00179	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Hexachlorobenzene	U		0.00134	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Heptachlor	U		0.00167	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Heptachlor epoxide	U		0.00174	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Methoxychlor	U		0.00193	0.0200	0.0217	1	01/09/2020 21:46	WG1408516
Toxaphene	U		0.0390	0.400	0.433	1	01/09/2020 21:46	WG1408516
(S) Decachlorobiphenyl	*86.9*				*10.0-135*		*01/09/2020 21:46*	WG1408516
(S) Tetrachloro-m-xylene	*96.6*				*10.0-139*		*01/09/2020 21:46*	WG1408516

SB36 (.5-1)

Collected date/time: 01/07/20 11:06

SAMPLE RESULTS - 25

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	94.3		1	01/09/2020 16:02	WG1408435

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	19.8		0.488	2.00	2.12	1	01/10/2020 05:49	WG1408501
Cadmium	0.177	J	0.0742	0.500	0.530	1	01/10/2020 05:49	WG1408501
Lead	34.6		0.201	0.500	0.530	1	01/10/2020 05:49	WG1408501

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00143	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Alpha BHC	U		0.00144	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Beta BHC	U		0.00170	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Delta BHC	U		0.00152	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Gamma BHC	U		0.00154	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Chlordane	U		0.0414	0.200	0.212	1	01/09/2020 21:59	WG1408516
4,4-DDD	U		0.00165	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
4,4-DDE	U		0.00163	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
4,4-DDT	U		0.00212	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Dieldrin	U		0.00161	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Endosulfan I	U		0.00158	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Endosulfan II	U		0.00170	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Endosulfan sulfate	U		0.00160	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Endrin	U		0.00166	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Endrin aldehyde	U		0.00137	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Endrin ketone	U		0.00175	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Hexachlorobenzene	U		0.00131	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Heptachlor	U		0.00163	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Heptachlor epoxide	U		0.00171	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Methoxychlor	U		0.00189	0.0200	0.0212	1	01/09/2020 21:59	WG1408516
Toxaphene	U		0.0382	0.400	0.424	1	01/09/2020 21:59	WG1408516
(S) Decachlorobiphenyl	*79.9*				*10.0-135*		*01/09/2020 21:59*	WG1408516
(S) Tetrachloro-m-xylene	*86.1*				*10.0-139*		*01/09/2020 21:59*	WG1408516

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.2		1	01/09/2020 16:02	WG1408435

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.71		0.516	2.00	2.24	1	01/10/2020 05:52	WG1408501
Cadmium	0.113	J	0.0785	0.500	0.561	1	01/10/2020 05:52	WG1408501
Lead	16.3		0.213	0.500	0.561	1	01/10/2020 05:52	WG1408501

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00151	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Alpha BHC	U		0.00152	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Beta BHC	U		0.00179	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Delta BHC	U		0.00160	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Gamma BHC	U		0.00163	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Chlordane	U		0.0437	0.200	0.224	1	01/09/2020 22:11	WG1408516
4,4-DDD	U		0.00175	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
4,4-DDE	U		0.00173	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
4,4-DDT	U		0.00224	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Dieldrin	U		0.00170	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Endosulfan I	U		0.00167	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Endosulfan II	U		0.00179	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Endosulfan sulfate	U		0.00169	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Endrin	U		0.00176	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Endrin aldehyde	U		0.00145	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Endrin ketone	U		0.00185	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Hexachlorobenzene	U		0.00139	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Heptachlor	U		0.00173	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Heptachlor epoxide	U		0.00180	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Methoxychlor	U		0.00200	0.0200	0.0224	1	01/09/2020 22:11	WG1408516
Toxaphene	U		0.0404	0.400	0.448	1	01/09/2020 22:11	WG1408516
(S) Decachlorobiphenyl	*71.9*				*10.0-135*		*01/09/2020 22:11*	WG1408516
(S) Tetrachloro-m-xylene	*79.7*				*10.0-139*		*01/09/2020 22:11*	WG1408516

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	90.7		1	01/09/2020 16:02	WG1408435

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	3.55		0.507	2.00	2.20	1	01/10/2020 05:20	WG1408501
Cadmium	0.117	J	0.0771	0.500	0.551	1	01/10/2020 05:20	WG1408501
Lead	15.9		0.209	0.500	0.551	1	01/10/2020 05:20	WG1408501

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00149	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Alpha BHC	U		0.00150	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Beta BHC	U		0.00176	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Delta BHC	U		0.00158	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Gamma BHC	U		0.00160	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Chlordane	U		0.0430	0.200	0.220	1	01/09/2020 22:24	WG1408516
4,4-DDD	U		0.00172	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
4,4-DDE	U		0.00170	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
4,4-DDT	U		0.00220	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Dieldrin	U		0.00167	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Endosulfan I	U		0.00164	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Endosulfan II	U		0.00176	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Endosulfan sulfate	U		0.00166	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Endrin	U		0.00173	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Endrin aldehyde	U		0.00142	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Endrin ketone	U		0.00182	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Hexachlorobenzene	U		0.00137	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Heptachlor	U		0.00170	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Heptachlor epoxide	U		0.00177	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Methoxychlor	U		0.00196	0.0200	0.0220	1	01/09/2020 22:24	WG1408516
Toxaphene	U		0.0397	0.400	0.441	1	01/09/2020 22:24	WG1408516
(S) Decachlorobiphenyl	*79.9*				*10.0-135*		*01/09/2020 22:24*	WG1408516
(S) Tetrachloro-m-xylene	*87.2*				*10.0-139*		*01/09/2020 22:24*	WG1408516

SB36 (5-6)

Collected date/time: 01/07/20 11:11

SAMPLE RESULTS - 28

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	81.8		1	01/09/2020 16:02	WG1408435

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	5.53		0.563	2.00	2.45	1	01/10/2020 05:54	WG1408501
Cadmium	0.180	J	0.0856	0.500	0.612	1	01/10/2020 05:54	WG1408501
Lead	13.5		0.232	0.500	0.612	1	01/10/2020 05:54	WG1408501

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00165	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Alpha BHC	U		0.00166	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Beta BHC	U		0.00196	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Delta BHC	U		0.00175	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Gamma BHC	U		0.00177	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Chlordane	U		0.0477	0.200	0.245	1	01/09/2020 22:36	WG1408516
4,4-DDD	U		0.00191	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
4,4-DDE	U		0.00188	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
4,4-DDT	U		0.00245	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Dieldrin	U		0.00186	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Endosulfan I	U		0.00182	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Endosulfan II	U		0.00196	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Endosulfan sulfate	U		0.00185	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Endrin	U		0.00192	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Endrin aldehyde	U		0.00158	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Endrin ketone	U		0.00202	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Hexachlorobenzene	U		0.00152	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Heptachlor	U		0.00188	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Heptachlor epoxide	U		0.00197	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Methoxychlor	U		0.00218	0.0200	0.0245	1	01/09/2020 22:36	WG1408516
Toxaphene	U		0.0440	0.400	0.489	1	01/09/2020 22:36	WG1408516
(S) Decachlorobiphenyl	*84.2*				*10.0-135*		*01/09/2020 22:36*	WG1408516
(S) Tetrachloro-m-xylene	*98.6*				*10.0-139*		*01/09/2020 22:36*	WG1408516

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.6		1	01/09/2020 16:02	WG1408435

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.82		0.557	2.00	2.42	1	01/10/2020 05:57	WG1408501
Cadmium	0.299	J	0.0847	0.500	0.605	1	01/10/2020 05:57	WG1408501
Lead	17.8		0.230	0.500	0.605	1	01/10/2020 05:57	WG1408501

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00163	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Alpha BHC	U		0.00165	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Beta BHC	U		0.00194	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Delta BHC	U		0.00173	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Gamma BHC	U		0.00175	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Chlordane	U		0.0472	0.200	0.242	1	01/09/2020 22:48	WG1408516
4,4-DDD	U		0.00189	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
4,4-DDE	U		0.00186	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
4,4-DDT	U		0.00242	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Dieldrin	U		0.00184	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Endosulfan I	U		0.00180	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Endosulfan II	U		0.00194	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Endosulfan sulfate	U		0.00183	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Endrin	U		0.00190	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Endrin aldehyde	U		0.00156	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Endrin ketone	U		0.00200	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Hexachlorobenzene	U		0.00150	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Heptachlor	U		0.00186	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Heptachlor epoxide	U		0.00195	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Methoxychlor	U		0.00215	0.0200	0.0242	1	01/09/2020 22:48	WG1408516
Toxaphene	U		0.0436	0.400	0.484	1	01/09/2020 22:48	WG1408516
(S) Decachlorobiphenyl	*81.1*				*10.0-135*		*01/09/2020 22:48*	WG1408516
(S) Tetrachloro-m-xylene	*88.2*				*10.0-139*		*01/09/2020 22:48*	WG1408516

SB36 (10-11)

Collected date/time: 01/07/20 11:16

SAMPLE RESULTS - 30

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.0		1	01/09/2020 16:02	WG1408435

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.85	J	0.517	2.00	2.25	1	01/10/2020 06:00	WG1408501
Cadmium	U		0.0786	0.500	0.562	1	01/10/2020 06:00	WG1408501
Lead	0.973		0.213	0.500	0.562	1	01/10/2020 06:00	WG1408501

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00152	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Alpha BHC	U		0.00153	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Beta BHC	U		0.00180	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Delta BHC	U		0.00161	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Gamma BHC	U		0.00163	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Chlordane	U		0.0438	0.200	0.225	1	01/09/2020 23:01	WG1408516
4,4-DDD	U		0.00175	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
4,4-DDE	U		0.00173	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
4,4-DDT	U		0.00225	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Dieldrin	U		0.00171	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Endosulfan I	U		0.00167	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Endosulfan II	U		0.00180	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Endosulfan sulfate	U		0.00170	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Endrin	U		0.00176	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Endrin aldehyde	U		0.00145	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Endrin ketone	U		0.00185	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Hexachlorobenzene	U		0.00139	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Heptachlor	U		0.00173	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Heptachlor epoxide	U		0.00181	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Methoxychlor	U		0.00200	0.0200	0.0225	1	01/09/2020 23:01	WG1408516
Toxaphene	U		0.0404	0.400	0.449	1	01/09/2020 23:01	WG1408516
(S) Decachlorobiphenyl	*88.3*				*10.0-135*		*01/09/2020 23:01*	WG1408516
(S) Tetrachloro-m-xylene	*85.5*				*10.0-139*		*01/09/2020 23:01*	WG1408516

SB37 (.5-1)

Collected date/time: 01/07/20 08:28

SAMPLE RESULTS - 31

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.0		1	01/09/2020 17:33	WG1408442

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.20	J	0.517	2.00	2.25	1	01/10/2020 06:03	WG1408501
Cadmium	0.0951	J	0.0786	0.500	0.561	1	01/10/2020 06:03	WG1408501
Lead	1.80		0.213	0.500	0.561	1	01/10/2020 06:03	WG1408501

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00152	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Alpha BHC	U		0.00153	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Beta BHC	U		0.00180	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Delta BHC	U		0.00161	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Gamma BHC	U		0.00163	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Chlordane	U		0.0438	0.200	0.225	1	01/09/2020 23:13	WG1408516
4,4-DDD	U		0.00175	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
4,4-DDE	U		0.00173	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
4,4-DDT	U		0.00225	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Dieldrin	U		0.00171	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Endosulfan I	U		0.00167	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Endosulfan II	U		0.00180	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Endosulfan sulfate	U		0.00170	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Endrin	U		0.00176	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Endrin aldehyde	U		0.00145	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Endrin ketone	U		0.00185	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Hexachlorobenzene	U		0.00139	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Heptachlor	U		0.00173	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Heptachlor epoxide	U		0.00181	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Methoxychlor	U		0.00200	0.0200	0.0225	1	01/09/2020 23:13	WG1408516
Toxaphene	U		0.0404	0.400	0.449	1	01/09/2020 23:13	WG1408516
(S) Decachlorobiphenyl	*86.5*				*10.0-135*		*01/09/2020 23:13*	WG1408516
(S) Tetrachloro-m-xylene	*100*				*10.0-139*		*01/09/2020 23:13*	WG1408516

SB37 (1-1.5)

Collected date/time: 01/07/20 08:29

SAMPLE RESULTS - 32

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.9		1	01/09/2020 17:33	WG1408442

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.15		0.490	2.00	2.13	1	01/10/2020 06:05	WG1408501
Cadmium	0.205	J	0.0746	0.500	0.533	1	01/10/2020 06:05	WG1408501
Lead	4.88		0.202	0.500	0.533	1	01/10/2020 06:05	WG1408501

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00144	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Alpha BHC	U		0.00145	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Beta BHC	U		0.00170	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Delta BHC	U		0.00152	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Gamma BHC	U		0.00154	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Chlordane	U		0.0415	0.200	0.213	1	01/09/2020 23:25	WG1408516
4,4-DDD	U		0.00166	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
4,4-DDE	U		0.00164	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
4,4-DDT	U		0.00213	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Dieldrin	U		0.00162	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Endosulfan I	U		0.00159	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Endosulfan II	U		0.00170	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Endosulfan sulfate	U		0.00161	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Endrin	U		0.00167	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Endrin aldehyde	U		0.00137	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Endrin ketone	U		0.00176	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Hexachlorobenzene	U		0.00132	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Heptachlor	U		0.00164	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Heptachlor epoxide	U		0.00172	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Methoxychlor	U		0.00190	0.0200	0.0213	1	01/09/2020 23:25	WG1408516
Toxaphene	U		0.0383	0.400	0.426	1	01/09/2020 23:25	WG1408516
(S) Decachlorobiphenyl	*79.8*				*10.0-135*		*01/09/2020 23:25*	WG1408516
(S) Tetrachloro-m-xylene	*92.2*				*10.0-139*		*01/09/2020 23:25*	WG1408516

SB37 (1.5-2)

Collected date/time: 01/07/20 08:30

SAMPLE RESULTS - 33

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.6		1	01/09/2020 17:33	WG1408442

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.39		0.491	2.00	2.14	1	01/10/2020 06:08	WG1408501
Cadmium	0.156	J	0.0748	0.500	0.534	1	01/10/2020 06:08	WG1408501
Lead	6.32		0.203	0.500	0.534	1	01/10/2020 06:08	WG1408501

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00144	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Alpha BHC	U		0.00145	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Beta BHC	U		0.00171	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Delta BHC	U		0.00153	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Gamma BHC	U		0.00155	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Chlordane	U		0.0417	0.200	0.214	1	01/09/2020 23:38	WG1408516
4,4-DDD	U		0.00167	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
4,4-DDE	U		0.00165	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
4,4-DDT	U		0.00214	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Dieldrin	U		0.00162	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Endosulfan I	U		0.00159	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Endosulfan II	U		0.00171	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Endosulfan sulfate	U		0.00161	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Endrin	U		0.00168	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Endrin aldehyde	U		0.00138	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Endrin ketone	U		0.00176	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Hexachlorobenzene	U		0.00132	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Heptachlor	U		0.00165	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Heptachlor epoxide	U		0.00172	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Methoxychlor	U		0.00190	0.0200	0.0214	1	01/09/2020 23:38	WG1408516
Toxaphene	U		0.0385	0.400	0.427	1	01/09/2020 23:38	WG1408516
(S) Decachlorobiphenyl	*83.4*				*10.0-135*		*01/09/2020 23:38*	WG1408516
(S) Tetrachloro-m-xylene	*97.2*				*10.0-139*		*01/09/2020 23:38*	WG1408516

SB37 (5-6)

Collected date/time: 01/07/20 08:33

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.7		1	01/09/2020 17:33	WG1408442

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.64		0.491	2.00	2.13	1	01/10/2020 06:16	WG1408501
Cadmium	0.131	J	0.0747	0.500	0.534	1	01/10/2020 06:16	WG1408501
Lead	2.46		0.203	0.500	0.534	1	01/10/2020 06:16	WG1408501

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00144	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Alpha BHC	U		0.00145	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Beta BHC	U		0.00171	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Delta BHC	U		0.00153	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Gamma BHC	U		0.00155	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Chlordane	U		0.0416	0.200	0.213	1	01/09/2020 23:50	WG1408516
4,4-DDD	U		0.00166	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
4,4-DDE	U		0.00164	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
4,4-DDT	U		0.00213	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Dieldrin	U		0.00162	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Endosulfan I	U		0.00159	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Endosulfan II	U		0.00171	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Endosulfan sulfate	U		0.00161	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Endrin	U		0.00168	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Endrin aldehyde	U		0.00138	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Endrin ketone	U		0.00176	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Hexachlorobenzene	U		0.00132	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Heptachlor	U		0.00164	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Heptachlor epoxide	U		0.00172	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Methoxychlor	U		0.00190	0.0200	0.0213	1	01/09/2020 23:50	WG1408516
Toxaphene	U		0.0384	0.400	0.427	1	01/09/2020 23:50	WG1408516
(S) Decachlorobiphenyl	*70.6*				*10.0-135*		*01/09/2020 23:50*	WG1408516
(S) Tetrachloro-m-xylene	*79.8*				*10.0-139*		*01/09/2020 23:50*	WG1408516

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.1		1	01/09/2020 17:33	WG1408442

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.81		0.479	2.00	2.08	1	01/10/2020 06:19	WG1408501
Cadmium	0.153	J	0.0728	0.500	0.520	1	01/10/2020 06:19	WG1408501
Lead	0.885		0.198	0.500	0.520	1	01/10/2020 06:19	WG1408501

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00140	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Alpha BHC	U		0.00142	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Beta BHC	U		0.00166	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Delta BHC	U		0.00149	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Gamma BHC	U		0.00151	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Chlordane	U		0.0406	0.200	0.208	1	01/10/2020 00:03	WG1408516
4,4-DDD	U		0.00162	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
4,4-DDE	U		0.00160	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
4,4-DDT	U		0.00208	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Dieldrin	U		0.00158	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Endosulfan I	U		0.00155	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Endosulfan II	U		0.00166	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Endosulfan sulfate	U		0.00157	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Endrin	U		0.00163	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Endrin aldehyde	U		0.00134	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Endrin ketone	U		0.00172	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Hexachlorobenzene	U		0.00129	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Heptachlor	U		0.00160	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Heptachlor epoxide	U		0.00168	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Methoxychlor	U		0.00185	0.0200	0.0208	1	01/10/2020 00:03	WG1408516
Toxaphene	U		0.0375	0.400	0.416	1	01/10/2020 00:03	WG1408516
(S) Decachlorobiphenyl	*84.4*				*10.0-135*		*01/10/2020 00:03*	WG1408516
(S) Tetrachloro-m-xylene	*101*				*10.0-139*		*01/10/2020 00:03*	WG1408516

SB37 (10-11)

Collected date/time: 01/07/20 08:38

SAMPLE RESULTS - 36

L1177542

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	93.1		1	01/09/2020 17:33	WG1408442

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	2.13	J	0.494	2.00	2.15	1	01/10/2020 06:22	WG1408501
Cadmium	0.0961	J	0.0752	0.500	0.537	1	01/10/2020 06:22	WG1408501
Lead	2.13		0.204	0.500	0.537	1	01/10/2020 06:22	WG1408501

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00145	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Alpha BHC	U		0.00146	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Beta BHC	U		0.00172	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Delta BHC	U		0.00154	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Gamma BHC	U		0.00156	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Chlordane	U		0.0419	0.200	0.215	1	01/10/2020 00:15	WG1408516
4,4-DDD	U		0.00168	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
4,4-DDE	U		0.00165	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
4,4-DDT	U		0.00215	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Dieldrin	U		0.00163	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Endosulfan I	U		0.00160	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Endosulfan II	U		0.00172	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Endosulfan sulfate	U		0.00162	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Endrin	U		0.00169	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Endrin aldehyde	U		0.00139	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Endrin ketone	U		0.00177	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Hexachlorobenzene	U		0.00133	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Heptachlor	U		0.00165	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Heptachlor epoxide	U		0.00173	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Methoxychlor	U		0.00191	0.0200	0.0215	1	01/10/2020 00:15	WG1408516
Toxaphene	U		0.0387	0.400	0.430	1	01/10/2020 00:15	WG1408516
(S) Decachlorobiphenyl	*81.0*				*10.0-135*		*01/10/2020 00:15*	WG1408516
(S) Tetrachloro-m-xylene	*93.7*				*10.0-139*		*01/10/2020 00:15*	WG1408516

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	89.2		1	01/09/2020 17:33	WG1408442

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	65.1		0.516	2.00	2.24	1	01/09/2020 23:52	WG1408493
Cadmium	0.325	J	0.0785	0.500	0.561	1	01/09/2020 23:52	WG1408493
Lead	63.4		0.213	0.500	0.561	1	01/09/2020 23:52	WG1408493

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00151	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Alpha BHC	U		0.00152	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Beta BHC	U		0.00179	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Delta BHC	U		0.00160	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Gamma BHC	U		0.00163	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Chlordane	U		0.0437	0.200	0.224	1	01/10/2020 00:27	WG1408516
4,4-DDD	U		0.00175	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
4,4-DDE	U		0.00173	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
4,4-DDT	U		0.00224	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Dieldrin	U		0.00170	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Endosulfan I	U		0.00167	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Endosulfan II	U		0.00179	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Endosulfan sulfate	U		0.00169	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Endrin	U		0.00176	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Endrin aldehyde	U		0.00145	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Endrin ketone	U		0.00185	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Hexachlorobenzene	U		0.00139	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Heptachlor	U		0.00173	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Heptachlor epoxide	U		0.00181	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Methoxychlor	U		0.00200	0.0200	0.0224	1	01/10/2020 00:27	WG1408516
Toxaphene	U		0.0404	0.400	0.449	1	01/10/2020 00:27	WG1408516
(S) Decachlorobiphenyl	*86.2*				*10.0-135*		*01/10/2020 00:27*	WG1408516
(S) Tetrachloro-m-xylene	*102*				*10.0-139*		*01/10/2020 00:27*	WG1408516

SB38 (1-1.5)

Collected date/time: 01/07/20 09:52

SAMPLE RESULTS - 38

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.3		1	01/09/2020 17:33	WG1408442

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	19.1		0.515	2.00	2.24	1	01/10/2020 06:24	WG1408501
Cadmium	0.213	J	0.0784	0.500	0.560	1	01/10/2020 06:24	WG1408501
Lead	26.1		0.213	0.500	0.560	1	01/10/2020 06:24	WG1408501

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00151	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Alpha BHC	U		0.00152	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Beta BHC	U		0.00179	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Delta BHC	U		0.00160	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Gamma BHC	U		0.00162	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Chlordane	U		0.0437	0.200	0.224	1	01/10/2020 00:40	WG1408516
4,4-DDD	U		0.00175	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
4,4-DDE	U		0.00172	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
4,4-DDT	U		0.00224	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Dieldrin	U		0.00170	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Endosulfan I	U		0.00167	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Endosulfan II	U		0.00179	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Endosulfan sulfate	U		0.00169	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Endrin	U		0.00176	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Endrin aldehyde	U		0.00144	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Endrin ketone	U		0.00185	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Hexachlorobenzene	U		0.00139	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Heptachlor	U		0.00172	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Heptachlor epoxide	U		0.00180	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Methoxychlor	U		0.00199	0.0200	0.0224	1	01/10/2020 00:40	WG1408516
Toxaphene	U		0.0403	0.400	0.448	1	01/10/2020 00:40	WG1408516
(S) Decachlorobiphenyl	*81.1*				*10.0-135*		*01/10/2020 00:40*	WG1408516
(S) Tetrachloro-m-xylene	*94.1*				*10.0-139*		*01/10/2020 00:40*	WG1408516

SB38 (5-6)

Collected date/time: 01/07/20 09:56

SAMPLE RESULTS - 39

L1177542

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.2		1	01/09/2020 17:33	WG1408442

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	36.4		0.528	2.00	2.29	1	01/10/2020 06:27	WG1408501
Cadmium	0.120	J	0.0803	0.500	0.574	1	01/10/2020 06:27	WG1408501
Lead	30.3		0.218	0.500	0.574	1	01/10/2020 06:27	WG1408501

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00155	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Alpha BHC	U		0.00156	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Beta BHC	U		0.00184	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Delta BHC	U		0.00164	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Gamma BHC	U		0.00166	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Chlordane	U		0.0447	0.200	0.229	1	01/10/2020 00:52	WG1408516
4,4-DDD	U		0.00179	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
4,4-DDE	U		0.00177	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
4,4-DDT	U		0.00229	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Dieldrin	U		0.00174	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Endosulfan I	U		0.00171	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Endosulfan II	U		0.00184	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Endosulfan sulfate	U		0.00173	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Endrin	U		0.00180	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Endrin aldehyde	U		0.00148	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Endrin ketone	U		0.00189	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Hexachlorobenzene	U		0.00142	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Heptachlor	U		0.00177	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Heptachlor epoxide	U		0.00185	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Methoxychlor	U		0.00204	0.0200	0.0229	1	01/10/2020 00:52	WG1408516
Toxaphene	U		0.0413	0.400	0.459	1	01/10/2020 00:52	WG1408516
(S) Decachlorobiphenyl	*73.2*				*10.0-135*		*01/10/2020 00:52*	WG1408516
(S) Tetrachloro-m-xylene	*84.2*				*10.0-139*		*01/10/2020 00:52*	WG1408516

SB38 (8-9)

Collected date/time: 01/07/20 09:59

SAMPLE RESULTS - 40

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	90.8		1	01/09/2020 17:33	WG1408442

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	0.953	J	0.507	2.00	2.20	1	01/10/2020 06:30	WG1408501
Cadmium	0.0815	J	0.0771	0.500	0.551	1	01/10/2020 06:30	WG1408501
Lead	0.401	J	0.209	0.500	0.551	1	01/10/2020 06:30	WG1408501

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00149	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Alpha BHC	U		0.00150	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Beta BHC	U		0.00176	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Delta BHC	U		0.00157	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Gamma BHC	U		0.00160	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Chlordane	U		0.0430	0.200	0.220	1	01/10/2020 01:04	WG1408516
4,4-DDD	U		0.00172	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
4,4-DDE	U		0.00170	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
4,4-DDT	U		0.00220	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Dieldrin	U		0.00167	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Endosulfan I	U		0.00164	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Endosulfan II	U		0.00176	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Endosulfan sulfate	U		0.00166	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Endrin	U		0.00173	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Endrin aldehyde	U		0.00142	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Endrin ketone	U		0.00182	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Hexachlorobenzene	U		0.00137	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Heptachlor	U		0.00170	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Heptachlor epoxide	U		0.00177	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Methoxychlor	U		0.00196	0.0200	0.0220	1	01/10/2020 01:04	WG1408516
Toxaphene	U		0.0396	0.400	0.441	1	01/10/2020 01:04	WG1408516
(S) Decachlorobiphenyl	*79.3*				*10.0-135*		*01/10/2020 01:04*	WG1408516
(S) Tetrachloro-m-xylene	*92.8*				*10.0-139*		*01/10/2020 01:04*	WG1408516

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.0		1	01/09/2020 13:41	WG1408444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.08	J	0.500	2.00	2.17	1	01/09/2020 23:54	WG1408493
Cadmium	U		0.0761	0.500	0.543	1	01/09/2020 23:54	WG1408493
Lead	1.27		0.207	0.500	0.543	1	01/09/2020 23:54	WG1408493

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00147	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Alpha BHC	U		0.00148	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Beta BHC	U		0.00174	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Delta BHC	U		0.00155	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Gamma BHC	U		0.00158	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Chlordane	U		0.0424	0.200	0.217	1	01/10/2020 08:23	WG1408518
4,4-DDD	U		0.00170	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
4,4-DDE	U		0.00167	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
4,4-DDT	U		0.00217	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Dieldrin	U		0.00165	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Endosulfan I	U		0.00162	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Endosulfan II	U		0.00174	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Endosulfan sulfate	U		0.00164	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Endrin	U		0.00171	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Endrin aldehyde	U		0.00140	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Endrin ketone	U		0.00179	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Hexachlorobenzene	U		0.00135	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Heptachlor	U		0.00167	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Heptachlor epoxide	U		0.00175	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Methoxychlor	U		0.00193	0.0200	0.0217	1	01/10/2020 08:23	WG1408518
Toxaphene	U		0.0391	0.400	0.435	1	01/10/2020 08:23	WG1408518
(S) Decachlorobiphenyl	*113*				*10.0-135*		*01/10/2020 08:23*	WG1408518
(S) Tetrachloro-m-xylene	*129*				*10.0-139*		*01/10/2020 08:23*	WG1408518

SB39 (.5-1)

Collected date/time: 01/07/20 09:28

SAMPLE RESULTS - 42

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	87.8		1	01/09/2020 13:41	WG1408444

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	11.6		0.524	2.00	2.28	1	01/10/2020 00:02	WG1408493
Cadmium	0.175	J	0.0797	0.500	0.569	1	01/10/2020 00:02	WG1408493
Lead	22.0		0.216	0.500	0.569	1	01/10/2020 00:02	WG1408493

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00154	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Alpha BHC	U		0.00155	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Beta BHC	U		0.00182	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Delta BHC	U		0.00163	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Gamma BHC	U		0.00165	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Chlordane	U		0.0444	0.200	0.228	1	01/10/2020 09:00	WG1408518
4,4-DDD	U		0.00178	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
4,4-DDE	U		0.00175	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
4,4-DDT	U		0.00228	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Dieldrin	U		0.00173	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Endosulfan I	U		0.00170	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Endosulfan II	U		0.00182	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Endosulfan sulfate	U		0.00172	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Endrin	U		0.00179	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Endrin aldehyde	U		0.00147	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Endrin ketone	U		0.00188	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Hexachlorobenzene	U		0.00141	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Heptachlor	U		0.00175	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Heptachlor epoxide	U		0.00183	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Methoxychlor	U		0.00203	0.0200	0.0228	1	01/10/2020 09:00	WG1408518
Toxaphene	U		0.0410	0.400	0.456	1	01/10/2020 09:00	WG1408518
(S) Decachlorobiphenyl	*74.4*				*10.0-135*		*01/10/2020 09:00*	WG1408518
(S) Tetrachloro-m-xylene	*94.8*				*10.0-139*		*01/10/2020 09:00*	WG1408518

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.8		1	01/09/2020 13:41	WG1408444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.59		0.518	2.00	2.25	1	01/10/2020 00:05	WG1408493
Cadmium	0.141	J	0.0788	0.500	0.563	1	01/10/2020 00:05	WG1408493
Lead	13.0		0.214	0.500	0.563	1	01/10/2020 00:05	WG1408493

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00152	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Alpha BHC	U		0.00153	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Beta BHC	U		0.00180	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Delta BHC	U		0.00161	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Gamma BHC	U		0.00163	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Chlordane	U		0.0439	0.200	0.225	1	01/10/2020 09:12	WG1408518
4,4-DDD	U		0.00176	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
4,4-DDE	U		0.00173	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
4,4-DDT	U		0.00225	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Dieldrin	U		0.00171	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Endosulfan I	U		0.00168	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Endosulfan II	U		0.00180	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Endosulfan sulfate	U		0.00170	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Endrin	U		0.00177	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Endrin aldehyde	U		0.00145	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Endrin ketone	U		0.00186	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Hexachlorobenzene	U		0.00140	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Heptachlor	U		0.00173	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Heptachlor epoxide	U		0.00181	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Methoxychlor	U		0.00200	0.0200	0.0225	1	01/10/2020 09:12	WG1408518
Toxaphene	U		0.0405	0.400	0.450	1	01/10/2020 09:12	WG1408518
(S) Decachlorobiphenyl	*91.5*				*10.0-135*		*01/10/2020 09:12*	WG1408518
(S) Tetrachloro-m-xylene	*105*				*10.0-139*		*01/10/2020 09:12*	WG1408518

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	89.4		1	01/09/2020 13:41	WG1408444

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	3.36		0.514	2.00	2.24	1	01/10/2020 00:07	WG1408493
Cadmium	0.105	J	0.0783	0.500	0.559	1	01/10/2020 00:07	WG1408493
Lead	4.22		0.212	0.500	0.559	1	01/10/2020 00:07	WG1408493

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00151	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Alpha BHC	U		0.00152	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Beta BHC	U		0.00179	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Delta BHC	U		0.00160	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Gamma BHC	U		0.00162	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Chlordane	U		0.0436	0.200	0.224	1	01/10/2020 09:25	WG1408518
4,4-DDD	U		0.00174	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
4,4-DDE	U		0.00172	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
4,4-DDT	U		0.00224	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Dieldrin	U		0.00170	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Endosulfan I	U		0.00167	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Endosulfan II	U		0.00179	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Endosulfan sulfate	U		0.00169	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Endrin	U		0.00176	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Endrin aldehyde	U		0.00144	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Endrin ketone	U		0.00185	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Hexachlorobenzene	U		0.00139	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Heptachlor	U		0.00172	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Heptachlor epoxide	U		0.00180	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Methoxychlor	U		0.00199	0.0200	0.0224	1	01/10/2020 09:25	WG1408518
Toxaphene	U		0.0403	0.400	0.447	1	01/10/2020 09:25	WG1408518
(S) Decachlorobiphenyl	*67.6*				*10.0-135*		*01/10/2020 09:25*	WG1408518
(S) Tetrachloro-m-xylene	*83.9*				*10.0-139*		*01/10/2020 09:25*	WG1408518

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.0		1	01/09/2020 13:41	WG1408444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.10		0.479	2.00	2.08	1	01/10/2020 00:10	WG1408493
Cadmium	U		0.0729	0.500	0.521	1	01/10/2020 00:10	WG1408493
Lead	4.16		0.198	0.500	0.521	1	01/10/2020 00:10	WG1408493

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00141	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Alpha BHC	U		0.00142	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Beta BHC	U		0.00167	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Delta BHC	U		0.00149	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Gamma BHC	U		0.00151	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Chlordane	U		0.0406	0.200	0.208	1	01/10/2020 09:37	WG1408518
4,4-DDD	U		0.00163	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
4,4-DDE	U		0.00160	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
4,4-DDT	U		0.00208	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Dieldrin	U		0.00158	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Endosulfan I	U		0.00155	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Endosulfan II	U		0.00167	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Endosulfan sulfate	U		0.00157	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Endrin	U		0.00164	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Endrin aldehyde	U		0.00134	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Endrin ketone	U		0.00172	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Hexachlorobenzene	U		0.00129	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Heptachlor	U		0.00160	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Heptachlor epoxide	U		0.00168	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Methoxychlor	U		0.00185	0.0200	0.0208	1	01/10/2020 09:37	WG1408518
Toxaphene	U		0.0375	0.400	0.417	1	01/10/2020 09:37	WG1408518
(S) Decachlorobiphenyl	*76.9*				*10.0-135*		*01/10/2020 09:37*	WG1408518
(S) Tetrachloro-m-xylene	*93.7*				*10.0-139*		*01/10/2020 09:37*	WG1408518

SB39 (10-11)

Collected date/time: 01/07/20 09:37

SAMPLE RESULTS - 47

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	87.3		1	01/09/2020 13:41	WG1408444

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	3.58		0.527	2.00	2.29	1	01/10/2020 00:12	WG1408493
Cadmium	U		0.0802	0.500	0.573	1	01/10/2020 00:12	WG1408493
Lead	5.18		0.218	0.500	0.573	1	01/10/2020 00:12	WG1408493

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00155	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Alpha BHC	U		0.00156	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Beta BHC	U		0.00183	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Delta BHC	U		0.00164	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Gamma BHC	U		0.00166	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Chlordane	U		0.0447	0.200	0.229	1	01/10/2020 09:49	WG1408518
4,4-DDD	U		0.00179	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
4,4-DDE	U		0.00176	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
4,4-DDT	U		0.00229	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Dieldrin	U		0.00174	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Endosulfan I	U		0.00171	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Endosulfan II	U		0.00183	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Endosulfan sulfate	U		0.00173	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Endrin	U		0.00180	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Endrin aldehyde	U		0.00148	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Endrin ketone	U		0.00189	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Hexachlorobenzene	U		0.00142	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Heptachlor	U		0.00176	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Heptachlor epoxide	U		0.00184	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Methoxychlor	U		0.00204	0.0200	0.0229	1	01/10/2020 09:49	WG1408518
Toxaphene	U		0.0412	0.400	0.458	1	01/10/2020 09:49	WG1408518
(S) Decachlorobiphenyl	*68.9*				*10.0-135*		*01/10/2020 09:49*	WG1408518
(S) Tetrachloro-m-xylene	*92.6*				*10.0-139*		*01/10/2020 09:49*	WG1408518

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.8		1	01/09/2020 13:41	WG1408444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	10.9		0.205	0.500	0.539	1	01/10/2020 00:15	WG1408493

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0375		0.0161	0.0250	0.0294	1.09	01/09/2020 21:43	WG1408315
Acrylonitrile	U		0.00223	0.0125	0.0147	1.09	01/09/2020 21:43	WG1408315
Benzene	0.000499	J	0.000470	0.00100	0.00117	1.09	01/09/2020 21:43	WG1408315
Bromobenzene	U		0.00123	0.0125	0.0147	1.09	01/09/2020 21:43	WG1408315
Bromodichloromethane	U		0.000926	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
Bromoform	U		0.00703	0.0250	0.0294	1.09	01/09/2020 21:43	WG1408315
Bromomethane	U		0.00435	0.0125	0.0147	1.09	01/09/2020 21:43	WG1408315
n-Butylbenzene	U		0.00451	0.0125	0.0147	1.09	01/09/2020 21:43	WG1408315
sec-Butylbenzene	U		0.00297	0.0125	0.0147	1.09	01/09/2020 21:43	WG1408315
tert-Butylbenzene	U		0.00182	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
Carbon tetrachloride	U		0.00127	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
Chlorobenzene	U		0.000673	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
Chlorodibromomethane	U		0.000529	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
Chloroethane	U		0.00127	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
Chloroform	U		0.000488	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
Chloromethane	U		0.00163	0.0125	0.0147	1.09	01/09/2020 21:43	WG1408315
2-Chlorotoluene	U		0.00108	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
4-Chlorotoluene	U		0.00133	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
1,2-Dibromo-3-Chloropropane	U		0.00599	0.0250	0.0294	1.09	01/09/2020 21:43	WG1408315
1,2-Dibromoethane	U		0.000617	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
Dibromomethane	U		0.00117	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
1,2-Dichlorobenzene	U		0.00170	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
1,3-Dichlorobenzene	U		0.00200	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
1,4-Dichlorobenzene	U		0.00231	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
Dichlorodifluoromethane	U		0.000961	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
1,1-Dichloroethane	U		0.000676	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
1,2-Dichloroethane	U		0.000558	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
1,1-Dichloroethene	U		0.000587	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
cis-1,2-Dichloroethene	U		0.000811	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
trans-1,2-Dichloroethene	U		0.00168	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
1,2-Dichloropropane	U		0.00149	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
1,1-Dichloropropene	U		0.000822	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
1,3-Dichloropropane	U		0.00206	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
cis-1,3-Dichloropropene	U		0.000797	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
trans-1,3-Dichloropropene	U		0.00180	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
2,2-Dichloropropane	U		0.000932	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
Di-isopropyl ether	U		0.000411	0.00100	0.00117	1.09	01/09/2020 21:43	WG1408315
Ethylbenzene	U		0.000623	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
Hexachloro-1,3-butadiene	U		0.0149	0.0250	0.0294	1.09	01/09/2020 21:43	WG1408315
Isopropylbenzene	U		0.00101	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
p-Isopropyltoluene	U		0.00274	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
2-Butanone (MEK)	0.0395	B	0.0147	0.0250	0.0294	1.09	01/09/2020 21:43	WG1408315
Methylene Chloride	0.00918	J	0.00780	0.0250	0.0294	1.09	01/09/2020 21:43	WG1408315
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0250	0.0294	1.09	01/09/2020 21:43	WG1408315
Methyl tert-butyl ether	U		0.000347	0.00100	0.00117	1.09	01/09/2020 21:43	WG1408315

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Naphthalene	U		0.00367	0.0125	0.0147	1.09	01/09/2020 21:43	WG1408315
n-Propylbenzene	U		0.00139	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
Styrene	U		0.00321	0.0125	0.0147	1.09	01/09/2020 21:43	WG1408315
1,1,1,2-Tetrachloroethane	U		0.000587	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
1,1,2,2-Tetrachloroethane	U		0.000458	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
1,1,2-Trichlorotrifluoroethane	U		0.000793	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
Tetrachloroethene	U		0.000822	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
Toluene	0.00430	J	0.00147	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
1,2,3-Trichlorobenzene	U	J3	0.000734	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
1,2,4-Trichlorobenzene	U		0.00566	0.0125	0.0147	1.09	01/09/2020 21:43	WG1408315
1,1,1-Trichloroethane	U		0.000323	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
1,1,2-Trichloroethane	U		0.00104	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
Trichloroethene	U		0.000470	0.00100	0.00117	1.09	01/09/2020 21:43	WG1408315
Trichlorofluoromethane	U		0.000587	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
1,2,3-Trichloropropane	U		0.00599	0.0125	0.0147	1.09	01/09/2020 21:43	WG1408315
1,2,4-Trimethylbenzene	0.00301	B J	0.00136	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
1,2,3-Trimethylbenzene	U		0.00135	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
Vinyl chloride	U		0.000802	0.00250	0.00294	1.09	01/09/2020 21:43	WG1408315
1,3,5-Trimethylbenzene	U		0.00127	0.00500	0.00587	1.09	01/09/2020 21:43	WG1408315
Xylenes, Total	U		0.00562	0.00650	0.00763	1.09	01/09/2020 21:43	WG1408315
(S) Toluene-d8	*101*				*75.0-131*		*01/09/2020 21:43*	WG1408315
(S) 4-Bromofluorobenzene	*97.8*				*67.0-138*		*01/09/2020 21:43*	WG1408315
(S) 1,2-Dichloroethane-d4	*94.3*				*70.0-130*		*01/09/2020 21:43*	WG1408315

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.2		1	01/09/2020 13:41	WG1408444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	11.9		0.206	0.500	0.542	1	01/10/2020 00:17	WG1408493

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0495		0.0229	0.0250	0.0418	1.54	01/09/2020 22:04	WG1408315
Acrylonitrile	U		0.00317	0.0125	0.0209	1.54	01/09/2020 22:04	WG1408315
Benzene	0.00102	J	0.000668	0.00100	0.00167	1.54	01/09/2020 22:04	WG1408315
Bromobenzene	U		0.00175	0.0125	0.0209	1.54	01/09/2020 22:04	WG1408315
Bromodichloromethane	U		0.00132	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
Bromoform	U		0.00999	0.0250	0.0418	1.54	01/09/2020 22:04	WG1408315
Bromomethane	U		0.00618	0.0125	0.0209	1.54	01/09/2020 22:04	WG1408315
n-Butylbenzene	U		0.00641	0.0125	0.0209	1.54	01/09/2020 22:04	WG1408315
sec-Butylbenzene	U		0.00423	0.0125	0.0209	1.54	01/09/2020 22:04	WG1408315
tert-Butylbenzene	U		0.00259	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
Carbon tetrachloride	U		0.00180	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
Chlorobenzene	U		0.000957	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
Chlorodibromomethane	U		0.000752	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
Chloroethane	U		0.00180	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
Chloroform	U		0.000693	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
Chloromethane	U		0.00232	0.0125	0.0209	1.54	01/09/2020 22:04	WG1408315
2-Chlorotoluene	U		0.00154	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
4-Chlorotoluene	U		0.00189	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
1,2-Dibromo-3-Chloropropane	U		0.00852	0.0250	0.0418	1.54	01/09/2020 22:04	WG1408315
1,2-Dibromoethane	U		0.000877	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
Dibromomethane	U		0.00167	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
1,2-Dichlorobenzene	U		0.00242	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
1,3-Dichlorobenzene	U		0.00284	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
1,4-Dichlorobenzene	U		0.00329	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
Dichlorodifluoromethane	U		0.00137	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
1,1-Dichloroethane	U		0.000961	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
1,2-Dichloroethane	U		0.000794	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
1,1-Dichloroethene	U		0.000835	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
cis-1,2-Dichloroethene	U		0.00115	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
trans-1,2-Dichloroethene	U		0.00239	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
1,2-Dichloropropane	U		0.00212	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
1,1-Dichloropropene	U		0.00117	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
1,3-Dichloropropane	U		0.00292	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
cis-1,3-Dichloropropene	U		0.00113	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
trans-1,3-Dichloropropene	U		0.00256	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
2,2-Dichloropropane	U		0.00132	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
Di-isopropyl ether	U		0.000585	0.00100	0.00167	1.54	01/09/2020 22:04	WG1408315
Ethylbenzene	0.0111		0.000885	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
Hexachloro-1,3-butadiene	U		0.0212	0.0250	0.0418	1.54	01/09/2020 22:04	WG1408315
Isopropylbenzene	U		0.00144	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
p-Isopropyltoluene	0.00568	J	0.00389	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
2-Butanone (MEK)	0.0472	B	0.0209	0.0250	0.0418	1.54	01/09/2020 22:04	WG1408315
Methylene Chloride	U		0.0111	0.0250	0.0418	1.54	01/09/2020 22:04	WG1408315
4-Methyl-2-pentanone (MIBK)	U		0.0167	0.0250	0.0418	1.54	01/09/2020 22:04	WG1408315
Methyl tert-butyl ether	U		0.000493	0.00100	0.00167	1.54	01/09/2020 22:04	WG1408315

SB44 (6-8)

Collected date/time: 01/07/20 14:50

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Naphthalene	U		0.00521	0.0125	0.0209	1.54	01/09/2020 22:04	WG1408315
n-Propylbenzene	U		0.00197	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
Styrene	U		0.00456	0.0125	0.0209	1.54	01/09/2020 22:04	WG1408315
1,1,1,2-Tetrachloroethane	U		0.000835	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
1,1,2,2-Tetrachloroethane	U		0.000652	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
1,1,2-Trichlorotrifluoroethane	U		0.00113	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
Tetrachloroethene	U		0.00117	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
Toluene	0.0682		0.00209	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
1,2,3-Trichlorobenzene	U	J3	0.00104	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
1,2,4-Trichlorobenzene	U		0.00805	0.0125	0.0209	1.54	01/09/2020 22:04	WG1408315
1,1,1-Trichloroethane	U		0.000459	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
1,1,2-Trichloroethane	U		0.00148	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
Trichloroethene	U		0.000668	0.00100	0.00167	1.54	01/09/2020 22:04	WG1408315
Trichlorofluoromethane	U		0.000835	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
1,2,3-Trichloropropane	U		0.00852	0.0125	0.0209	1.54	01/09/2020 22:04	WG1408315
1,2,4-Trimethylbenzene	0.00563	B J	0.00194	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
1,2,3-Trimethylbenzene	U		0.00192	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
Vinyl chloride	U		0.00114	0.00250	0.00418	1.54	01/09/2020 22:04	WG1408315
1,3,5-Trimethylbenzene	U		0.00180	0.00500	0.00835	1.54	01/09/2020 22:04	WG1408315
Xylenes, Total	0.0438		0.00799	0.00650	0.0108	1.54	01/09/2020 22:04	WG1408315
(S) Toluene-d8	*99.9*				*75.0-131*		*01/09/2020 22:04*	WG1408315
(S) 4-Bromofluorobenzene	*96.6*				*67.0-138*		*01/09/2020 22:04*	WG1408315
(S) 1,2-Dichloroethane-d4	*95.4*				*70.0-130*		*01/09/2020 22:04*	WG1408315

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	73.1		1	01/09/2020 13:41	WG1408444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	33.5		0.260	0.500	0.684	1	01/10/2020 00:20	WG1408493

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0855		0.0217	0.0250	0.0397	1.16	01/09/2020 22:26	WG1408315
Acrylonitrile	U		0.00301	0.0125	0.0198	1.16	01/09/2020 22:26	WG1408315
Benzene	0.00414		0.000635	0.00100	0.00159	1.16	01/09/2020 22:26	WG1408315
Bromobenzene	U		0.00167	0.0125	0.0198	1.16	01/09/2020 22:26	WG1408315
Bromodichloromethane	U		0.00125	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
Bromoform	U		0.00949	0.0250	0.0397	1.16	01/09/2020 22:26	WG1408315
Bromomethane	U		0.00587	0.0125	0.0198	1.16	01/09/2020 22:26	WG1408315
n-Butylbenzene	U		0.00609	0.0125	0.0198	1.16	01/09/2020 22:26	WG1408315
sec-Butylbenzene	U		0.00401	0.0125	0.0198	1.16	01/09/2020 22:26	WG1408315
tert-Butylbenzene	U		0.00246	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
Carbon tetrachloride	U		0.00171	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
Chlorobenzene	U		0.000909	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
Chlorodibromomethane	U		0.000714	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
Chloroethane	U		0.00171	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
Chloroform	U		0.000658	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
Chloromethane	U		0.00221	0.0125	0.0198	1.16	01/09/2020 22:26	WG1408315
2-Chlorotoluene	U		0.00146	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
4-Chlorotoluene	U		0.00179	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
1,2-Dibromo-3-Chloropropane	U		0.00809	0.0250	0.0397	1.16	01/09/2020 22:26	WG1408315
1,2-Dibromoethane	U		0.000833	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
Dibromomethane	U		0.00159	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
1,2-Dichlorobenzene	U		0.00230	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
1,3-Dichlorobenzene	U		0.00270	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
1,4-Dichlorobenzene	U		0.00313	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
Dichlorodifluoromethane	U		0.00130	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
1,1-Dichloroethane	U		0.000912	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
1,2-Dichloroethane	U		0.000754	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
1,1-Dichloroethene	U		0.000793	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
cis-1,2-Dichloroethene	U		0.00109	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
trans-1,2-Dichloroethene	U		0.00227	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
1,2-Dichloropropane	U		0.00201	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
1,1-Dichloropropene	U		0.00111	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
1,3-Dichloropropane	U		0.00278	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
cis-1,3-Dichloropropene	U		0.00108	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
trans-1,3-Dichloropropene	U		0.00243	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
2,2-Dichloropropane	U		0.00126	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
Di-isopropyl ether	U		0.000555	0.00100	0.00159	1.16	01/09/2020 22:26	WG1408315
Ethylbenzene	0.00297	J	0.000841	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
Hexachloro-1,3-butadiene	U		0.0201	0.0250	0.0397	1.16	01/09/2020 22:26	WG1408315
Isopropylbenzene	U		0.00137	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
p-Isopropyltoluene	U		0.00370	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
2-Butanone (MEK)	0.142	B	0.0198	0.0250	0.0397	1.16	01/09/2020 22:26	WG1408315
Methylene Chloride	0.0114	J	0.0105	0.0250	0.0397	1.16	01/09/2020 22:26	WG1408315
4-Methyl-2-pentanone (MIBK)	U		0.0159	0.0250	0.0397	1.16	01/09/2020 22:26	WG1408315
Methyl tert-butyl ether	U		0.000468	0.00100	0.00159	1.16	01/09/2020 22:26	WG1408315

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Naphthalene	U		0.00495	0.0125	0.0198	1.16	01/09/2020 22:26	WG1408315
n-Propylbenzene	U		0.00187	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
Styrene	U		0.00433	0.0125	0.0198	1.16	01/09/2020 22:26	WG1408315
1,1,1,2-Tetrachloroethane	U		0.000793	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
1,1,2,2-Tetrachloroethane	U		0.000619	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
1,1,2-Trichlorotrifluoroethane	U		0.00107	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
Tetrachloroethene	U		0.00111	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
Toluene	0.0332		0.00198	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
1,2,3-Trichlorobenzene	U	J3	0.000992	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
1,2,4-Trichlorobenzene	U		0.00765	0.0125	0.0198	1.16	01/09/2020 22:26	WG1408315
1,1,1-Trichloroethane	U		0.000436	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
1,1,2-Trichloroethane	U		0.00140	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
Trichloroethene	U		0.000635	0.00100	0.00159	1.16	01/09/2020 22:26	WG1408315
Trichlorofluoromethane	U		0.000793	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
1,2,3-Trichloropropane	U		0.00809	0.0125	0.0198	1.16	01/09/2020 22:26	WG1408315
1,2,4-Trimethylbenzene	0.0174	B	0.00184	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
1,2,3-Trimethylbenzene	0.00857		0.00182	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
Vinyl chloride	U		0.00108	0.00250	0.00397	1.16	01/09/2020 22:26	WG1408315
1,3,5-Trimethylbenzene	0.00832		0.00171	0.00500	0.00793	1.16	01/09/2020 22:26	WG1408315
Xylenes, Total	0.0107		0.00758	0.00650	0.0103	1.16	01/09/2020 22:26	WG1408315
(S) Toluene-d8	*102*				*75.0-131*		*01/09/2020 22:26*	WG1408315
(S) 4-Bromofluorobenzene	*89.8*				*67.0-138*		*01/09/2020 22:26*	WG1408315
(S) 1,2-Dichloroethane-d4	*94.8*				*70.0-130*		*01/09/2020 22:26*	WG1408315

SB44 (15-16)

Collected date/time: 01/07/20 14:53

SAMPLE RESULTS - 51

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	77.3		1	01/09/2020 13:41	WG1408444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	9.68		0.246	0.500	0.647	1	01/10/2020 00:22	WG1408493

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0679	J3	0.0200	0.0250	0.0366	1.13	01/10/2020 01:05	WG1408822
Acrylonitrile	U		0.00278	0.0125	0.0182	1.13	01/10/2020 01:05	WG1408822
Benzene	0.00252		0.000585	0.00100	0.00146	1.13	01/10/2020 01:05	WG1408822
Bromobenzene	U		0.00153	0.0125	0.0182	1.13	01/10/2020 01:05	WG1408822
Bromodichloromethane	U		0.00115	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
Bromoform	U		0.00874	0.0250	0.0366	1.13	01/10/2020 01:05	WG1408822
Bromomethane	U		0.00541	0.0125	0.0182	1.13	01/10/2020 01:05	WG1408822
n-Butylbenzene	U		0.00561	0.0125	0.0182	1.13	01/10/2020 01:05	WG1408822
sec-Butylbenzene	U		0.00370	0.0125	0.0182	1.13	01/10/2020 01:05	WG1408822
tert-Butylbenzene	U		0.00227	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
Carbon tetrachloride	U		0.00158	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
Chlorobenzene	U		0.000837	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
Chlorodibromomethane	U		0.000658	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
Chloroethane	U		0.00158	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
Chloroform	0.000657	J	0.000607	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
Chloromethane	U		0.00203	0.0125	0.0182	1.13	01/10/2020 01:05	WG1408822
2-Chlorotoluene	U	J4	0.00134	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
4-Chlorotoluene	U		0.00165	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
1,2-Dibromo-3-Chloropropane	U	J4	0.00745	0.0250	0.0366	1.13	01/10/2020 01:05	WG1408822
1,2-Dibromoethane	U		0.000767	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
Dibromomethane	U		0.00146	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
1,2-Dichlorobenzene	U		0.00212	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
1,3-Dichlorobenzene	U		0.00248	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
1,4-Dichlorobenzene	U		0.00288	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
Dichlorodifluoromethane	U		0.00120	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
1,1-Dichloroethane	U		0.000840	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
1,2-Dichloroethane	U		0.000694	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
1,1-Dichloroethene	U		0.000731	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
cis-1,2-Dichloroethene	U		0.00101	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
trans-1,2-Dichloroethene	U		0.00209	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
1,2-Dichloropropane	U		0.00186	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
1,1-Dichloropropene	U		0.00102	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
1,3-Dichloropropane	U		0.00256	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
cis-1,3-Dichloropropene	U		0.000991	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
trans-1,3-Dichloropropene	U		0.00224	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
2,2-Dichloropropane	U		0.00116	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
Di-isopropyl ether	U		0.000512	0.00100	0.00146	1.13	01/10/2020 01:05	WG1408822
Ethylbenzene	0.00146	J	0.000775	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
Hexachloro-1,3-butadiene	U		0.0186	0.0250	0.0366	1.13	01/10/2020 01:05	WG1408822
Isopropylbenzene	U		0.00126	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
p-Isopropyltoluene	0.0392		0.00341	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
2-Butanone (MEK)	0.0208	J	0.0183	0.0250	0.0366	1.13	01/10/2020 01:05	WG1408822
Methylene Chloride	U		0.00970	0.0250	0.0366	1.13	01/10/2020 01:05	WG1408822
4-Methyl-2-pentanone (MIBK)	U		0.0146	0.0250	0.0366	1.13	01/10/2020 01:05	WG1408822
Methyl tert-butyl ether	U		0.000431	0.00100	0.00146	1.13	01/10/2020 01:05	WG1408822

SB44 (15-16)
Collected date/time: 01/07/20 14:53

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Naphthalene	U		0.00456	0.0125	0.0182	1.13	01/10/2020 01:05	WG1408822
n-Propylbenzene	0.00222	J	0.00172	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
Styrene	U		0.00399	0.0125	0.0182	1.13	01/10/2020 01:05	WG1408822
1,1,1,2-Tetrachloroethane	U	J4	0.000731	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
1,1,2,2-Tetrachloroethane	U		0.000570	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
1,1,2-Trichlorotrifluoroethane	U		0.000987	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
Tetrachloroethene	U		0.00102	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
Toluene	0.00833		0.00183	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
1,2,3-Trichlorobenzene	U		0.000913	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
1,2,4-Trichlorobenzene	U		0.00704	0.0125	0.0182	1.13	01/10/2020 01:05	WG1408822
1,1,1-Trichloroethane	U		0.000402	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
1,1,2-Trichloroethane	U		0.00129	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
Trichloroethene	U		0.000585	0.00100	0.00146	1.13	01/10/2020 01:05	WG1408822
Trichlorofluoromethane	U		0.000731	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
1,2,3-Trichloropropane	U		0.00745	0.0125	0.0182	1.13	01/10/2020 01:05	WG1408822
1,2,4-Trimethylbenzene	0.00453	J	0.00170	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
1,2,3-Trimethylbenzene	0.00292	J	0.00168	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
Vinyl chloride	U		0.000998	0.00250	0.00366	1.13	01/10/2020 01:05	WG1408822
1,3,5-Trimethylbenzene	U	J4	0.00158	0.00500	0.00731	1.13	01/10/2020 01:05	WG1408822
Xylenes, Total	U		0.00699	0.00650	0.00951	1.13	01/10/2020 01:05	WG1408822
(S) Toluene-d8	*111*				*75.0-131*		*01/10/2020 01:05*	WG1408822
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*01/10/2020 01:05*	WG1408822
(S) 1,2-Dichloroethane-d4	*98.3*				*70.0-130*		*01/10/2020 01:05*	WG1408822

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.7		1	01/09/2020 14:28	WG1408466

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.895	0.100	2.64	25	01/09/2020 16:03	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*01/09/2020 16:03*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		140	4.00	422	100	01/10/2020 18:12	WG1408977
Residual Range Organics (RRO)	1740		351	10.0	1060	100	01/10/2020 18:12	WG1408977
(S) o-Terphenyl	*75.9*	J7			*18.0-148*		*01/10/2020 18:12*	WG1408977

Sample Narrative:

L1177542-52 WG1408977: Cannot run at lower dilution due to viscosity of extract

SB47 (1-2)

Collected date/time: 01/07/20 12:31

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.9		1	01/09/2020 14:28	WG1408466

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.893	0.100	2.64	25	01/09/2020 16:24	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*01/09/2020 16:24*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	3.87	J	1.40	4.00	4.22	1	01/10/2020 19:15	WG1408977
Residual Range Organics (RRO)	36.0		3.51	10.0	10.5	1	01/10/2020 19:15	WG1408977
(S) o-Terphenyl	*67.1*				*18.0-148*		*01/10/2020 19:15*	WG1408977

SB48 (0-1)

Collected date/time: 01/07/20 14:00

SAMPLE RESULTS - 54

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.6		1	01/09/2020 14:28	WG1408466

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.73	J	1.40	0.100	4.13	38.3	01/09/2020 16:44	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*01/09/2020 16:44*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		144	4.00	432	100	01/10/2020 17:09	WG1408977
Residual Range Organics (RRO)	1840		359	10.0	1080	100	01/10/2020 17:09	WG1408977
(S) o-Terphenyl	*72.0*	J7			*18.0-148*		*01/10/2020 17:09*	WG1408977

Sample Narrative:

L1177542-54 WG1408977: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.0		1	01/09/2020 14:28	WG1408466

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.902	0.100	2.66	25	01/09/2020 17:05	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*01/09/2020 17:05*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		70.8	4.00	213	50	01/10/2020 15:41	WG1408977
Residual Range Organics (RRO)	500	J	177	10.0	532	50	01/10/2020 15:41	WG1408977
(S) o-Terphenyl	*62.4*	J7			*18.0-148*		*01/10/2020 15:41*	WG1408977

Sample Narrative:

L1177542-55 WG1408977: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.8		1	01/09/2020 14:28	WG1408466

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.944	0.100	2.78	25	01/09/2020 17:25	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*01/09/2020 17:25*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		74.8	4.00	225	50.5	01/10/2020 17:22	WG1408977
Residual Range Organics (RRO)	1100		187	10.0	562	50.5	01/10/2020 17:22	WG1408977
(S) o-Terphenyl	*71.5*	J7			*18.0-148*		*01/10/2020 17:22*	WG1408977

Sample Narrative:

L1177542-56 WG1408977: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.2		1	01/09/2020 14:28	WG1408466

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.27	J	1.18	0.100	3.48	32.8	01/09/2020 17:46	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*01/09/2020 17:46*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		70.6	4.00	212	50	01/10/2020 16:06	WG1408977
Residual Range Organics (RRO)	618		177	10.0	531	50	01/10/2020 16:06	WG1408977
(S) o-Terphenyl	*64.2*	J7			*18.0-148*		*01/10/2020 16:06*	WG1408977

Sample Narrative:

L1177542-57 WG1408977: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.9		1	01/09/2020 14:28	WG1408466

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.922	0.100	2.72	25	01/09/2020 18:07	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*01/09/2020 18:07*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	143	J	72.4	4.00	218	50	01/10/2020 17:34	WG1408977
Residual Range Organics (RRO)	1110		181	10.0	544	50	01/10/2020 17:34	WG1408977
(S) o-Terphenyl	*76.8*	J7			*18.0-148*		*01/10/2020 17:34*	WG1408977

Sample Narrative:

L1177542-58 WG1408977: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.9		1	01/09/2020 14:28	WG1408466

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.08	J	1.01	0.100	2.97	27	01/09/2020 18:27	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*01/09/2020 18:27*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	41.8		7.39	4.00	22.2	5.05	01/10/2020 15:53	WG1408977
Residual Range Organics (RRO)	78.0		18.5	10.0	55.5	5.05	01/10/2020 15:53	WG1408977
(S) o-Terphenyl	*56.8*				*18.0-148*		*01/10/2020 15:53*	WG1408977

SB51 (0-1)

Collected date/time: 01/07/20 12:58

SAMPLE RESULTS - 60

L1177542

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	93.7		1	01/09/2020 14:28	WG1408466

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.905	0.100	2.67	25	01/09/2020 18:48	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*01/09/2020 18:48*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	292		71.0	4.00	213	50	01/10/2020 17:47	WG1408977
Residual Range Organics (RRO)	1670		178	10.0	534	50	01/10/2020 17:47	WG1408977
(S) o-Terphenyl	*83.0*	J7			*18.0-148*		*01/10/2020 17:47*	WG1408977

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB51 (1-2)

Collected date/time: 01/07/20 12:59

SAMPLE RESULTS - 61

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.5		1	01/09/2020 14:28	WG1408466

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.66	0.100	4.89	42.8	01/09/2020 19:08	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*01/09/2020 19:08*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	49.7	J	30.9	4.00	92.8	20.3	01/10/2020 16:19	WG1408977
Residual Range Organics (RRO)	415		77.3	10.0	232	20.3	01/10/2020 16:19	WG1408977
(S) o-Terphenyl	*65.9*	J7			*18.0-148*		*01/10/2020 16:19*	WG1408977

Sample Narrative:

L1177542-61 WG1408977: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.9		1	01/09/2020 14:15	WG1408468

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	0.936	J	0.903	0.100	2.66	25.3	01/09/2020 19:29	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*01/09/2020 19:29*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	139	J	70.0	4.00	211	50	01/10/2020 19:03	WG1408977
Residual Range Organics (RRO)	1430		175	10.0	527	50	01/10/2020 19:03	WG1408977
(S) o-Terphenyl	*75.7*	J7			*18.0-148*		*01/10/2020 19:03*	WG1408977

Sample Narrative:

L1177542-62 WG1408977: Cannot run at lower dilution due to viscosity of extract

SB52 (1-2)
Collected date/time: 01/07/20 13:31

SAMPLE RESULTS - 63

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.5		1	01/09/2020 14:15	WG1408468

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.01	J	0.897	0.100	2.65	25	01/09/2020 19:49	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*01/09/2020 19:49*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	176		28.3	4.00	85.1	20.1	01/10/2020 16:31	WG1408977
Residual Range Organics (RRO)	743		70.8	10.0	213	20.1	01/10/2020 16:31	WG1408977
(S) o-Terphenyl	*56.7*	J7			*18.0-148*		*01/10/2020 16:31*	WG1408977

SB53 (0-1)
Collected date/time: 01/07/20 13:10

SAMPLE RESULTS - 64

L1177542

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.3		1	01/09/2020 14:15	WG1408468

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2.02	J	1.03	0.100	3.04	28.7	01/09/2020 20:10	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*01/09/2020 20:10*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	185	J	70.5	4.00	212	50	01/10/2020 18:50	WG1408977
Residual Range Organics (RRO)	1420		177	10.0	530	50	01/10/2020 18:50	WG1408977
(S) o-Terphenyl	*82.3*	J7			*18.0-148*		*01/10/2020 18:50*	WG1408977

Sample Narrative:

L1177542-64 WG1408977: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.3		1	01/09/2020 14:15	WG1408468

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.22	J	0.939	0.100	2.77	25	01/09/2020 20:30	WG1408430
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*01/09/2020 20:30*	WG1408430

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	53.8	J	29.5	4.00	88.6	20	01/10/2020 16:56	WG1408977
Residual Range Organics (RRO)	459		73.8	10.0	222	20	01/10/2020 16:56	WG1408977
(S) o-Terphenyl	*67.1*	J7			*18.0-148*		*01/10/2020 16:56*	WG1408977

Sample Narrative:

L1177542-65 WG1408977: Cannot run at lower dilution due to viscosity of extract

SB-39 (1.5-2)

Collected date/time: 01/07/20 09:30

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.2		1	01/10/2020 09:05	WG1408846

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.92		0.515	2.00	2.24	1	01/10/2020 00:25	WG1408493
Cadmium	0.140	J	0.0784	0.500	0.560	1	01/10/2020 00:25	WG1408493
Lead	13.4		0.213	0.500	0.560	1	01/10/2020 00:25	WG1408493

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00151	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Alpha BHC	U		0.00152	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Beta BHC	U		0.00179	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Delta BHC	U		0.00160	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Gamma BHC	U		0.00162	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Chlordane	U		0.0437	0.200	0.224	1	01/10/2020 10:02	WG1408518
4,4-DDD	U		0.00175	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
4,4-DDE	U		0.00173	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
4,4-DDT	U		0.00224	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Dieldrin	U		0.00170	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Endosulfan I	U		0.00167	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Endosulfan II	U		0.00179	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Endosulfan sulfate	U		0.00169	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Endrin	U		0.00176	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Endrin aldehyde	U		0.00145	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Endrin ketone	U		0.00185	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Hexachlorobenzene	U		0.00139	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Heptachlor	U		0.00173	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Heptachlor epoxide	U		0.00180	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Methoxychlor	U		0.00199	0.0200	0.0224	1	01/10/2020 10:02	WG1408518
Toxaphene	U		0.0403	0.400	0.448	1	01/10/2020 10:02	WG1408518
(S) Decachlorobiphenyl	*53.5*				*10.0-135*		*01/10/2020 10:02*	WG1408518
(S) Tetrachloro-m-xylene	*75.5*				*10.0-139*		*01/10/2020 10:02*	WG1408518

SB-38 (1.5-2)

Collected date/time: 01/07/20 09:53

SAMPLE RESULTS - 67

L1177542

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.6		1	01/10/2020 09:05	WG1408846

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	40.0		0.502	2.00	2.18	1	01/09/2020 23:39	WG1408493
Cadmium	0.302	J	0.0764	0.500	0.546	1	01/09/2020 23:39	WG1408493
Lead	33.0		0.207	0.500	0.546	1	01/09/2020 23:39	WG1408493

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00147	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Alpha BHC	U		0.00148	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Beta BHC	U		0.00175	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Delta BHC	U		0.00156	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Gamma BHC	U		0.00158	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Chlordane	U		0.0426	0.200	0.218	1	01/10/2020 10:14	WG1408518
4,4-DDD	U		0.00170	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
4,4-DDE	U		0.00168	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
4,4-DDT	U		0.00218	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Dieldrin	U		0.00166	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Endosulfan I	U		0.00163	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Endosulfan II	U		0.00175	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Endosulfan sulfate	U		0.00165	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Endrin	U		0.00171	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Endrin aldehyde	U		0.00141	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Endrin ketone	U		0.00180	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Hexachlorobenzene	U		0.00135	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Heptachlor	U		0.00168	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Heptachlor epoxide	U		0.00176	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Methoxychlor	U		0.00194	0.0200	0.0218	1	01/10/2020 10:14	WG1408518
Toxaphene	U		0.0393	0.400	0.437	1	01/10/2020 10:14	WG1408518
(S) Decachlorobiphenyl	*99.7*				*10.0-135*		*01/10/2020 10:14*	WG1408518
(S) Tetrachloro-m-xylene	*97.5*				*10.0-139*		*01/10/2020 10:14*	WG1408518

Method Blank (MB)

(MB) R3489556-1 01/09/20 13:59

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1177542-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1177542-01 01/09/20 13:59 • (DUP) R3489556-3 01/09/20 13:59

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	93.2	90.5	1	2.90		10

Laboratory Control Sample (LCS)

(LCS) R3489556-2 01/09/20 13:59

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) R3489578-1 01/09/20 17:06

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1177542-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1177542-11 01/09/20 17:06 • (DUP) R3489578-3 01/09/20 17:06

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	92.3	94.1	1	1.98		10

Laboratory Control Sample (LCS)

(LCS) R3489578-2 01/09/20 17:06

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) R3489573-1 01/09/20 16:02

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1177542-30 Original Sample (OS) • Duplicate (DUP)

(OS) L1177542-30 01/09/20 16:02 • (DUP) R3489573-3 01/09/20 16:02

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.0	88.4	1	0.729		10

Laboratory Control Sample (LCS)

(LCS) R3489573-2 01/09/20 16:02

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) R3489587-1 01/09/20 17:33

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1177542-36 Original Sample (OS) • Duplicate (DUP)

(OS) L1177542-36 01/09/20 17:33 • (DUP) R3489587-3 01/09/20 17:33

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	93.1	92.3	1	0.837		10

Laboratory Control Sample (LCS)

(LCS) R3489587-2 01/09/20 17:33

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) R3489554-1 01/09/20 13:41

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1177542-48 Original Sample (OS) • Duplicate (DUP)

(OS) L1177542-48 01/09/20 13:41 • (DUP) R3489554-3 01/09/20 13:41

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	92.8	93.3	1	0.601		10

Laboratory Control Sample (LCS)

(LCS) R3489554-2 01/09/20 13:41

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) R3489559-1 01/09/20 14:28

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1177542-55 Original Sample (OS) • Duplicate (DUP)

(OS) L1177542-55 01/09/20 14:28 • (DUP) R3489559-3 01/09/20 14:28

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.0	94.6	1	0.678		10

Laboratory Control Sample (LCS)

(LCS) R3489559-2 01/09/20 14:28

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) R3489558-1 01/09/20 14:15

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1177542-65 Original Sample (OS) • Duplicate (DUP)

(OS) L1177542-65 01/09/20 14:15 • (DUP) R3489558-3 01/09/20 14:15

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	90.3	85.8	1	5.14		10

Laboratory Control Sample (LCS)

(LCS) R3489558-2 01/09/20 14:15

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) R3489692-1 01/10/20 09:05

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1177542-67 Original Sample (OS) • Duplicate (DUP)

(OS) L1177542-67 01/10/20 09:05 • (DUP) R3489692-3 01/10/20 09:05

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.6	91.9	1	0.284		10

Laboratory Control Sample (LCS)

(LCS) R3489692-2 01/10/20 09:05

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3489509-1 01/09/20 23:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Arsenic	U		0.460	2.00
Cadmium	U		0.0700	0.500
Lead	U		0.190	0.500

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3489509-2 01/09/20 23:34 • (LCSD) R3489509-3 01/09/20 23:37

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Arsenic	100	92.8	91.8	92.8	91.8	80.0-120			1.06	20
Cadmium	100	97.3	97.1	97.3	97.1	80.0-120			0.275	20
Lead	100	95.5	94.1	95.5	94.1	80.0-120			1.40	20

L1177542-67 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1177542-67 01/09/20 23:39 • (MS) R3489509-6 01/09/20 23:47 • (MSD) R3489509-7 01/09/20 23:49

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	109	40.0	125	133	78.1	84.8	1	75.0-125			5.72	20
Cadmium	109	0.302	102	107	93.5	97.6	1	75.0-125			4.25	20
Lead	109	33.0	130	136	88.6	94.7	1	75.0-125			5.00	20

Method Blank (MB)

(MB) R3489523-1 01/10/20 03:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Cadmium	U		0.0700	0.500
Lead	U		0.190	0.500

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3489523-2 01/10/20 03:45 • (LCSD) R3489523-3 01/10/20 03:48

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 %
Arsenic	100	96.1	96.0	96.1	96.0	80.0-120			0.109	20
Cadmium	100	96.0	95.9	96.0	95.9	80.0-120			0.174	20
Lead	100	96.5	96.6	96.5	96.6	80.0-120			0.0284	20

L1177542-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1177542-01 01/10/20 03:51 • (MS) R3489523-6 01/10/20 03:59 • (MSD) R3489523-7 01/10/20 04:01

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 %
Arsenic	107	13.7	129	125	107	104	1	75.0-125			2.68	20
Cadmium	107	0.293	110	112	102	104	1	75.0-125			1.84	20
Lead	107	20.5	139	136	111	108	1	75.0-125			2.35	20

Method Blank (MB)

(MB) R3489524-1 01/10/20 05:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Cadmium	U		0.0700	0.500
Lead	U		0.190	0.500

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3489524-2 01/10/20 05:14 • (LCSD) R3489524-3 01/10/20 05:17

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 %
Arsenic	100	98.3	95.1	98.3	95.1	80.0-120			3.25	20
Cadmium	100	95.9	94.9	95.9	94.9	80.0-120			1.06	20
Lead	100	98.5	95.4	98.5	95.4	80.0-120			3.14	20

L1177542-27 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1177542-27 01/10/20 05:20 • (MS) R3489524-6 01/10/20 05:27 • (MSD) R3489524-7 01/10/20 05:30

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 %
Arsenic	110	3.55	112	104	98.1	91.2	1	75.0-125			7.09	20
Cadmium	110	0.117	104	97.7	94.6	88.6	1	75.0-125			6.53	20
Lead	110	15.9	123	116	97.5	91.1	1	75.0-125			5.88	20

Method Blank (MB)

(MB) R3489491-2 01/09/20 12:37

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)	*101*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3489491-1 01/09/20 11:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	4.60	83.6	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*77.0-120*	

L1177542-52 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1177542-52 01/09/20 16:03 • (MS) R3489491-3 01/09/20 20:51 • (MSD) R3489491-4 01/09/20 21:12

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	91.7	U	92.5	82.6	101	90.1	25	10.0-149			11.2	27
(S) a,a,a-Trifluorotoluene(FID)					*113*	*112*		*77.0-120*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3489496-3 01/09/20 12:00

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3489496-3 01/09/20 12:00

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0665		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	0.00250
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	0.00216	J	0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*100*			*75.0-131*
(S) 4-Bromofluorobenzene	*92.8*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3489496-1 01/09/20 10:27 • (LCSD) R3489496-2 01/09/20 10:57

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Acetone	0.625	0.560	0.589	89.6	94.2	10.0-160			5.05	31
Acrylonitrile	0.625	0.683	0.721	109	115	45.0-153			5.41	22
Benzene	0.125	0.125	0.131	100	105	70.0-123			4.69	20
Bromobenzene	0.125	0.130	0.135	104	108	73.0-121			3.77	20
Bromodichloromethane	0.125	0.129	0.135	103	108	73.0-121			4.55	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3489496-1 01/09/20 10:27 • (LCSD) R3489496-2 01/09/20 10:57

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 %
Bromoform	0.125	0.124	0.130	99.2	104	64.0-132			4.72	20
Bromomethane	0.125	0.104	0.107	83.2	85.6	56.0-147			2.84	20
n-Butylbenzene	0.125	0.117	0.134	93.6	107	68.0-135			13.5	20
sec-Butylbenzene	0.125	0.123	0.137	98.4	110	74.0-130			10.8	20
tert-Butylbenzene	0.125	0.118	0.134	94.4	107	75.0-127			12.7	20
Carbon tetrachloride	0.125	0.146	0.158	117	126	66.0-128			7.89	20
Chlorobenzene	0.125	0.123	0.129	98.4	103	76.0-128			4.76	20
Chlorodibromomethane	0.125	0.134	0.141	107	113	74.0-127			5.09	20
Chloroethane	0.125	0.102	0.105	81.6	84.0	61.0-134			2.90	20
Chloroform	0.125	0.126	0.130	101	104	72.0-123			3.12	20
Chloromethane	0.125	0.138	0.143	110	114	51.0-138			3.56	20
2-Chlorotoluene	0.125	0.119	0.131	95.2	105	75.0-124			9.60	20
4-Chlorotoluene	0.125	0.124	0.135	99.2	108	75.0-124			8.49	20
1,2-Dibromo-3-Chloropropane	0.125	0.0971	0.109	77.7	87.2	59.0-130			11.5	20
1,2-Dibromoethane	0.125	0.131	0.135	105	108	74.0-128			3.01	20
Dibromomethane	0.125	0.123	0.129	98.4	103	75.0-122			4.76	20
1,2-Dichlorobenzene	0.125	0.119	0.130	95.2	104	76.0-124			8.84	20
1,3-Dichlorobenzene	0.125	0.118	0.128	94.4	102	76.0-125			8.13	20
1,4-Dichlorobenzene	0.125	0.121	0.129	96.8	103	77.0-121			6.40	20
Dichlorodifluoromethane	0.125	0.158	0.164	126	131	43.0-156			3.73	20
1,1-Dichloroethane	0.125	0.145	0.151	116	121	70.0-127			4.05	20
1,2-Dichloroethane	0.125	0.127	0.129	102	103	65.0-131			1.56	20
1,1-Dichloroethene	0.125	0.137	0.142	110	114	65.0-131			3.58	20
cis-1,2-Dichloroethene	0.125	0.128	0.132	102	106	73.0-125			3.08	20
trans-1,2-Dichloroethene	0.125	0.128	0.133	102	106	71.0-125			3.83	20
1,2-Dichloropropane	0.125	0.134	0.140	107	112	74.0-125			4.38	20
1,1-Dichloropropene	0.125	0.135	0.143	108	114	73.0-125			5.76	20
1,3-Dichloropropane	0.125	0.132	0.139	106	111	80.0-125			5.17	20
cis-1,3-Dichloropropene	0.125	0.122	0.126	97.6	101	76.0-127			3.23	20
trans-1,3-Dichloropropene	0.125	0.120	0.124	96.0	99.2	73.0-127			3.28	20
2,2-Dichloropropane	0.125	0.167	0.168	134	134	59.0-135			0.597	20
Di-isopropyl ether	0.125	0.150	0.156	120	125	60.0-136			3.92	20
Ethylbenzene	0.125	0.115	0.124	92.0	99.2	74.0-126			7.53	20
Hexachloro-1,3-butadiene	0.125	0.125	0.143	100	114	57.0-150			13.4	20
Isopropylbenzene	0.125	0.111	0.122	88.8	97.6	72.0-127			9.44	20
p-Isopropyltoluene	0.125	0.119	0.136	95.2	109	72.0-133			13.3	20
2-Butanone (MEK)	0.625	0.736	0.748	118	120	30.0-160			1.62	24
Methylene Chloride	0.125	0.126	0.132	101	106	68.0-123			4.65	20
4-Methyl-2-pentanone (MIBK)	0.625	0.682	0.695	109	111	56.0-143			1.89	20
Methyl tert-butyl ether	0.125	0.135	0.137	108	110	66.0-132			1.47	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3489496-1 01/09/20 10:27 • (LCSD) R3489496-2 01/09/20 10:57

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 %
Naphthalene	0.125	0.0800	0.0956	64.0	76.5	59.0-130			17.8	20
n-Propylbenzene	0.125	0.115	0.126	92.0	101	74.0-126			9.13	20
Styrene	0.125	0.119	0.125	95.2	100	72.0-127			4.92	20
1,1,1,2-Tetrachloroethane	0.125	0.135	0.146	108	117	74.0-129			7.83	20
1,1,2,2-Tetrachloroethane	0.125	0.134	0.137	107	110	68.0-128			2.21	20
Tetrachloroethene	0.125	0.123	0.136	98.4	109	70.0-136			10.0	20
Toluene	0.125	0.121	0.131	96.8	105	75.0-121			7.94	20
1,1,2-Trichlorotrifluoroethane	0.125	0.130	0.138	104	110	61.0-139			5.97	20
1,2,3-Trichlorobenzene	0.125	0.0906	0.112	72.5	89.6	59.0-139		J3	21.1	20
1,2,4-Trichlorobenzene	0.125	0.0975	0.117	78.0	93.6	62.0-137			18.2	20
1,1,1-Trichloroethane	0.125	0.142	0.147	114	118	69.0-126			3.46	20
1,1,2-Trichloroethane	0.125	0.139	0.141	111	113	78.0-123			1.43	20
Trichloroethene	0.125	0.129	0.132	103	106	76.0-126			2.30	20
Trichlorofluoromethane	0.125	0.119	0.128	95.2	102	61.0-142			7.29	20
1,2,3-Trichloropropane	0.125	0.138	0.140	110	112	67.0-129			1.44	20
1,2,3-Trimethylbenzene	0.125	0.114	0.127	91.2	102	74.0-124			10.8	20
1,2,4-Trimethylbenzene	0.125	0.120	0.135	96.0	108	70.0-126			11.8	20
1,3,5-Trimethylbenzene	0.125	0.117	0.133	93.6	106	73.0-127			12.8	20
Vinyl chloride	0.125	0.117	0.121	93.6	96.8	63.0-134			3.36	20
Xylenes, Total	0.375	0.339	0.369	90.4	98.4	72.0-127			8.47	20
(S) Toluene-d8				*97.8*	*98.8*	*75.0-131*				
(S) 4-Bromofluorobenzene				*94.9*	*96.4*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*99.7*	*98.8*	*70.0-130*				

Method Blank (MB)

(MB) R3489613-3 01/10/20 00:45

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3489613-3 01/10/20 00:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	U		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	0.00250
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 chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*107*			*75.0-131*
(S) 4-Bromofluorobenzene	*99.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*91.9*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3489613-1 01/09/20 20:28 • (LCSD) R3489613-2 01/09/20 20:48

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	0.676	0.406	108	65.0	10.0-160		J3	49.9	31
Acrylonitrile	0.625	0.477	0.427	76.3	68.3	45.0-153			11.1	22
Benzene	0.125	0.103	0.106	82.4	84.8	70.0-123			2.87	20
Bromobenzene	0.125	0.113	0.123	90.4	98.4	73.0-121			8.47	20
Bromodichloromethane	0.125	0.112	0.108	89.6	86.4	73.0-121			3.64	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3489613-1 01/09/20 20:28 • (LCSD) R3489613-2 01/09/20 20:48

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Bromoform	0.125	0.0920	0.0924	73.6	73.9	64.0-132			0.434	20
Bromomethane	0.125	0.103	0.0983	82.4	78.6	56.0-147			4.67	20
n-Butylbenzene	0.125	0.107	0.120	85.6	96.0	68.0-135			11.5	20
sec-Butylbenzene	0.125	0.0994	0.114	79.5	91.2	74.0-130			13.7	20
tert-Butylbenzene	0.125	0.0978	0.109	78.2	87.2	75.0-127			10.8	20
Carbon tetrachloride	0.125	0.109	0.112	87.2	89.6	66.0-128			2.71	20
Chlorobenzene	0.125	0.106	0.112	84.8	89.6	76.0-128			5.50	20
Chlorodibromomethane	0.125	0.102	0.106	81.6	84.8	74.0-127			3.85	20
Chloroethane	0.125	0.113	0.102	90.4	81.6	61.0-134			10.2	20
Chloroform	0.125	0.111	0.113	88.8	90.4	72.0-123			1.79	20
Chloromethane	0.125	0.121	0.125	96.8	100	51.0-138			3.25	20
2-Chlorotoluene	0.125	0.0922	0.105	73.8	84.0	75.0-124	J4		13.0	20
4-Chlorotoluene	0.125	0.0952	0.108	76.2	86.4	75.0-124			12.6	20
1,2-Dibromo-3-Chloropropane	0.125	0.0684	0.0713	54.7	57.0	59.0-130	J4	J4	4.15	20
1,2-Dibromoethane	0.125	0.105	0.109	84.0	87.2	74.0-128			3.74	20
Dibromomethane	0.125	0.113	0.111	90.4	88.8	75.0-122			1.79	20
1,2-Dichlorobenzene	0.125	0.104	0.116	83.2	92.8	76.0-124			10.9	20
1,3-Dichlorobenzene	0.125	0.101	0.110	80.8	88.0	76.0-125			8.53	20
1,4-Dichlorobenzene	0.125	0.106	0.115	84.8	92.0	77.0-121			8.14	20
Dichlorodifluoromethane	0.125	0.145	0.150	116	120	43.0-156			3.39	20
1,1-Dichloroethane	0.125	0.121	0.128	96.8	102	70.0-127			5.62	20
1,2-Dichloroethane	0.125	0.0998	0.101	79.8	80.8	65.0-131			1.20	20
1,1-Dichloroethene	0.125	0.123	0.130	98.4	104	65.0-131			5.53	20
cis-1,2-Dichloroethene	0.125	0.122	0.125	97.6	100	73.0-125			2.43	20
trans-1,2-Dichloroethene	0.125	0.111	0.114	88.8	91.2	71.0-125			2.67	20
1,2-Dichloropropane	0.125	0.120	0.125	96.0	100	74.0-125			4.08	20
1,1-Dichloropropene	0.125	0.111	0.116	88.8	92.8	73.0-125			4.41	20
1,3-Dichloropropane	0.125	0.112	0.116	89.6	92.8	80.0-125			3.51	20
cis-1,3-Dichloropropene	0.125	0.106	0.109	84.8	87.2	76.0-127			2.79	20
trans-1,3-Dichloropropene	0.125	0.0991	0.0991	79.3	79.3	73.0-127			0.000	20
2,2-Dichloropropane	0.125	0.113	0.111	90.4	88.8	59.0-135			1.79	20
Di-isopropyl ether	0.125	0.103	0.109	82.4	87.2	60.0-136			5.66	20
Ethylbenzene	0.125	0.0964	0.109	77.1	87.2	74.0-126			12.3	20
Hexachloro-1,3-butadiene	0.125	0.0898	0.101	71.8	80.8	57.0-150			11.7	20
Isopropylbenzene	0.125	0.0928	0.100	74.2	80.0	72.0-127			7.47	20
p-Isopropyltoluene	0.125	0.103	0.112	82.4	89.6	72.0-133			8.37	20
2-Butanone (MEK)	0.625	0.599	0.613	95.8	98.1	30.0-160			2.31	24
Methylene Chloride	0.125	0.0964	0.102	77.1	81.6	68.0-123			5.65	20
4-Methyl-2-pentanone (MIBK)	0.625	0.495	0.511	79.2	81.8	56.0-143			3.18	20
Methyl tert-butyl ether	0.125	0.0997	0.106	79.8	84.8	66.0-132			6.13	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3489613-1 01/09/20 20:28 • (LCSD) R3489613-2 01/09/20 20:48

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 %
Naphthalene	0.125	0.0892	0.0975	71.4	78.0	59.0-130			8.89	20
n-Propylbenzene	0.125	0.0971	0.115	77.7	92.0	74.0-126			16.9	20
Styrene	0.125	0.102	0.105	81.6	84.0	72.0-127			2.90	20
1,1,1,2-Tetrachloroethane	0.125	0.0881	0.0918	70.5	73.4	74.0-129	J4	J4	4.11	20
1,1,2,2-Tetrachloroethane	0.125	0.0900	0.0884	72.0	70.7	68.0-128			1.79	20
Tetrachloroethene	0.125	0.121	0.124	96.8	99.2	70.0-136			2.45	20
Toluene	0.125	0.0984	0.104	78.7	83.2	75.0-121			5.53	20
1,1,2-Trichlorotrifluoroethane	0.125	0.134	0.137	107	110	61.0-139			2.21	20
1,2,3-Trichlorobenzene	0.125	0.101	0.119	80.8	95.2	59.0-139			16.4	20
1,2,4-Trichlorobenzene	0.125	0.0934	0.105	74.7	84.0	62.0-137			11.7	20
1,1,1-Trichloroethane	0.125	0.102	0.106	81.6	84.8	69.0-126			3.85	20
1,1,2-Trichloroethane	0.125	0.116	0.118	92.8	94.4	78.0-123			1.71	20
Trichloroethene	0.125	0.123	0.136	98.4	109	76.0-126			10.0	20
Trichlorofluoromethane	0.125	0.126	0.127	101	102	61.0-142			0.791	20
1,2,3-Trichloropropane	0.125	0.107	0.116	85.6	92.8	67.0-129			8.07	20
1,2,3-Trimethylbenzene	0.125	0.0945	0.109	75.6	87.2	74.0-124			14.3	20
1,2,4-Trimethylbenzene	0.125	0.0990	0.115	79.2	92.0	70.0-126			15.0	20
1,3,5-Trimethylbenzene	0.125	0.0909	0.104	72.7	83.2	73.0-127	J4		13.4	20
Vinyl chloride	0.125	0.0974	0.0942	77.9	75.4	63.0-134			3.34	20
Xylenes, Total	0.375	0.291	0.311	77.6	82.9	72.0-127			6.64	20
(S) Toluene-d8				*106*	*107*	*75.0-131*				
(S) 4-Bromofluorobenzene				*103*	*103*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*103*	*98.7*	*70.0-130*				

Method Blank (MB)

(MB) R3489768-1 01/10/20 15:15

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	*65.6*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3489768-2 01/10/20 15:28

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	42.5	85.0	50.0-150	
(S) o-Terphenyl			*61.7*	*18.0-148*	

Method Blank (MB)

(MB) R3489737-1 01/09/20 18:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00135	0.0200
Alpha BHC	U		0.00136	0.0200
Beta BHC	U		0.00160	0.0200
Delta BHC	U		0.00143	0.0200
Gamma BHC	U		0.00145	0.0200
4,4-DDD	U		0.00156	0.0200
4,4-DDE	U		0.00154	0.0200
4,4-DDT	U		0.00200	0.0200
Dieldrin	U		0.00152	0.0200
Endosulfan I	U		0.00149	0.0200
Endosulfan II	U		0.00160	0.0200
Endosulfan sulfate	U		0.00151	0.0200
Endrin	U		0.00157	0.0200
Endrin aldehyde	U		0.00129	0.0200
Endrin ketone	U		0.00165	0.0200
Heptachlor	U		0.00154	0.0200
Heptachlor epoxide	U		0.00161	0.0200
Hexachlorobenzene	U		0.00124	0.0200
Methoxychlor	U		0.00178	0.0200
Chlordane	U		0.0390	0.200
Toxaphene	U		0.0360	0.400
(S) Decachlorobiphenyl	*108*			*10.0-135*
(S) Tetrachloro-m-xylene	*104*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3489737-2 01/09/20 18:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0728	109	34.0-136	
Alpha BHC	0.0666	0.0794	119	34.0-139	
Beta BHC	0.0666	0.0669	100	34.0-133	
Delta BHC	0.0666	0.0716	108	34.0-135	
Gamma BHC	0.0666	0.0721	108	34.0-136	
4,4-DDD	0.0666	0.0709	106	33.0-141	
4,4-DDE	0.0666	0.0706	106	34.0-134	
4,4-DDT	0.0666	0.0668	100	30.0-143	
Dieldrin	0.0666	0.0695	104	35.0-137	
Endosulfan I	0.0666	0.0687	103	34.0-134	

Laboratory Control Sample (LCS)

(LCS) R3489737-2 01/09/20 18:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0657	98.6	35.0-132	
Endosulfan sulfate	0.0666	0.0671	101	35.0-132	
Endrin	0.0666	0.0666	100	34.0-137	
Endrin aldehyde	0.0666	0.0564	84.7	23.0-121	
Endrin ketone	0.0666	0.0692	104	35.0-144	
Heptachlor	0.0666	0.0737	111	36.0-141	
Heptachlor epoxide	0.0666	0.0698	105	36.0-134	
Hexachlorobenzene	0.0666	0.0691	104	33.0-129	
Methoxychlor	0.0666	0.0639	95.9	28.0-150	
(S) Decachlorobiphenyl			*114*	*10.0-135*	
(S) Tetrachloro-m-xylene			*107*	*10.0-139*	

L1177542-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1177542-09 01/09/20 18:36 • (MS) R3489737-3 01/09/20 18:51 • (MSD) R3489737-4 01/09/20 19:05

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 %
Aldrin	0.0727	U	0.0895	0.101	123	139	1	20.0-135		J5	12.0	37
Alpha BHC	0.0727	U	0.0960	0.101	132	139	1	27.0-140			5.31	35
Beta BHC	0.0727	U	0.0813	0.0843	112	116	1	23.0-141			3.69	37
Delta BHC	0.0727	U	0.0862	0.0907	119	125	1	21.0-138			5.06	35
Gamma BHC	0.0727	U	0.0884	0.0939	122	129	1	27.0-137			6.10	36
4,4-DDD	0.0727	U	0.0794	0.0814	109	112	1	15.0-152			2.44	39
4,4-DDE	0.0727	U	0.0805	0.0819	111	113	1	10.0-152			1.75	40
4,4-DDT	0.0727	U	0.0755	0.0763	104	105	1	10.0-151			1.01	40
Dieldrin	0.0727	0.0594	0.155	0.170	132	153	1	17.0-145		J5	9.40	37
Endosulfan I	0.0727	U	0.0792	0.0815	109	112	1	20.0-137			2.85	36
Endosulfan II	0.0727	U	0.0718	0.0735	98.8	101	1	15.0-141			2.40	37
Endosulfan sulfate	0.0727	U	0.0731	0.0747	101	103	1	15.0-143			2.21	38
Endrin	0.0727	U	0.0798	0.0819	110	113	1	19.0-143			2.70	37
Endrin aldehyde	0.0727	U	0.0724	0.0740	99.7	102	1	10.0-139			2.09	40
Endrin ketone	0.0727	U	0.0734	0.0754	101	104	1	17.0-149			2.64	38
Heptachlor	0.0727	U	0.0906	0.0944	125	130	1	22.0-138			4.13	37
Heptachlor epoxide	0.0727	U	0.0834	0.0855	115	118	1	22.0-138			2.58	36
Hexachlorobenzene	0.0727	U	0.0811	0.0837	112	115	1	25.0-126			3.18	35
Methoxychlor	0.0727	U	0.0775	0.0790	107	109	1	10.0-159			1.95	40
(S) Decachlorobiphenyl					*101*	*105*		*10.0-135*				
(S) Tetrachloro-m-xylene					*110*	*130*		*10.0-139*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3489536-1 01/09/20 20:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00135	0.0200
Alpha BHC	U		0.00136	0.0200
Beta BHC	U		0.00160	0.0200
Delta BHC	U		0.00143	0.0200
Gamma BHC	U		0.00145	0.0200
4,4-DDD	U		0.00156	0.0200
4,4-DDE	U		0.00154	0.0200
4,4-DDT	U		0.00200	0.0200
Dieldrin	U		0.00152	0.0200
Endosulfan I	U		0.00149	0.0200
Endosulfan II	U		0.00160	0.0200
Endosulfan sulfate	U		0.00151	0.0200
Endrin	U		0.00157	0.0200
Endrin aldehyde	U		0.00129	0.0200
Endrin ketone	U		0.00165	0.0200
Heptachlor	U		0.00154	0.0200
Heptachlor epoxide	U		0.00161	0.0200
Hexachlorobenzene	U		0.00124	0.0200
Methoxychlor	U		0.00178	0.0200
Chlordane	U		0.0390	0.200
Toxaphene	U		0.0360	0.400
(S) Decachlorobiphenyl	*80.0*			*10.0-135*
(S) Tetrachloro-m-xylene	*83.6*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3489536-2 01/09/20 20:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0784	118	34.0-136	
Alpha BHC	0.0666	0.0827	124	34.0-139	
Beta BHC	0.0666	0.0760	114	34.0-133	
Delta BHC	0.0666	0.0811	122	34.0-135	
Gamma BHC	0.0666	0.0802	120	34.0-136	
4,4-DDD	0.0666	0.0819	123	33.0-141	
4,4-DDE	0.0666	0.0782	117	34.0-134	
4,4-DDT	0.0666	0.0804	121	30.0-143	
Dieldrin	0.0666	0.0788	118	35.0-137	
Endosulfan I	0.0666	0.0757	114	34.0-134	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS)

(LCS) R3489536-2 01/09/20 20:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0730	110	35.0-132	
Endosulfan sulfate	0.0666	0.0780	117	35.0-132	
Endrin	0.0666	0.0822	123	34.0-137	
Endrin aldehyde	0.0666	0.0624	93.7	23.0-121	
Endrin ketone	0.0666	0.0787	118	35.0-144	
Heptachlor	0.0666	0.0803	121	36.0-141	
Heptachlor epoxide	0.0666	0.0761	114	36.0-134	
Hexachlorobenzene	0.0666	0.0716	108	33.0-129	
Methoxychlor	0.0666	0.0736	111	28.0-150	
(S) Decachlorobiphenyl			*99.2*	*10.0-135*	
(S) Tetrachloro-m-xylene			*101*	*10.0-139*	

L1177542-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1177542-22 01/09/20 20:45 • (MS) R3489536-3 01/09/20 20:57 • (MSD) R3489536-4 01/09/20 21:09

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 %
Aldrin	0.0717	U	0.0652	0.0787	91.0	110	1	20.0-135			18.7	37
Alpha BHC	0.0717	U	0.0691	0.0825	96.4	115	1	27.0-140			17.6	35
Beta BHC	0.0717	U	0.0647	0.0763	90.2	106	1	23.0-141			16.5	37
Delta BHC	0.0717	U	0.0688	0.0813	95.9	113	1	21.0-138			16.6	35
Gamma BHC	0.0717	U	0.0680	0.0803	94.9	112	1	27.0-137			16.5	36
4,4-DDD	0.0717	U	0.0658	0.0775	91.7	108	1	15.0-152			16.4	39
4,4-DDE	0.0717	U	0.0633	0.0742	88.3	103	1	10.0-152			15.8	40
4,4-DDT	0.0717	U	0.0652	0.0752	91.0	105	1	10.0-151			14.1	40
Dieldrin	0.0717	U	0.0656	0.0767	91.4	107	1	17.0-145			15.6	37
Endosulfan I	0.0717	U	0.0624	0.0735	87.1	103	1	20.0-137			16.3	36
Endosulfan II	0.0717	U	0.0587	0.0684	81.8	95.3	1	15.0-141			15.3	37
Endosulfan sulfate	0.0717	U	0.0621	0.0728	86.6	102	1	15.0-143			15.8	38
Endrin	0.0717	U	0.0663	0.0820	92.5	114	1	19.0-143			21.2	37
Endrin aldehyde	0.0717	U	0.0574	0.0668	80.0	93.1	1	10.0-139			15.1	40
Endrin ketone	0.0717	U	0.0610	0.0715	85.1	99.7	1	17.0-149			15.8	38
Heptachlor	0.0717	U	0.0699	0.0840	97.4	117	1	22.0-138			18.3	37
Heptachlor epoxide	0.0717	U	0.0637	0.0760	88.9	106	1	22.0-138			17.6	36
Hexachlorobenzene	0.0717	U	0.0618	0.0743	86.2	104	1	25.0-126			18.4	35
Methoxychlor	0.0717	U	0.0615	0.0726	85.7	101	1	10.0-159			16.5	40
(S) Decachlorobiphenyl					*75.1*	*93.7*		*10.0-135*				
(S) Tetrachloro-m-xylene					*80.6*	*97.7*		*10.0-139*				

Method Blank (MB)

(MB) R3489697-1 01/10/20 07:58

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00135	0.0200
Alpha BHC	U		0.00136	0.0200
Beta BHC	U		0.00160	0.0200
Delta BHC	U		0.00143	0.0200
Gamma BHC	U		0.00145	0.0200
4,4-DDD	U		0.00156	0.0200
4,4-DDE	U		0.00154	0.0200
4,4-DDT	U		0.00200	0.0200
Dieldrin	U		0.00152	0.0200
Endosulfan I	U		0.00149	0.0200
Endosulfan II	U		0.00160	0.0200
Endosulfan sulfate	U		0.00151	0.0200
Endrin	U		0.00157	0.0200
Endrin aldehyde	U		0.00129	0.0200
Endrin ketone	U		0.00165	0.0200
Heptachlor	U		0.00154	0.0200
Heptachlor epoxide	U		0.00161	0.0200
Hexachlorobenzene	U		0.00124	0.0200
Methoxychlor	U		0.00178	0.0200
Chlordane	U		0.0390	0.200
Toxaphene	U		0.0360	0.400
(S) Decachlorobiphenyl	*84.7*			*10.0-135*
(S) Tetrachloro-m-xylene	*95.9*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3489697-2 01/10/20 08:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0613	92.0	34.0-136	
Alpha BHC	0.0666	0.0641	96.2	34.0-139	
Beta BHC	0.0666	0.0596	89.5	34.0-133	
Delta BHC	0.0666	0.0632	94.9	34.0-135	
Gamma BHC	0.0666	0.0609	91.4	34.0-136	
4,4-DDD	0.0666	0.0502	75.4	33.0-141	
4,4-DDE	0.0666	0.0605	90.8	34.0-134	
4,4-DDT	0.0666	0.0629	94.4	30.0-143	
Dieldrin	0.0666	0.0603	90.5	35.0-137	
Endosulfan I	0.0666	0.0587	88.1	34.0-134	

Laboratory Control Sample (LCS)

(LCS) R3489697-2 01/10/20 08:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0570	85.6	35.0-132	
Endosulfan sulfate	0.0666	0.0610	91.6	35.0-132	
Endrin	0.0666	0.0621	93.2	34.0-137	
Endrin aldehyde	0.0666	0.0389	58.4	23.0-121	
Endrin ketone	0.0666	0.0623	93.5	35.0-144	
Heptachlor	0.0666	0.0628	94.3	36.0-141	
Heptachlor epoxide	0.0666	0.0595	89.3	36.0-134	
Hexachlorobenzene	0.0666	0.0517	77.6	33.0-129	
Methoxychlor	0.0666	0.0592	88.9	28.0-150	
(S) Decachlorobiphenyl			*77.0*	*10.0-135*	
(S) Tetrachloro-m-xylene			*85.7*	*10.0-139*	

L1177542-41 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1177542-41 01/10/20 08:23 • (MS) R3489697-3 01/10/20 08:35 • (MSD) R3489697-4 01/10/20 08:48

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 %
Aldrin	0.0724	U	0.0847	0.0910	117	126	1	20.0-135			7.18	37
Alpha BHC	0.0724	U	0.0859	0.0973	119	134	1	27.0-140			12.5	35
Beta BHC	0.0724	U	0.0816	0.0910	113	126	1	23.0-141			10.8	37
Delta BHC	0.0724	U	0.0875	0.0975	121	135	1	21.0-138			10.8	35
Gamma BHC	0.0724	U	0.0822	0.0926	114	128	1	27.0-137			11.9	36
4,4-DDD	0.0724	U	0.0860	0.0946	119	131	1	15.0-152			9.51	39
4,4-DDE	0.0724	U	0.0823	0.0897	114	124	1	10.0-152			8.60	40
4,4-DDT	0.0724	U	0.0847	0.0915	117	126	1	10.0-151			7.77	40
Dieldrin	0.0724	U	0.0839	0.0918	116	127	1	17.0-145			9.03	37
Endosulfan I	0.0724	U	0.0805	0.0889	111	123	1	20.0-137			9.88	36
Endosulfan II	0.0724	U	0.0765	0.0851	106	118	1	15.0-141			10.6	37
Endosulfan sulfate	0.0724	U	0.0811	0.0904	112	125	1	15.0-143			10.9	38
Endrin	0.0724	U	0.0870	0.0974	120	135	1	19.0-143			11.3	37
Endrin aldehyde	0.0724	U	0.0757	0.0847	105	117	1	10.0-139			11.3	40
Endrin ketone	0.0724	U	0.0816	0.0913	113	126	1	17.0-149			11.2	38
Heptachlor	0.0724	U	0.0865	0.0929	120	128	1	22.0-138			7.15	37
Heptachlor epoxide	0.0724	U	0.0826	0.0899	114	124	1	22.0-138			8.44	36
Hexachlorobenzene	0.0724	U	0.0682	0.0760	94.1	105	1	25.0-126			10.9	35
Methoxychlor	0.0724	U	0.0791	0.0866	109	120	1	10.0-159			9.05	40
(S) Decachlorobiphenyl					*93.2*	*105*		*10.0-135*				
(S) Tetrachloro-m-xylene					*105*	*118*		*10.0-139*				

GLOSSARY OF TERMS

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
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.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCREDITATIONS & LOCATIONS

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia[1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky[1,6]	90010
Kentucky[2]	16
Louisiana	AI30792
Louisiana[1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico[1]	n/a
New York	11742
North Carolina	Env375
North Carolina[1]	DW21704
North Carolina[3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee[1,4]	2006
Texas	T104704245-18-15
Texas[5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

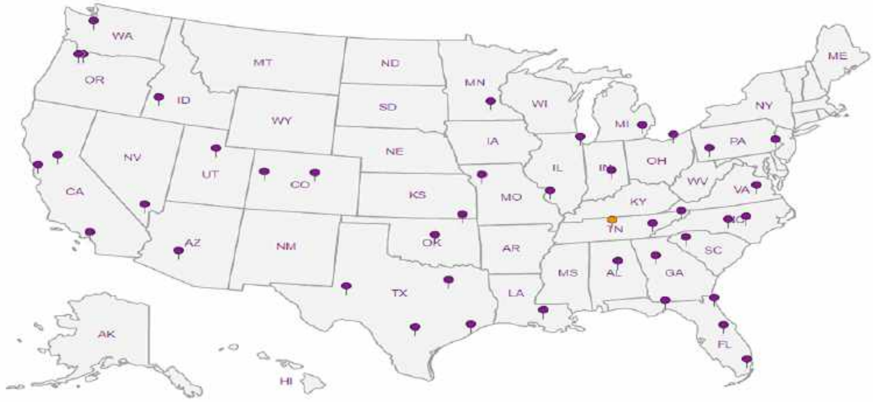
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025[5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources **8048 Northcourt Road** **Houston, TX 77040**	Billing Information: **Accounts Payable** **8048 Northcourt Road** **Houston, TX 77040**	Pres Chk	
Report to: **Kristi Barnette**	Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**		
Project Description: **Future Federal Way Hospital**	City/State Collected: Federal Way WA	Please Circle: PT MT CT ET	
Phone: **713-744-5800** Fax: **713-744-5888**	Client Project # **R13411.08**	Lab Project # **TGERESHTX-R13411**	
Collected by (print): K Barnette	Site/Facility ID #	P.O. # **8772**	
Collected by (signature): KBarnette Immediately Packed on Ice N___ Y X	*Rush?* (Lab MUST Be Notified) ___ Same Day ___ Five Day X Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day	Quote # Date Results Needed	

Chain of Custody Page ___ of ___

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 # 1177542

Table #

Acctnum: **TGERESHTX**

Template: **T160680**

Prelogin: **P747407**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB32(0-.5)	Grab	SS	0-.5	1/7/20	1015	1								X				
SB32(.5-1)	Grab	SS	.5-1	1/7/20	1016	1	X	X	X			X			X			01
SB32(1-1.5)	Grab	SS	1-1.5	1/7/20	1017	1	X	X	X			X			X			02
SB32(1.5-2)	Grab	SS	1.5-2	1/7/20	1019	1	X	X	X			X			X			03
SB32(3-3.5)	Grab	SS	3-3.5	1/7/20	1018	1								X				
SB32(4.5-5)	Grab	SS	4.5-5	1/7/20	1020	1								X				
SB32(5-6)	Grab	SS	5-6	1/7/20	1021	1	X	X	X			X			X			04
SB32(6-7)	Grab	SS	6-7	1/7/20	1022	1								X				
SB32(7-8)	Grab	SS	7-8	1/7/20	1023	1								X				
SB32(8-9)	Grab	SS	8-9	1/7/20	1024	1	X	X	X			X			X			05

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks:

0.3/0.3/1.4/0.4/1.3/1.2/0.4/0.4/0.3/0.5

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ______

Tracking # 1275 8607 1836/1766/1897/1803/1819/1755/1788/1777/1825/1799/1794

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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR 10	
Relinquished by : (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: °C 22-3=1.9	Bottles Received: 148
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/9/20	Time: 8:30

If preservation required by Login: Date/Time

01-024
01-025
01-026
01-027

Condition: NCF / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

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

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.08

Lab Project #
TGERESHTX-R13411

SDG # L1173542

Table #

Collected by (print):
K Barnette

Site/Facility ID #

P.O. #
8772

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Collected by (signature):
KBarnette

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X 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	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB32(9-10)	Grab	SS	9-10	1/7/20	1025	1								X				
SB32(10-11)	Grab	SS	10-11	1/7/20	1026	1	X	X	X			X			X			06
SB32(11-12)	Grab	SS	11-12	1/7/20	1027	1								X				07
SB33(0-.5)	Grab	SS	0-.5	1/7/20	855	1								X				08
SB33(.5-1)	Grab	SS	.5-1	1/7/20	856	1	X	X	X			X			X			07
SB33(1-1.5)	Grab	SS	1-1.5	1/7/20	857	1	X	X	X			X			X			08
SB33(1.5-2)	Grab	SS	1.5-2	1/7/20	858	1	X	X	X			X			X			09
SB33(3-3.5)	Grab	SS	3-3.5	1/7/20	859	1								X				09
SB33(4-4.5)	Grab	SS	4-4.5	1/7/20	900	1								X				11
SB33(5-6)	Grab	SS	5-6	1/7/20	901	1	X	X	X			X			X			10

* 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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR 10
Relinquished by : (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: [illegible] °C Bottles Received: 148
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/9/20 Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page ___ of ___

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National Center for Testing & Innovation

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Phone: 800-767-5859
Fax: 615-758-5859

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnette

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

SDG # 1177542

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB33 (6-7)	Grab	SS	6-7	1/7/20	902	1								X				
SB33 (7-8)	Grab	SS	7-8	1/7/20	903	1								X				
SB33 (8-9)	Grab	SS	8-9	1/7/20	904	1	X	X	X			X			X			11
SB33 (9-10)	Grab	SS	9-10	1/7/20	905	1								X				
SB33 (10-11)	Grab	SS	10-11	1/7/20	906	1	X	X	X			X			X			12
SB33 (11-12)	Grab	SS	11-12	1/7/20	907	1								X				
SB34 (0-.5)	Grab	SS	0-.5	1/7/20	1053	1								X				
SB34 (.5-1)	Grab	SS	.5-1	1/7/20	1054	1	X	X	X			X			X			13
SB34 (1-1.5)	Grab	SS	1-1.5	1/7/20	1055	1	X	X	X			X			X			14
SB34 (1.5-2)	Grab	SS	1.5-2	1/7/20	1056	1	X	X	X			X			X			15

* 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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 10 HCL / MeoH TBR	
Relinquished by : (Signature)	Date: 1-7-20	Time: 1800	Received by: (Signature)	Temp: 28-3=0.9 °C Bottles Received: 148	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/19/20 Time: 8:30	Hold: Condition: [✓ NCF] OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): K Barnette

Immediately Packed on Ice N___ Y X

Rush? (Lab MUST Be Notified)
- ___ Same Day
- ___ Five Day
- X 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 ___ of ___

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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 # L1177542

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB34(3-3.5)	Grab	SS	3-3.5	1/7/20	1057	1								X				
SB34(4.5-5)	Grab	SS	KD 4.5-5 ~~4-5.5~~	1/7/20	1058	1								X				
SB34(5-6)	Grab	SS	5-6	1/7/20	1059	1	X	X	X			X			X			16
SB34(6-7)	Grab	SS	6-7	1/7/20	1100	1								X				
SB34(7-8)	Grab	SS	7-8	1/7/20	1101	1								X				
SB34(8-9)	Grab	SS	8-9	1/7/20	1102	1	X	X	X			X			X			17
SB34(9-10)	Grab	SS	9-10	1/7/20	1103	1								X				
SB34 (10-11)	Grab	SS	10-11	1/7/20	1104	1	X	X	X			X			X			18
SB34(11-12)	Grab	SS	11-12	1/7/20	1105	1								X				
SB35 (0-.5)	Grab	SS	0-.5	1/7/20	908	1								X				

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks:

pH ______ Temp ______

Flow ______ Other ______

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

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking #

Relinquished by : (Signature) K Barnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR 10	
Relinquished by : (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: °C 22-3=09	Bottles Received: 148
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/9/20	Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NC] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.08

Lab Project #
TGERESHTX-R13411

Collected by (print): K Barnette

Site/Facility ID #

P.O. #
8772

Collected by (signature): K Barnette

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Chain of Custody Page ___ of ___

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 # L1177542

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB35 (.5-1)	Grab	SS	.5-1	1/7/20	909	1	X	X	X			X			X			19
SB35 (1-1.5)	Grab	SS	1-1.5	1/7/20	910	1	X	X	X			X			X			20
SB35 (1.5-2)	Grab	SS	1.5-2	1/7/20	911	1	X	X	Y			X			X			21
SB35 (3-3.5)	Grab	SS	3-3.5	1/7/20	912	1								X				
SB35 (~~4-~~4.5-5)	Grab	SS	~~4-4.5~~ 4.5-5	1/7/20	913	1								X				
SB35 (5-6)	Grab	SS	5-6	1/7/20	914	1	X	V	X			X			X			22
SB35 (6-7)	Grab	SS	6-7	1/7/20	915	1								X				
SB35 (7-8)	Grab	SS	7-8	1/7/20	916	1								X				
SB35 (8-9)	Grab	SS	8-9	1/7/20	917	1	X	X	X			X			X			23
SB35 (9-10)	Grab	SS	9-10	1/7/20	918	1								X				

* 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) K Barnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 10 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 1-7-20	Time: 150	Received by: (Signature)	Temp: 2.2-3=0.9 °C Bottles Received: 148	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/9/20 Time: 8:30	Hold: Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
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Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnette

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Chain of Custody Page ___ of ___

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SDG # 1177542

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB35(10-11)	Grab	SS	10-11	1/7/20	919	1	X	X	X			X			X			24
SB35(11-12)	Grab	SS	11-12	1/7/20	920	1								X				
SB36(0-.5)	Grab	SS	0-.5	1/7/20	1105	1								X				
SB36(.5-1)	Grab	SS	.5-1	1/7/20	1106	1	X	X	X			X			X			25
SB36(1-1.5)	Grab	SS	1-1.5	1/7/20	1107	1	X	X	X			X			X			26
SB36(1.5-2)	Grab	SS	1.5-2	1/7/20	1108	1	X	X	X			X			X			27
SB36(3-3.5)	Grab	SS	3-3.5	1/7/20	1109	1								X				
SB36(4.5-5)	Grab	SS	4.5-5	1/7/20	1110	1								X				
SB36(5-6)	Grab	SS	5-6	1/7/20	1111	1	X	X	X			X			X			28
SB36(6-7)	Grab	SS	6-7	1/7/20	1112	1								X				

* 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 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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeOH TBR 10
Relinquished by : (Signature)	Date: 1-7-20	Time: 150C	Received by: (Signature)	Temp: 2.2-.3=1.9 °C Bottles Received: 148
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/9/20 Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

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Pres Chk

Chain of Custody Page ___ of ___

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Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Quote #

Collected by (signature): K Barnette

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

SDG # 1177542

Table #

Acctnum: **TGERESHTX**

Template: **T160680**

Prelogin: **P747407**

PM: 134 - Mark W. Beasley

PB:

Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB36(7-8)	Grab	SS	7-8	1/7/20	1113	1								X				
SB36(8-9)	Grab	SS	8-9	1/7/20	1114	1	X	X	X			X			X			29
SB36 (9-10)	Grab	SS	9-10	1/7/20	1115	1								X				
SB36 (10-11)	Grab	SS	10-11	1/7/20	1116	1	X	X	X			X			X			30
SB36 (11-12)	Grab	SS	11-12	1/7/20	1117	1								X				
SB37(0-.5)	Grab	SS	0-.5	1/7/20	827	1								X				
SB37(.5-1)	Grab	SS	.5-1	1/7/20	828	1	X	X	X			X			X			31
SB37(1-1.5)	Grab	SS	1-1.5	1/7/20	829	1	X	X	X			X			X			32
SB37(1.5-2)	Grab	SS	1.5-2	1/7/20	830	1	X	X	X			X			X			33
SB37(3-3.5)	Grab	SS	3-3.5	1/7/20	831	1								X				

* 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: [illegible]
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) K Barnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: Yes / [✓ No] 10 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: 2.2-3=[illegible] °C	Bottles Received: 148
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/9/20	Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources **8048 Northcourt Road** **Houston, TX 77040**	Billing Information: **Accounts Payable** **8048 Northcourt Road** **Houston, TX 77040**	Pres Chk
Report to: **Kristi Barnette**	Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**	
Project Description: **Future Federal Way Hospital**	City/State Collected: Federal way WA	Please Circle: PT MT CT ET
Phone: **713-744-5800** Fax: **713-744-5888**	Client Project # **R13411.08**	Lab Project # **TGERESHTX-R13411**
Collected by (print): KBarnette	Site/Facility ID #	P.O. # **8772**
Collected by (signature): KBarnette 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	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB37 (4.5-5)	Grab	SS	4.5-5	1/7/20	832	1								X				
SB37 (5-6)	Grab	SS	5-6	1/7/20	833	1	X	X	X			X			X			34
SB37 (6-7)	Grab	SS	6-7	1/7/20	834	1								X				
SB37 (7-8)	Grab	SS	7-8	1/7/20	835	1								X				
SB37 (8-9)	Grab	SS	8-9	1/7/20	836	1	X	X	X			X			X			35
SB37 (9-10)	Grab	SS	9-10	1/7/20	837	1								X				
SB37 (10-11)	Grab	SS	10-11	1/7/20	838	1	X	X	X			X			X			36
SB37 (11-12)	Grab	SS	11-12	1/7/20	839	1								X				
SB38 (0-.5)	Grab	SS	0-.5	1/7/20	950	1								X				
SB38 (.5-1)	Grab	SS	.5-1	1/7/20	951	1	X	X	X			X			X			37

Chain of Custody Page ___ of ___

Pace Analytical®
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Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1171542

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:

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 #

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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 10	
Relinquished by : (Signature)	Date: 1-7-20	Time: 1808	Received by: (Signature)	Temp: °C 22-3=19.9	Bottles Received: 148
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/9/20	Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition:
[✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.08

Lab Project #
TGERESHTX-R13411

Collected by (print): KBarnette

Site/Facility ID #

P.O. #
8772

Collected by (signature): KBarnette

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 ___ of ___

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SDG # 117542

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB38 (1-1.5)	Grab	SS	1-1.5	1/7/20	952	1	X	X	X			X			X			38
SB38 (3-3.5)	Grab	SS	3-3.5	1/7/20	953	1								X				
SB38 (4.5-5)	Grab	SS	4.5-5	1/7/20	955	1								X				
SB38 (5-6)	Grab	SS	5-6	1/7/20	956	1	X	X	X			X			X			39
SB38 (6-7)	Grab	SS	6-7	1/7/20	957	1								X				
SB38 (7-8)	Grab	SS	7-8	1/7/20	958	1								X				
SB38 (8-9)	Grab	SS	8-9	1/7/20	959	1	X	X	X			X			X			40
SB38 (9-10)	Grab	SS	9-10	1/7/20	1000	1								X				
SB38 (10-11)	Grab	SS	10-11	1/7/20	1001	1	X	X	X			X			X			41
		SS																

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks:

pH ______ Temp ______

Flow ______ Other ______

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

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking #

Relinquished by : (Signature) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 10 [✓ HCL] / MeoH TBR	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: °C 2.2-.3=1.9 Bottles Received: 148	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/9/20 Time: 8:30	Hold: Condition: [✓ NCF] / OK

Chain of Custody Page ___ of ___

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TGE Resources

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Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Report to: **Kristi Barnette**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Site/Facility ID #

P.O. # **8772**

Quote #

Collected by (print): K Barnette

Collected by (signature): K Barnette

Immediately Packed on Ice N ___ [✓ Y]

Rush? (Lab MUST Be Notified)
- ___ Same Day
- [✓ Next Day]
- ___ Two Day
- ___ Three Day
- ___ Five Day
- ___ 5 Day (Rad Only)
- ___ 10 Day (Rad Only)

Date Results Needed

SDG # 1177542

Table #

Acctnum: **TGERESHTX**

Template: **T160680**

Prelogin: **P747407**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB38 (11-12)	Grab	SS	11-12	1/7/20	1002	1								X				
SB39 (0-.5)	Grab	SS	0-.5	1/7/20	927	1								X				
SB39 (.5-1)	Grab	SS	.5-1	1/7/20	928	1	X	+	X			X			X			42
SB39 (1-1.5)	Grab	SS	1-1.5	1/7/20	929	1	X	+	X			X			X			43
SB39 (3-3.5)	Grab	SS	3-3.5	1/7/20	930	1	~~X~~	~~X~~	~~X~~			~~X~~		X	~~X~~	KB		44
SB39 (4-4.5)	Grab	SS	4-4.5	1/7/20	931	1	X	X	X			X			X			44
SB39 (4.5-5)	Grab	SS	4.5-5	1/7/20	931	1								X				~~44~~
SB39 (5-6)	Grab	SS	5-6	1/7/20	932	1	X	X	X			X			X			45
SB39 (6-7)	Grab	SS	6-7	1/7/20	933	1								X				
SB39 (7-8)	Grab	SS	7-8	1/7/20	934	1								X				

* 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) K Barnette
Date: 1/7/20
Time: 2000
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
10
HCL / MeoH
TBR

Relinquished by : (Signature)
Date: 1-7-20
Time: 1800
Received by: (Signature)

Temp: 2.2-3=0.4 1.3 °C
Bottles Received: 148

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature)

Date: 1/9/20
Time: 8:30

Hold:

Condition: [✓ NCF] / OK 6

TGE Resources

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Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Chain of Custody Page ___ of ___

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SDG # 1177842

Table #

Acctnum: **TGERESHTX**

Template: **T160680**

Prelogin: **P747407**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB39(8-9)	Grab	SS	8-9	1/7/20	935	1	X	X	X			X			X			46
SB39 (9-10)	Grab	SS	9-10	1/7/20	936	1								X				
SB39(10-11)	Grab	SS	10-11	1/7/20	937	1	X	X	X			X			X			47
SB39 (11-12)	Grab	SS	11-12	1/7/20	938	1								X				
SB44(0-1)	Grab	SS	0-1	1/7/20	1445	3								X				
SB44(1-2)	Grab	SS	1-2	1/7/20	1446	3								X				
SB44 (2-3)	Grab	SS	2-3	1/7/20	1447	3			X				X		X			48
SB44 (3-4)	Grab	SS	3-4	1/7/20	1448	3								X				
SB44(4-6)	Grab	SS	4-6	1/7/20	1449	3								X				
SB44 (6-8)	Grab	SS	6-8	1/7/20	1450	3			X				X		X			49

* 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: __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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 10 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 1-7-20	Time:	Received by: (Signature)	Temp: 2.2-.3=[illegible] °C Bottles Received: 148	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/9/20 Time: 8:30	Hold:

Condition: NCF / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnett

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

Immediately Packed on Ice N ___ Y X

Chain of Custody Page ___ of ___

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Fax: 615-758-5859

SDG # 1177542

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB44 (9-11)	Grab	SS	9-11	1/7/20	1451	3			X				X		X			50
SB44 (12-14)	Grab	SS	12-14	1/7/20	1452	3								X				
SB44 (15-16)	Grab	SS	15-16	1/7/20	1453	3			X				X		X			51
SB44 (16-17)	Grab	SS	16-17	1/7/20	1454	3								X				
SB44 (17-18)	Grab	SS	17-18	1/7/20	1455	3								X				
SB44 (18-19)	Grab	SS	18-19	1/7/20	1456	3								X				
SB44 (19-20)	Grab	SS	19-20	1/7/20	1457	3								X				
SB47 (0-1)	Grab	SS	0-1	1/7/20	1230	3				X	X				X			52
SB47 (1-2)	Grab	SS	1-2	1/7/20	1231	3				X	X				X			53
SB47 (2-3)	Grab	SS	2-3	1/7/20	1232	3								X				

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks:

pH ______ Temp ______
Flow ______ Other ______

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

Samples returned via:
___ UPS ___ FedEx ___ Courier ________

Tracking #

Relinquished by : (Signature) KBarnett	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 10 [✓ HCl] / MeoH TBR	
Relinquished by : (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: 2.2-.3=1.9 *3 °C	Bottles Received: 148	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/9/20	Time: 8:30	Hold:	Condition: [✓ NCF] / OK

TGE Resources

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Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Report to:
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Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): K Barnette

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

SDG # 1177542

Table #

Acctnum: **TGERESHTX**

Template: **T160680**

Prelogin: **P747407**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB47 (3-4)	Grab	SS	3-4	1/7/20	1233	3								X				
SB47 (5-6)	Grab	SS	5-6	1/7/20	1234	3								X				
SB48 (0-1)	Grab	SS	0-1	1/7/20	1400	3				X	X				X			54
SB48 (1-2)	Grab	SS	1-2	1/7/20	1401	3				X	X				X			55
SB48 (2-3)	Grab	SS	2-3	1/7/20	1402	3								X				
SB48 (3-4)	Grab	SS	3-4	1/7/20	1403	3								X				
SB48 (5-6)	Grab	SS	5-6	1/7/20	1404	3								X				
SB49 (0-1)	Grab	SS	0-1	1/7/20	1250	3				X	X				X			56
SB49 (1-2)	Grab	SS	1-2	1/7/20	1251	3				X	X				X			57
SB49 (2-3)	Grab	SS	2-3	1/7/20	1252	3								X				

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks:

pH ______ Temp ______

Flow ______ Other ______

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

Samples returned via:
___ UPS ___ FedEx ___ Courier ________

Tracking #

Relinquished by : (Signature) KBarnette
Date: 1/7/20
Time: 2000
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No 10
HCL / MeoH
TBR

Relinquished by : (Signature)
Date: 1-7-20
Time: 1800
Received by: (Signature)

Temp: 22-3=19.3 °C
Bottles Received: 148

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature) Carol Kemp

Date: 1/9/20
Time: 8:30

Hold:

Condition: [illegible] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.08

Lab Project #
TGERESHTX-R13411

Collected by (print): K Barnette

Site/Facility ID #

P.O. #
8772

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

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

SDG # 1177542

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB49 (3-4)	Grab	SS	3-4	1/7/20	1253	3								X				
SB49 (5-6)	Grab	SS	5-6	1/7/20	1254	3								X				
SB50 (0-1)	Grab	SS	0-1	1/7/20	1320	3				X	X				X			58
SB50 (1-2)	Grab	SS	1-2	1/7/20	1321	3				X	X				X			59
SB50 (2-3)	Grab	SS	2-3	1/7/20	1322	3								X				
SB50 (3-4)	Grab	SS	3-4	1/7/20	1323	3								X				
SB50 (5-6)	Grab	SS	5-6	1/7/20	1324	3								X				
SB51 (0-1)	Grab	SS	0-1	1/7/20	1258	3				X	X				X			60
SB51 (1-2)	Grab	SS	1-2	1/7/20	1259	3				X	X				X			61
SB51 (2-3)	Grab	SS	2-3	1/7/20	1300	3								X				

* 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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR 10
Relinquished by : (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: °C 2.2-.3=1.9 Bottles Received: 148
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/9/20 Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnette

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

Immediately Packed on Ice N ___ Y X

Chain of Custody Page ___ of ___

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1177542

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB51 (3-4)	Grab	SS	3-4	1/7/20	1301	3								X				
SB51 (5-6)	Grab	SS	5-6	1/7/20	1302	3								X				
SB52 (0-1)	Grab	SS	0-1	1/7/20	1330	3				X	✓				X			62
SB52 (1-2)	Grab	SS	1-2	1/7/20	1331	3				X	X				X			63
SB52 (2-3)	Grab	SS	2-3	1/7/20	1332	3								X				
SB52 (3-4)	Grab	SS	3-4	1/7/20	1333	3								X				
SB52 (5-6)	Grab	SS	5-6	1/7/20	1334	3								X				
SB53 (0-1)	Grab	SS	0-1	1/7/20	1310	3				X	X				X			64
SB53 (1-2)	Grab	SS	1-2	1/7/20	1311	3				X	X				X			65
SB53 (2-3)	Grab	SS	2-3	1/7/20	1312	3								X				

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks:

pH ______ Temp ______
Flow ______ Other ______

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

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking #

Relinquished by : (Signature) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCL / MeoH TBR 10	
Relinquished by : (Signature)	Date: 1-7-20	Time: 1800	Received by: (Signature)	Temp: 2.2-.3=1.9 °C	Bottles Received: 148
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/9/20	Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Report to: **Kristi Barnette**

Project Description: **Future Federal Way Hospital**

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Please Circle: PT MT CT ET

Phone: **713-744-5800**
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Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
☐ Same Day ☐ Five Day
☒ Next Day ☐ 5 Day (Rad Only)
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SDG # L1177542

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold			Remarks	Sample # (lab only)
SB53 (3-4)	Grab	SS	3-4	1/7/20	1313	3								X				
SB53 (5-6)	Grab	SS	5-6	1/7/20	1314	3								X				
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks:

pH ______ Temp ______
Flow ______ Other ______

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

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)		
KBarnette	1/7/20	2000		Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR 10	If preservation required by Login: Date/Time
Relinquished by: (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: °C 2.2-3=1.9 Bottles Received: 148	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemr	Date: 1/9/20 Time: 8:30	Hold: Condition: [✓ NCF] / OK

ANALYTICAL REPORT

January 14, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1178043
Samples Received:	01/10/2020
Project Number:	R13411.08
Description:	Future Federal Way Hospital

Report To:

Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SB40 (2-3) L1178043-01 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:17	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409211	1	01/10/20 15:48	01/10/20 16:04	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 08:42	TRB	Mt. Juliet, TN

SB40 (4-6) L1178043-02 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:19	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409211	1	01/10/20 15:48	01/10/20 16:04	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 08:45	TRB	Mt. Juliet, TN

SB40 (8-9) L1178043-03 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:21	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409211	1	01/10/20 15:48	01/10/20 16:04	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 08:53	TRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	5	01/10/20 19:45	01/11/20 11:02	TRB	Mt. Juliet, TN

SB40 (10-11) L1178043-04 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:23	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409211	1	01/10/20 15:48	01/10/20 16:04	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 08:55	TRB	Mt. Juliet, TN

SB40 (11-12) L1178043-05 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:24	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409211	1	01/10/20 15:48	01/10/20 16:04	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 08:58	TRB	Mt. Juliet, TN

SB40 (16-17) L1178043-06 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:26	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409211	1	01/10/20 15:48	01/10/20 16:04	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:00	TRB	Mt. Juliet, TN

SB41 (2-3) L1178043-07 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 09:07	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409212	1	01/10/20 16:07	01/10/20 16:21	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:03	TRB	Mt. Juliet, TN

SB41 (4-6) L1178043-08 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 09:09	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409212	1	01/10/20 16:07	01/10/20 16:21	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:06	TRB	Mt. Juliet, TN

SB41 (8-9) L1178043-09 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 09:11	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409212	1	01/10/20 16:07	01/10/20 16:21	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:08	TRB	Mt. Juliet, TN

SB41 (10-11) L1178043-10 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 09:13	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409212	1	01/10/20 16:07	01/10/20 16:21	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:11	TRB	Mt. Juliet, TN

SB41 (11-12) L1178043-11 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 09:14	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409212	1	01/10/20 16:07	01/10/20 16:21	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:13	TRB	Mt. Juliet, TN

SB41 (16-17) L1178043-12 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 09:16	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409212	1	01/10/20 16:07	01/10/20 16:21	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:16	TRB	Mt. Juliet, TN

SB42 (2-3) L1178043-13 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 07:57	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409212	1	01/10/20 16:07	01/10/20 16:21	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:24	TRB	Mt. Juliet, TN

SB42 (4-6) L1178043-14 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 07:59	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409212	1	01/10/20 16:07	01/10/20 16:21	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 08:30	TRB	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:01	01/10/20 09:00

SB42 (8-9) L1178043-15 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409212	1	01/10/20 16:07	01/10/20 16:21	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:26	TRB	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:03	01/10/20 09:00

SB42 (10-11) L1178043-16 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409212	1	01/10/20 16:07	01/10/20 16:21	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:29	TRB	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:04	01/10/20 09:00

SB42 (11-12) L1178043-17 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409444	1	01/11/20 16:33	01/11/20 16:51	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:31	TRB	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:06	01/10/20 09:00

SB42 (16-17) L1178043-18 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409444	1	01/11/20 16:33	01/11/20 16:51	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:34	TRB	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:42	01/10/20 09:00

SB43 (2-3) L1178043-19 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409444	1	01/11/20 16:33	01/11/20 16:51	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:36	TRB	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:44	01/10/20 09:00

SB43 (4-6) L1178043-20 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409444	1	01/11/20 16:33	01/11/20 16:51	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409384	1	01/10/20 19:45	01/11/20 09:39	TRB	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:46	01/10/20 09:00

SB43 (8-9) L1178043-21 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409444	1	01/11/20 16:33	01/11/20 16:51	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 08:55	TRB	Mt. Juliet, TN

SB43 (10-11) L1178043-22 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:48	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409444	1	01/11/20 16:33	01/11/20 16:51	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 08:58	TRB	Mt. Juliet, TN

SB43 (11-12) L1178043-23 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:49	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409444	1	01/11/20 16:33	01/11/20 16:51	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:00	TRB	Mt. Juliet, TN

SB43 (16-17) L1178043-24 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:51	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409444	1	01/11/20 16:33	01/11/20 16:51	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:03	TRB	Mt. Juliet, TN

SB45 (0-1) L1178043-25 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 13:10	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409444	1	01/11/20 16:33	01/11/20 16:51	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:06	TRB	Mt. Juliet, TN

SB45 (1-2) L1178043-26 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 13:11	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409444	1	01/11/20 16:33	01/11/20 16:51	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:08	TRB	Mt. Juliet, TN

SB46 (0-1) L1178043-27 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 10:25	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409445	1	01/11/20 16:07	01/11/20 16:32	RA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	25	01/08/20 10:25	01/10/20 15:16	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1409185	1	01/08/20 10:25	01/10/20 15:30	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	10	01/10/20 18:41	01/11/20 20:46	KME	Mt. Juliet, TN

SB46 (1-2) L1178043-28 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 10:26	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409445	1	01/11/20 16:07	01/11/20 16:32	RA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	26.8	01/08/20 10:26	01/10/20 15:36	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1409185	1.07	01/08/20 10:26	01/10/20 15:50	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	100	01/10/20 18:41	01/11/20 19:03	KME	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB46 (9-10) L1178043-29 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 10:30	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409445	1	01/11/20 16:07	01/11/20 16:32	RA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	25	01/08/20 10:30	01/10/20 15:57	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1409185	1	01/08/20 10:30	01/10/20 16:10	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	10	01/10/20 18:41	01/11/20 18:00	KME	Mt. Juliet, TN

SB46 (14-15) L1178043-30 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 10:31	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409445	1	01/11/20 16:07	01/11/20 16:32	RA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	25	01/08/20 10:31	01/10/20 16:17	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1409185	1	01/08/20 10:31	01/10/20 16:30	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	5	01/10/20 18:41	01/11/20 18:38	KME	Mt. Juliet, TN

SB46 (16-18) L1178043-31 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 10:33	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409445	1	01/11/20 16:07	01/11/20 16:32	RA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	29	01/08/20 10:33	01/10/20 16:38	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1409185	1.16	01/08/20 10:33	01/10/20 16:50	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	1	01/10/20 18:41	01/12/20 13:52	TJD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	5	01/10/20 18:41	01/11/20 18:13	KME	Mt. Juliet, TN

SB46 (20-22) L1178043-32 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 10:35	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409445	1	01/11/20 16:07	01/11/20 16:32	RA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	25	01/08/20 10:35	01/10/20 16:58	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1409185	1	01/08/20 10:35	01/10/20 17:10	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	1	01/10/20 18:41	01/11/20 19:28	KME	Mt. Juliet, TN

SB54 (2-3) L1178043-33 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 10:02	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409445	1	01/11/20 16:07	01/11/20 16:32	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:11	TRB	Mt. Juliet, TN

SB54 (4-6) L1178043-34 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 10:04	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409445	1	01/11/20 16:07	01/11/20 16:32	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:13	TRB	Mt. Juliet, TN

SB54 (8-9) L1178043-35 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 10:06	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409445	1	01/11/20 16:07	01/11/20 16:32	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:21	TRB	Mt. Juliet, TN

SB54 (10-11) L1178043-36 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 10:08	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409445	1	01/11/20 16:07	01/11/20 16:32	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:24	TRB	Mt. Juliet, TN

SB54 (11-12) L1178043-37 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 10:09	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409446	1	01/11/20 15:51	01/11/20 16:05	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:27	TRB	Mt. Juliet, TN

SB54 (16-17) L1178043-38 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 10:11	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409446	1	01/11/20 15:51	01/11/20 16:05	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:29	TRB	Mt. Juliet, TN

SB55 (0-1) L1178043-39 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 13:25	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409446	1	01/11/20 15:51	01/11/20 16:05	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:32	TRB	Mt. Juliet, TN

SB55 (1-2) L1178043-40 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 13:26	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409446	1	01/11/20 15:51	01/11/20 16:05	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:34	TRB	Mt. Juliet, TN

SB56 (0-1) L1178043-41 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 13:00	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409446	1	01/11/20 15:51	01/11/20 16:05	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 08:27	TRB	Mt. Juliet, TN

SB56 (1-2) L1178043-42 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 13:01	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409446	1	01/11/20 15:51	01/11/20 16:05	RA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409385	1	01/10/20 18:44	01/11/20 09:37	TRB	Mt. Juliet, TN

SB57 (0-1) L1178043-43 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 11:55	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409446	1	01/11/20 15:51	01/11/20 16:05	RA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	25	01/08/20 11:55	01/10/20 17:19	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	50	01/10/20 18:41	01/11/20 19:41	KME	Mt. Juliet, TN

SB57 (1-2) L1178043-44 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 11:56	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409446	1	01/11/20 15:51	01/11/20 16:05	RA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	31	01/08/20 11:56	01/10/20 17:39	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	5	01/10/20 18:41	01/11/20 20:59	KME	Mt. Juliet, TN

SB58 (0-1) L1178043-45 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 14:30	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409446	1	01/11/20 15:51	01/11/20 16:05	RA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	26	01/08/20 14:30	01/10/20 18:00	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	50	01/10/20 18:41	01/11/20 20:06	KME	Mt. Juliet, TN

SB58 (1-2) L1178043-46 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 14:31	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409446	1	01/11/20 15:51	01/11/20 16:05	RA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	25.3	01/08/20 14:31	01/10/20 18:41	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	5	01/10/20 18:41	01/11/20 19:54	KME	Mt. Juliet, TN

SB59 (0-1) L1178043-47 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 14:00	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409447	1	01/13/20 09:26	01/13/20 09:36	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	25.5	01/08/20 14:00	01/10/20 18:20	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	50	01/10/20 18:41	01/11/20 20:19	KME	Mt. Juliet, TN

SB59 (1-2) L1178043-48 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 14:01	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409447	1	01/13/20 09:26	01/13/20 09:36	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	27.8	01/08/20 14:01	01/10/20 19:01	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	50	01/10/20 18:41	01/11/20 18:51	KME	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB60 (0-1) L1178043-49 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 11:40	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409447	1	01/13/20 09:26	01/13/20 09:36	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	25	01/08/20 11:40	01/10/20 19:22	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	100	01/10/20 18:41	01/11/20 18:25	KME	Mt. Juliet, TN

SB60 (1-2) L1178043-50 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 11:41	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409447	1	01/13/20 09:26	01/13/20 09:36	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	25	01/08/20 11:41	01/10/20 19:42	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	50	01/10/20 18:41	01/11/20 17:22	KME	Mt. Juliet, TN

SB61 (0-1) L1178043-51 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 13:45	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409447	1	01/13/20 09:26	01/13/20 09:36	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	25	01/08/20 13:45	01/10/20 20:03	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	50	01/10/20 18:41	01/11/20 19:16	KME	Mt. Juliet, TN

SB61 (1-2) L1178043-52 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 13:46	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409447	1	01/13/20 09:26	01/13/20 09:36	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1409249	25	01/08/20 13:46	01/10/20 20:23	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1409318	50	01/10/20 18:41	01/11/20 20:34	KME	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.

Mark W. Beasley
Project Manager

Report Revision History

Version 1: 01/13/20 17:06

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 01/14/2020 10:26
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1178043-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51 and 52
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1409001, WG1409211, WG1409212, WG1409249, WG1409313, WG1409385, WG1409257, WG1409384, WG1409318, WG1409185, WG1408913, WG1409446, WG1409445, WG1409444, WG1410096, WG1409150 and WG1409447

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 01/14/2020 10:26
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1178043-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51 and 52
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1409001, WG1409211, WG1409212, WG1409249, WG1409313, WG1409385, WG1409257, WG1409384, WG1409318, WG1409185, WG1408913, WG1409446, WG1409445, WG1409444, WG1410096, WG1409150 and WG1409447

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 01/14/2020 10:26
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1178043-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51 and 52
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1409001, WG1409211, WG1409212, WG1409249, WG1409313, WG1409385, WG1409257, WG1409384, WG1409318, WG1409185, WG1408913, WG1409446, WG1409445, WG1409444, WG1410096, WG1409150 and WG1409447

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			3
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 01/14/2020 10:26
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1178043-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51 and 52
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1409001, WG1409211, WG1409212, WG1409249, WG1409313, WG1409385, WG1409257, WG1409384, WG1409318, WG1409185, WG1408913, WG1409446, WG1409445, WG1409444, WG1410096, WG1409150 and WG1409447

ER #[1]	Description
1	NWTPHDX-NO SGT WG1409318 o-Terphenyl L1178043-28, 43, 45, 47, 48, 49, 50, 51 and 52: Percent Recovery is outside of established control limits.
2	8260D WG1409185 Naphthalene: Percent Recovery is outside of established control limits.
3	6010D WG1409384 Lead: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	76.9		1	01/10/2020 16:04	WG1409211

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	U		0.0910	0.500	0.650	1	01/11/2020 08:42	WG1409384
Lead	14.6		0.247	0.500	0.650	1	01/11/2020 08:42	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.0		1	01/10/2020 16:04	WG1409211

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	U		0.0843	0.500	0.602	1	01/11/2020 08:45	WG1409384
Lead	25.6		0.229	0.500	0.602	1	01/11/2020 08:45	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.1		1	01/10/2020 16:04	WG1409211

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.856		0.0832	0.500	0.594	1	01/11/2020 08:53	WG1409384
Lead	319		1.13	0.500	2.97	5	01/11/2020 11:02	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.9		1	01/10/2020 16:04	WG1409211

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.488	J	0.0824	0.500	0.589	1	01/11/2020 08:55	WG1409384
Lead	228		0.224	0.500	0.589	1	01/11/2020 08:55	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	76.9		1	01/10/2020 16:04	WG1409211

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.408	J	0.0911	0.500	0.650	1	01/11/2020 08:58	WG1409384
Lead	186		0.247	0.500	0.650	1	01/11/2020 08:58	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	77.9		1	01/10/2020 16:04	WG1409211

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.271	J	0.0899	0.500	0.642	1	01/11/2020 09:00	WG1409384
Lead	113		0.244	0.500	0.642	1	01/11/2020 09:00	WG1409384

SB41 (2-3)

Collected date/time: 01/08/20 09:07

SAMPLE RESULTS - 07

L1178043

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.0		1	01/10/2020 16:21	WG1409212

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	U		0.0745	0.500	0.532	1	01/11/2020 09:03	WG1409384
Lead	8.02		0.202	0.500	0.532	1	01/11/2020 09:03	WG1409384

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB41 (4-6)

Collected date/time: 01/08/20 09:09

SAMPLE RESULTS - 08

L1178043

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.6		1	01/10/2020 16:21	WG1409212

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	U		0.0756	0.500	0.540	1	01/11/2020 09:06	WG1409384
Lead	1.55		0.205	0.500	0.540	1	01/11/2020 09:06	WG1409384

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.1		1	01/10/2020 16:21	WG1409212

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	U		0.0768	0.500	0.549	1	01/11/2020 09:08	WG1409384
Lead	13.0		0.209	0.500	0.549	1	01/11/2020 09:08	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.4		1	01/10/2020 16:21	WG1409212

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	U		0.0783	0.500	0.559	1	01/11/2020 09:11	WG1409384
Lead	16.3		0.213	0.500	0.559	1	01/11/2020 09:11	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.3		1	01/10/2020 16:21	WG1409212

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.158	J	0.0792	0.500	0.566	1	01/11/2020 09:13	WG1409384
Lead	58.5		0.215	0.500	0.566	1	01/11/2020 09:13	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.1		1	01/10/2020 16:21	WG1409212

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.106	J	0.0853	0.500	0.609	1	01/11/2020 09:16	WG1409384
Lead	93.6		0.231	0.500	0.609	1	01/11/2020 09:16	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.7		1	01/10/2020 16:21	WG1409212

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	U		0.0847	0.500	0.605	1	01/11/2020 09:24	WG1409384
Lead	6.35		0.230	0.500	0.605	1	01/11/2020 09:24	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.8		1	01/10/2020 16:21	WG1409212

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	U		0.0816	0.500	0.583	1	01/11/2020 08:30	WG1409384
Lead	12.1	O1	0.221	0.500	0.583	1	01/11/2020 08:30	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.4		1	01/10/2020 16:21	WG1409212

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	U		0.0801	0.500	0.572	1	01/11/2020 09:26	WG1409384
Lead	8.89		0.217	0.500	0.572	1	01/11/2020 09:26	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.1		1	01/10/2020 16:21	WG1409212

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.316	J	0.0804	0.500	0.574	1	01/11/2020 09:29	WG1409384
Lead	49.6		0.218	0.500	0.574	1	01/11/2020 09:29	WG1409384

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB42 (11-12)

Collected date/time: 01/08/20 08:04

SAMPLE RESULTS - 17

L1178043

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.5		1	01/11/2020 16:51	WG1409444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	U		0.0809	0.500	0.578	1	01/11/2020 09:31	WG1409384
Lead	9.46		0.220	0.500	0.578	1	01/11/2020 09:31	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.3		1	01/11/2020 16:51	WG1409444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.340	J	0.0851	0.500	0.608	1	01/11/2020 09:34	WG1409384
Lead	81.3		0.231	0.500	0.608	1	01/11/2020 09:34	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.8		1	01/11/2020 16:51	WG1409444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.464	J	0.0836	0.500	0.597	1	01/11/2020 09:36	WG1409384
Lead	170		0.227	0.500	0.597	1	01/11/2020 09:36	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.1		1	01/11/2020 16:51	WG1409444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.171	J	0.0813	0.500	0.581	1	01/11/2020 09:39	WG1409384
Lead	57.7		0.221	0.500	0.581	1	01/11/2020 09:39	WG1409384

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.4		1	01/11/2020 16:51	WG1409444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.389	J	0.0840	0.500	0.600	1	01/11/2020 08:55	WG1409385
Lead	66.8		0.228	0.500	0.600	1	01/11/2020 08:55	WG1409385

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.9		1	01/11/2020 16:51	WG1409444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.319	J	0.0834	0.500	0.596	1	01/11/2020 08:58	WG1409385
Lead	41.6		0.226	0.500	0.596	1	01/11/2020 08:58	WG1409385

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.3		1	01/11/2020 16:51	WG1409444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.467	J	0.0802	0.500	0.573	1	01/11/2020 09:00	WG1409385
Lead	104		0.218	0.500	0.573	1	01/11/2020 09:00	WG1409385

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	77.7		1	01/11/2020 16:51	WG1409444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.238	J	0.0900	0.500	0.643	1	01/11/2020 09:03	WG1409385
Lead	12.5		0.244	0.500	0.643	1	01/11/2020 09:03	WG1409385

SB45 (0-1)

Collected date/time: 01/08/20 13:10

SAMPLE RESULTS - 25

L1178043

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.5		1	01/11/2020 16:51	WG1409444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.69		0.508	2.00	2.21	1	01/11/2020 09:06	WG1409385

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB45 (1-2)
Collected date/time: 01/08/20 13:11

SAMPLE RESULTS - 26

L1178043

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.6		1	01/11/2020 16:51	WG1409444

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.23		0.497	2.00	2.16	1	01/11/2020 09:08	WG1409385

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	01/11/2020 16:32	WG1409445

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.914	0.100	2.70	25	01/10/2020 15:16	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*106*				*77.0-120*		*01/10/2020 15:16*	WG1409249

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0457		0.0148	0.0250	0.0270	1	01/10/2020 15:30	WG1409185
Acrylonitrile	U		0.00205	0.0125	0.0135	1	01/10/2020 15:30	WG1409185
Benzene	0.000725	J	0.000431	0.00100	0.00108	1	01/10/2020 15:30	WG1409185
Bromobenzene	U		0.00113	0.0125	0.0135	1	01/10/2020 15:30	WG1409185
Bromodichloromethane	U		0.000850	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
Bromoform	U		0.00645	0.0250	0.0270	1	01/10/2020 15:30	WG1409185
Bromomethane	U		0.00399	0.0125	0.0135	1	01/10/2020 15:30	WG1409185
n-Butylbenzene	U		0.00414	0.0125	0.0135	1	01/10/2020 15:30	WG1409185
sec-Butylbenzene	U		0.00273	0.0125	0.0135	1	01/10/2020 15:30	WG1409185
tert-Butylbenzene	U		0.00167	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
Carbon tetrachloride	U		0.00116	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
Chlorobenzene	U		0.000618	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
Chlorodibromomethane	U		0.000485	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
Chloroethane	U		0.00116	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
Chloroform	U		0.000448	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
Chloromethane	U		0.00150	0.0125	0.0135	1	01/10/2020 15:30	WG1409185
2-Chlorotoluene	U		0.000992	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
4-Chlorotoluene	U		0.00122	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
1,2-Dibromo-3-Chloropropane	U		0.00550	0.0250	0.0270	1	01/10/2020 15:30	WG1409185
1,2-Dibromoethane	U		0.000566	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
Dibromomethane	U		0.00108	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
1,2-Dichlorobenzene	U		0.00156	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
1,3-Dichlorobenzene	U		0.00183	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
1,4-Dichlorobenzene	U		0.00213	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
Dichlorodifluoromethane	U		0.000882	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
1,1-Dichloroethane	U		0.000620	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
1,2-Dichloroethane	U		0.000512	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
1,1-Dichloroethene	U		0.000539	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
cis-1,2-Dichloroethene	U		0.000744	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
trans-1,2-Dichloroethene	U		0.00154	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
1,2-Dichloropropane	U		0.00137	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
1,1-Dichloropropene	U		0.000755	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
1,3-Dichloropropane	U		0.00189	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
cis-1,3-Dichloropropene	U		0.000731	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
trans-1,3-Dichloropropene	U		0.00165	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
2,2-Dichloropropane	U		0.000855	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
Di-isopropyl ether	U		0.000378	0.00100	0.00108	1	01/10/2020 15:30	WG1409185
Ethylbenzene	0.000660	J	0.000572	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
Hexachloro-1,3-butadiene	U		0.0137	0.0250	0.0270	1	01/10/2020 15:30	WG1409185
Isopropylbenzene	U		0.000931	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
p-Isopropyltoluene	U		0.00251	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
2-Butanone (MEK)	U		0.0135	0.0250	0.0270	1	01/10/2020 15:30	WG1409185
Methylene Chloride	U		0.00716	0.0250	0.0270	1	01/10/2020 15:30	WG1409185
4-Methyl-2-pentanone (MIBK)	U		0.0108	0.0250	0.0270	1	01/10/2020 15:30	WG1409185

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000318	0.00100	0.00108	1	01/10/2020 15:30	WG1409185
Naphthalene	0.00470	B J	0.00337	0.0125	0.0135	1	01/10/2020 15:30	WG1409185
n-Propylbenzene	U		0.00127	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
Styrene	U		0.00294	0.0125	0.0135	1	01/10/2020 15:30	WG1409185
1,1,1,2-Tetrachloroethane	U		0.000539	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
1,1,2,2-Tetrachloroethane	U		0.000421	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
1,1,2-Trichlorotrifluoroethane	U		0.000728	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
Tetrachloroethene	U		0.000755	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
Toluene	0.00349	J	0.00135	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
1,2,3-Trichlorobenzene	U		0.000674	0.0125	0.0135	1	01/10/2020 15:30	WG1409185
1,2,4-Trichlorobenzene	U		0.00520	0.0125	0.0135	1	01/10/2020 15:30	WG1409185
1,1,1-Trichloroethane	U		0.000297	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
1,1,2-Trichloroethane	U		0.000952	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
Trichloroethene	U		0.000431	0.00100	0.00108	1	01/10/2020 15:30	WG1409185
Trichlorofluoromethane	U		0.000539	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
1,2,3-Trichloropropane	U		0.00550	0.0125	0.0135	1	01/10/2020 15:30	WG1409185
1,2,4-Trimethylbenzene	U		0.00125	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
1,2,3-Trimethylbenzene	U		0.00124	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
Vinyl chloride	U		0.000737	0.00250	0.00270	1	01/10/2020 15:30	WG1409185
1,3,5-Trimethylbenzene	U		0.00116	0.00500	0.00539	1	01/10/2020 15:30	WG1409185
Xylenes, Total	U		0.00516	0.00650	0.00701	1	01/10/2020 15:30	WG1409185
(S) Toluene-d8	*109*				*75.0-131*		*01/10/2020 15:30*	WG1409185
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*01/10/2020 15:30*	WG1409185
(S) 1,2-Dichloroethane-d4	*103*				*70.0-130*		*01/10/2020 15:30*	WG1409185

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	29.1	J	14.3	4.00	43.1	10	01/11/2020 20:46	WG1409318
Residual Range Organics (RRO)	318		35.9	10.0	108	10	01/11/2020 20:46	WG1409318
(S) o-Terphenyl	*60.6*				*18.0-148*		*01/11/2020 20:46*	WG1409318

Sample Narrative:

L1178043-27 WG1409318: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.3		1	01/11/2020 16:32	WG1409445

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.974	0.100	2.87	26.8	01/10/2020 15:36	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*107*				*77.0-120*		*01/10/2020 15:36*	WG1409249

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0503		0.0157	0.0250	0.0287	1.07	01/10/2020 15:50	WG1409185
Acrylonitrile	U		0.00218	0.0125	0.0144	1.07	01/10/2020 15:50	WG1409185
Benzene	0.000544	J	0.000459	0.00100	0.00115	1.07	01/10/2020 15:50	WG1409185
Bromobenzene	U		0.00120	0.0125	0.0144	1.07	01/10/2020 15:50	WG1409185
Bromodichloromethane	U		0.000904	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
Bromoform	U		0.00686	0.0250	0.0287	1.07	01/10/2020 15:50	WG1409185
Bromomethane	U		0.00424	0.0125	0.0144	1.07	01/10/2020 15:50	WG1409185
n-Butylbenzene	U		0.00440	0.0125	0.0144	1.07	01/10/2020 15:50	WG1409185
sec-Butylbenzene	U		0.00290	0.0125	0.0144	1.07	01/10/2020 15:50	WG1409185
tert-Butylbenzene	U		0.00178	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
Carbon tetrachloride	U		0.00124	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
Chlorobenzene	U		0.000657	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
Chlorodibromomethane	U		0.000516	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
Chloroethane	U		0.00124	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
Chloroform	U		0.000476	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
Chloromethane	U		0.00159	0.0125	0.0144	1.07	01/10/2020 15:50	WG1409185
2-Chlorotoluene	U		0.00105	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
4-Chlorotoluene	U		0.00130	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
1,2-Dibromo-3-Chloropropane	U		0.00585	0.0250	0.0287	1.07	01/10/2020 15:50	WG1409185
1,2-Dibromoethane	U		0.000602	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
Dibromomethane	U		0.00115	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
1,2-Dichlorobenzene	U		0.00166	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
1,3-Dichlorobenzene	U		0.00195	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
1,4-Dichlorobenzene	U		0.00226	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
Dichlorodifluoromethane	U		0.000938	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
1,1-Dichloroethane	U		0.000659	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
1,2-Dichloroethane	U		0.000545	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
1,1-Dichloroethene	U		0.000573	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
cis-1,2-Dichloroethene	U		0.000791	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
trans-1,2-Dichloroethene	U		0.00164	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
1,2-Dichloropropane	U		0.00146	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
1,1-Dichloropropene	U		0.000803	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
1,3-Dichloropropane	U		0.00201	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
cis-1,3-Dichloropropene	U		0.000777	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
trans-1,3-Dichloropropene	U		0.00175	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
2,2-Dichloropropane	U		0.000909	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
Di-isopropyl ether	U		0.000401	0.00100	0.00115	1.07	01/10/2020 15:50	WG1409185
Ethylbenzene	0.00224	J	0.000608	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
Hexachloro-1,3-butadiene	U		0.0146	0.0250	0.0287	1.07	01/10/2020 15:50	WG1409185
Isopropylbenzene	U		0.000990	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
p-Isopropyltoluene	U		0.00267	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
2-Butanone (MEK)	U		0.0143	0.0250	0.0287	1.07	01/10/2020 15:50	WG1409185
Methylene Chloride	U		0.00761	0.0250	0.0287	1.07	01/10/2020 15:50	WG1409185
4-Methyl-2-pentanone (MIBK)	U		0.0115	0.0250	0.0287	1.07	01/10/2020 15:50	WG1409185

SB46 (1-2)

Collected date/time: 01/08/20 10:26

SAMPLE RESULTS - 28

L1178043

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000338	0.00100	0.00115	1.07	01/10/2020 15:50	WG1409185
Naphthalene	0.00430	B J	0.00358	0.0125	0.0144	1.07	01/10/2020 15:50	WG1409185
n-Propylbenzene	U		0.00135	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
Styrene	U		0.00313	0.0125	0.0144	1.07	01/10/2020 15:50	WG1409185
1,1,1,2-Tetrachloroethane	U		0.000573	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
1,1,2,2-Tetrachloroethane	U		0.000447	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
1,1,2-Trichlorotrifluoroethane	U		0.000774	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
Tetrachloroethene	U		0.000803	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
Toluene	0.00481	J	0.00143	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
1,2,3-Trichlorobenzene	U		0.000717	0.0125	0.0144	1.07	01/10/2020 15:50	WG1409185
1,2,4-Trichlorobenzene	U		0.00553	0.0125	0.0144	1.07	01/10/2020 15:50	WG1409185
1,1,1-Trichloroethane	U		0.000315	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
1,1,2-Trichloroethane	U		0.00101	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
Trichloroethene	U		0.000459	0.00100	0.00115	1.07	01/10/2020 15:50	WG1409185
Trichlorofluoromethane	U		0.000573	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
1,2,3-Trichloropropane	U		0.00585	0.0125	0.0144	1.07	01/10/2020 15:50	WG1409185
1,2,4-Trimethylbenzene	0.00181	J	0.00133	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
1,2,3-Trimethylbenzene	U		0.00132	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
Vinyl chloride	U		0.000783	0.00250	0.00287	1.07	01/10/2020 15:50	WG1409185
1,3,5-Trimethylbenzene	U		0.00124	0.00500	0.00573	1.07	01/10/2020 15:50	WG1409185
Xylenes, Total	0.00840		0.00548	0.00650	0.00746	1.07	01/10/2020 15:50	WG1409185
(S) Toluene-d8	*110*				*75.0-131*		*01/10/2020 15:50*	WG1409185
(S) 4-Bromofluorobenzene	*102*				*67.0-138*		*01/10/2020 15:50*	WG1409185
(S) 1,2-Dichloroethane-d4	*96.8*				*70.0-130*		*01/10/2020 15:50*	WG1409185

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		143	4.00	429	100	01/11/2020 19:03	WG1409318
Residual Range Organics (RRO)	1910		357	10.0	1070	100	01/11/2020 19:03	WG1409318
(S) o-Terphenyl	*79.1*	J7			*18.0-148*		*01/11/2020 19:03*	WG1409318

Sample Narrative:

L1178043-28 WG1409318: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.6		1	01/11/2020 16:32	WG1409445

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.00	0.100	2.96	25	01/10/2020 15:57	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*108*				*77.0-120*		*01/10/2020 15:57*	WG1409249

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0307		0.0162	0.0250	0.0296	1	01/10/2020 16:10	WG1409185
Acrylonitrile	U		0.00225	0.0125	0.0148	1	01/10/2020 16:10	WG1409185
Benzene	0.00127		0.000473	0.00100	0.00118	1	01/10/2020 16:10	WG1409185
Bromobenzene	U		0.00124	0.0125	0.0148	1	01/10/2020 16:10	WG1409185
Bromodichloromethane	U		0.000932	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
Bromoform	U		0.00707	0.0250	0.0296	1	01/10/2020 16:10	WG1409185
Bromomethane	U		0.00438	0.0125	0.0148	1	01/10/2020 16:10	WG1409185
n-Butylbenzene	U		0.00454	0.0125	0.0148	1	01/10/2020 16:10	WG1409185
sec-Butylbenzene	U		0.00299	0.0125	0.0148	1	01/10/2020 16:10	WG1409185
tert-Butylbenzene	U		0.00183	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
Carbon tetrachloride	U		0.00128	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
Chlorobenzene	U		0.000678	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
Chlorodibromomethane	U		0.000532	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
Chloroethane	U		0.00128	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
Chloroform	U		0.000491	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
Chloromethane	U		0.00164	0.0125	0.0148	1	01/10/2020 16:10	WG1409185
2-Chlorotoluene	U		0.00109	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
4-Chlorotoluene	U		0.00134	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
1,2-Dibromo-3-Chloropropane	U		0.00603	0.0250	0.0296	1	01/10/2020 16:10	WG1409185
1,2-Dibromoethane	U		0.000621	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
Dibromomethane	U		0.00118	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
1,2-Dichlorobenzene	U		0.00171	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
1,3-Dichlorobenzene	U		0.00201	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
1,4-Dichlorobenzene	U		0.00233	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
Dichlorodifluoromethane	U		0.000967	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
1,1-Dichloroethane	U		0.000680	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
1,2-Dichloroethane	U		0.000562	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
1,1-Dichloroethene	U		0.000591	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
cis-1,2-Dichloroethene	U		0.000816	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
trans-1,2-Dichloroethene	U		0.00169	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
1,2-Dichloropropane	U		0.00150	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
1,1-Dichloropropene	U		0.000828	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
1,3-Dichloropropane	U		0.00207	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
cis-1,3-Dichloropropene	U		0.000802	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
trans-1,3-Dichloropropene	U		0.00181	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
2,2-Dichloropropane	U		0.000938	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
Di-isopropyl ether	U		0.000414	0.00100	0.00118	1	01/10/2020 16:10	WG1409185
Ethylbenzene	0.000702	J	0.000627	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
Hexachloro-1,3-butadiene	U		0.0150	0.0250	0.0296	1	01/10/2020 16:10	WG1409185
Isopropylbenzene	U		0.00102	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
p-Isopropyltoluene	0.00776		0.00276	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
2-Butanone (MEK)	U		0.0148	0.0250	0.0296	1	01/10/2020 16:10	WG1409185
Methylene Chloride	U		0.00785	0.0250	0.0296	1	01/10/2020 16:10	WG1409185
4-Methyl-2-pentanone (MIBK)	U		0.0118	0.0250	0.0296	1	01/10/2020 16:10	WG1409185

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000349	0.00100	0.00118	1	01/10/2020 16:10	WG1409185
Naphthalene	U		0.00369	0.0125	0.0148	1	01/10/2020 16:10	WG1409185
n-Propylbenzene	U		0.00140	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
Styrene	U		0.00323	0.0125	0.0148	1	01/10/2020 16:10	WG1409185
1,1,1,2-Tetrachloroethane	U		0.000591	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
1,1,2,2-Tetrachloroethane	U		0.000461	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
1,1,2-Trichlorotrifluoroethane	U		0.000798	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
Tetrachloroethene	U		0.000828	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
Toluene	0.00757		0.00148	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
1,2,3-Trichlorobenzene	U		0.000739	0.0125	0.0148	1	01/10/2020 16:10	WG1409185
1,2,4-Trichlorobenzene	U		0.00570	0.0125	0.0148	1	01/10/2020 16:10	WG1409185
1,1,1-Trichloroethane	U		0.000325	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
1,1,2-Trichloroethane	U		0.00104	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
Trichloroethene	U		0.000473	0.00100	0.00118	1	01/10/2020 16:10	WG1409185
Trichlorofluoromethane	U		0.000591	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
1,2,3-Trichloropropane	U		0.00603	0.0125	0.0148	1	01/10/2020 16:10	WG1409185
1,2,4-Trimethylbenzene	U		0.00137	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
1,2,3-Trimethylbenzene	U		0.00136	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
Vinyl chloride	U		0.000808	0.00250	0.00296	1	01/10/2020 16:10	WG1409185
1,3,5-Trimethylbenzene	U		0.00128	0.00500	0.00591	1	01/10/2020 16:10	WG1409185
Xylenes, Total	U		0.00565	0.00650	0.00769	1	01/10/2020 16:10	WG1409185
(S) Toluene-d8	*108*				*75.0-131*		*01/10/2020 16:10*	WG1409185
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*01/10/2020 16:10*	WG1409185
(S) 1,2-Dichloroethane-d4	*96.1*				*70.0-130*		*01/10/2020 16:10*	WG1409185

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		15.7	4.00	47.3	10	01/11/2020 18:00	WG1409318
Residual Range Organics (RRO)	131		39.4	10.0	118	10	01/11/2020 18:00	WG1409318
(S) o-Terphenyl	*56.5*				*18.0-148*		*01/11/2020 18:00*	WG1409318

Sample Narrative:

L1178043-29 WG1409318: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	85.3		1	01/11/2020 16:32	WG1409445

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.994	0.100	2.93	25	01/10/2020 16:17	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*114*				*77.0-120*		*01/10/2020 16:17*	WG1409249

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	0.0349		0.0161	0.0250	0.0293	1	01/10/2020 16:30	WG1409185
Acrylonitrile	U		0.00223	0.0125	0.0147	1	01/10/2020 16:30	WG1409185
Benzene	0.000814	J	0.000469	0.00100	0.00117	1	01/10/2020 16:30	WG1409185
Bromobenzene	U		0.00123	0.0125	0.0147	1	01/10/2020 16:30	WG1409185
Bromodichloromethane	U		0.000924	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
Bromoform	U		0.00701	0.0250	0.0293	1	01/10/2020 16:30	WG1409185
Bromomethane	U		0.00434	0.0125	0.0147	1	01/10/2020 16:30	WG1409185
n-Butylbenzene	U		0.00450	0.0125	0.0147	1	01/10/2020 16:30	WG1409185
sec-Butylbenzene	U		0.00297	0.0125	0.0147	1	01/10/2020 16:30	WG1409185
tert-Butylbenzene	U		0.00182	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
Carbon tetrachloride	U		0.00127	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
Chlorobenzene	U		0.000672	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
Chlorodibromomethane	U		0.000528	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
Chloroethane	U		0.00127	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
Chloroform	U		0.000487	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
Chloromethane	U		0.00163	0.0125	0.0147	1	01/10/2020 16:30	WG1409185
2-Chlorotoluene	U		0.00108	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
4-Chlorotoluene	U		0.00132	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
1,2-Dibromo-3-Chloropropane	U		0.00598	0.0250	0.0293	1	01/10/2020 16:30	WG1409185
1,2-Dibromoethane	U		0.000615	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
Dibromomethane	U		0.00117	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
1,2-Dichlorobenzene	U		0.00170	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
1,3-Dichlorobenzene	U		0.00199	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
1,4-Dichlorobenzene	U		0.00231	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
Dichlorodifluoromethane	U		0.000959	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
1,1-Dichloroethane	U		0.000674	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
1,2-Dichloroethane	U		0.000557	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
1,1-Dichloroethene	U		0.000586	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
cis-1,2-Dichloroethene	U		0.000809	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
trans-1,2-Dichloroethene	U		0.00168	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
1,2-Dichloropropane	U		0.00149	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
1,1-Dichloropropene	U		0.000821	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
1,3-Dichloropropane	U		0.00205	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
cis-1,3-Dichloropropene	U		0.000795	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
trans-1,3-Dichloropropene	U		0.00179	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
2,2-Dichloropropane	U		0.000930	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
Di-isopropyl ether	U		0.000410	0.00100	0.00117	1	01/10/2020 16:30	WG1409185
Ethylbenzene	U		0.000621	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
Hexachloro-1,3-butadiene	U		0.0149	0.0250	0.0293	1	01/10/2020 16:30	WG1409185
Isopropylbenzene	U		0.00101	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
p-Isopropyltoluene	0.0571		0.00273	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
2-Butanone (MEK)	U		0.0147	0.0250	0.0293	1	01/10/2020 16:30	WG1409185
Methylene Chloride	U		0.00778	0.0250	0.0293	1	01/10/2020 16:30	WG1409185
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0250	0.0293	1	01/10/2020 16:30	WG1409185

SB46 (14-15)

Collected date/time: 01/08/20 10:31

SAMPLE RESULTS - 30

L1178043

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000346	0.00100	0.00117	1	01/10/2020 16:30	WG1409185
Naphthalene	U		0.00366	0.0125	0.0147	1	01/10/2020 16:30	WG1409185
n-Propylbenzene	0.00148	J	0.00138	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
Styrene	U		0.00320	0.0125	0.0147	1	01/10/2020 16:30	WG1409185
1,1,1,2-Tetrachloroethane	U		0.000586	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
1,1,2,2-Tetrachloroethane	U		0.000457	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
1,1,2-Trichlorotrifluoroethane	U		0.000791	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
Tetrachloroethene	U		0.000821	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
Toluene	0.00231	J	0.00147	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
1,2,3-Trichlorobenzene	U		0.000733	0.0125	0.0147	1	01/10/2020 16:30	WG1409185
1,2,4-Trichlorobenzene	U		0.00565	0.0125	0.0147	1	01/10/2020 16:30	WG1409185
1,1,1-Trichloroethane	U		0.000322	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
1,1,2-Trichloroethane	U		0.00104	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
Trichloroethene	U		0.000469	0.00100	0.00117	1	01/10/2020 16:30	WG1409185
Trichlorofluoromethane	U		0.000586	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
1,2,3-Trichloropropane	U		0.00598	0.0125	0.0147	1	01/10/2020 16:30	WG1409185
1,2,4-Trimethylbenzene	U		0.00136	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
1,2,3-Trimethylbenzene	U		0.00135	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
Vinyl chloride	U		0.000801	0.00250	0.00293	1	01/10/2020 16:30	WG1409185
1,3,5-Trimethylbenzene	U		0.00127	0.00500	0.00586	1	01/10/2020 16:30	WG1409185
Xylenes, Total	U		0.00560	0.00650	0.00762	1	01/10/2020 16:30	WG1409185
(S) Toluene-d8	*109*				*75.0-131*		*01/10/2020 16:30*	WG1409185
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*01/10/2020 16:30*	WG1409185
(S) 1,2-Dichloroethane-d4	*97.9*				*70.0-130*		*01/10/2020 16:30*	WG1409185

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	10.5	J	7.80	4.00	23.4	5	01/11/2020 18:38	WG1409318
Residual Range Organics (RRO)	98.9		19.5	10.0	58.6	5	01/11/2020 18:38	WG1409318
(S) o-Terphenyl	*56.8*				*18.0-148*		*01/11/2020 18:38*	WG1409318

Sample Narrative:

L1178043-30 WG1409318: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.3		1	01/11/2020 16:32	WG1409445

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.09	0.100	3.21	29	01/10/2020 16:38	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*108*				*77.0-120*		*01/10/2020 16:38*	WG1409249

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0176	0.0250	0.0321	1.16	01/10/2020 16:50	WG1409185
Acrylonitrile	U		0.00244	0.0125	0.0161	1.16	01/10/2020 16:50	WG1409185
Benzene	0.000610	J	0.000514	0.00100	0.00128	1.16	01/10/2020 16:50	WG1409185
Bromobenzene	U		0.00135	0.0125	0.0161	1.16	01/10/2020 16:50	WG1409185
Bromodichloromethane	U		0.00101	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
Bromoform	U		0.00768	0.0250	0.0321	1.16	01/10/2020 16:50	WG1409185
Bromomethane	U		0.00475	0.0125	0.0161	1.16	01/10/2020 16:50	WG1409185
n-Butylbenzene	U		0.00493	0.0125	0.0161	1.16	01/10/2020 16:50	WG1409185
sec-Butylbenzene	U		0.00325	0.0125	0.0161	1.16	01/10/2020 16:50	WG1409185
tert-Butylbenzene	U		0.00199	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
Carbon tetrachloride	U		0.00139	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
Chlorobenzene	U		0.000736	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
Chlorodibromomethane	U		0.000578	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
Chloroethane	U		0.00139	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
Chloroform	U		0.000533	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
Chloromethane	U		0.00179	0.0125	0.0161	1.16	01/10/2020 16:50	WG1409185
2-Chlorotoluene	U		0.00118	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
4-Chlorotoluene	U		0.00145	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
1,2-Dibromo-3-Chloropropane	U		0.00655	0.0250	0.0321	1.16	01/10/2020 16:50	WG1409185
1,2-Dibromoethane	U		0.000674	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
Dibromomethane	U		0.00128	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
1,2-Dichlorobenzene	U		0.00186	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
1,3-Dichlorobenzene	U		0.00218	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
1,4-Dichlorobenzene	U		0.00253	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
Dichlorodifluoromethane	U		0.00105	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
1,1-Dichloroethane	U		0.000739	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
1,2-Dichloroethane	U		0.000610	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
1,1-Dichloroethene	U		0.000642	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
cis-1,2-Dichloroethene	U		0.000886	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
trans-1,2-Dichloroethene	U		0.00184	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
1,2-Dichloropropane	U		0.00163	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
1,1-Dichloropropene	U		0.000899	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
1,3-Dichloropropane	U		0.00225	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
cis-1,3-Dichloropropene	U		0.000871	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
trans-1,3-Dichloropropene	U		0.00197	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
2,2-Dichloropropane	U		0.00102	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
Di-isopropyl ether	U		0.000450	0.00100	0.00128	1.16	01/10/2020 16:50	WG1409185
Ethylbenzene	U		0.000681	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
Hexachloro-1,3-butadiene	U		0.0163	0.0250	0.0321	1.16	01/10/2020 16:50	WG1409185
Isopropylbenzene	U		0.00111	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
p-Isopropyltoluene	0.0635		0.00299	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
2-Butanone (MEK)	U		0.0161	0.0250	0.0321	1.16	01/10/2020 16:50	WG1409185
Methylene Chloride	U		0.00853	0.0250	0.0321	1.16	01/10/2020 16:50	WG1409185
4-Methyl-2-pentanone (MIBK)	U		0.0128	0.0250	0.0321	1.16	01/10/2020 16:50	WG1409185

SB46 (16-18)

Collected date/time: 01/08/20 10:33

SAMPLE RESULTS - 31

L1178043

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000379	0.00100	0.00128	1.16	01/10/2020 16:50	WG1409185
Naphthalene	U		0.00401	0.0125	0.0161	1.16	01/10/2020 16:50	WG1409185
n-Propylbenzene	0.00174	J	0.00152	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
Styrene	U		0.00351	0.0125	0.0161	1.16	01/10/2020 16:50	WG1409185
1,1,1,2-Tetrachloroethane	U		0.000642	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
1,1,2,2-Tetrachloroethane	U		0.000501	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
1,1,2-Trichlorotrifluoroethane	U		0.000867	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
Tetrachloroethene	U		0.000899	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
Toluene	0.00360	J	0.00161	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
1,2,3-Trichlorobenzene	U		0.000803	0.0125	0.0161	1.16	01/10/2020 16:50	WG1409185
1,2,4-Trichlorobenzene	U		0.00619	0.0125	0.0161	1.16	01/10/2020 16:50	WG1409185
1,1,1-Trichloroethane	U		0.000353	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
1,1,2-Trichloroethane	U		0.00113	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
Trichloroethene	U		0.000514	0.00100	0.00128	1.16	01/10/2020 16:50	WG1409185
Trichlorofluoromethane	U		0.000642	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
1,2,3-Trichloropropane	U		0.00655	0.0125	0.0161	1.16	01/10/2020 16:50	WG1409185
1,2,4-Trimethylbenzene	U		0.00149	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
1,2,3-Trimethylbenzene	U		0.00148	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
Vinyl chloride	U		0.000877	0.00250	0.00321	1.16	01/10/2020 16:50	WG1409185
1,3,5-Trimethylbenzene	U		0.00139	0.00500	0.00642	1.16	01/10/2020 16:50	WG1409185
Xylenes, Total	U		0.00614	0.00650	0.00835	1.16	01/10/2020 16:50	WG1409185
(S) Toluene-d8	*108*				*75.0-131*		*01/10/2020 16:50*	WG1409185
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*01/10/2020 16:50*	WG1409185
(S) 1,2-Dichloroethane-d4	*96.8*				*70.0-130*		*01/10/2020 16:50*	WG1409185

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	8.12		1.47	4.00	4.43	1	01/12/2020 13:52	WG1409318
Residual Range Organics (RRO)	59.4		18.4	10.0	55.4	5	01/11/2020 18:13	WG1409318
(S) o-Terphenyl	*51.5*				*18.0-148*		*01/12/2020 13:52*	WG1409318
(S) o-Terphenyl	*63.2*				*18.0-148*		*01/11/2020 18:13*	WG1409318

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	92.1		1	01/11/2020 16:32	WG1409445

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.920	0.100	2.71	25	01/10/2020 16:58	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*108*				*77.0-120*		*01/10/2020 16:58*	WG1409249

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	0.0230	J	0.0149	0.0250	0.0271	1	01/10/2020 17:10	WG1409185
Acrylonitrile	U		0.00206	0.0125	0.0136	1	01/10/2020 17:10	WG1409185
Benzene	U		0.000434	0.00100	0.00109	1	01/10/2020 17:10	WG1409185
Bromobenzene	U		0.00114	0.0125	0.0136	1	01/10/2020 17:10	WG1409185
Bromodichloromethane	U		0.000856	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
Bromoform	U		0.00649	0.0250	0.0271	1	01/10/2020 17:10	WG1409185
Bromomethane	U		0.00402	0.0125	0.0136	1	01/10/2020 17:10	WG1409185
n-Butylbenzene	U		0.00417	0.0125	0.0136	1	01/10/2020 17:10	WG1409185
sec-Butylbenzene	U		0.00275	0.0125	0.0136	1	01/10/2020 17:10	WG1409185
tert-Butylbenzene	U		0.00168	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
Carbon tetrachloride	U		0.00117	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
Chlorobenzene	U		0.000622	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
Chlorodibromomethane	U		0.000489	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
Chloroethane	U		0.00117	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
Chloroform	U		0.000451	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
Chloromethane	U		0.00151	0.0125	0.0136	1	01/10/2020 17:10	WG1409185
2-Chlorotoluene	U		0.000999	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
4-Chlorotoluene	U		0.00123	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
1,2-Dibromo-3-Chloropropane	U		0.00554	0.0250	0.0271	1	01/10/2020 17:10	WG1409185
1,2-Dibromoethane	U		0.000570	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
Dibromomethane	U		0.00109	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
1,2-Dichlorobenzene	U		0.00157	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
1,3-Dichlorobenzene	U		0.00185	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
1,4-Dichlorobenzene	U		0.00214	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
Dichlorodifluoromethane	U		0.000888	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
1,1-Dichloroethane	U		0.000624	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
1,2-Dichloroethane	U		0.000516	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
1,1-Dichloroethene	U		0.000543	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
cis-1,2-Dichloroethene	U		0.000749	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
trans-1,2-Dichloroethene	U		0.00155	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
1,2-Dichloropropane	U		0.00138	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
1,1-Dichloropropene	U		0.000760	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
1,3-Dichloropropane	U		0.00190	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
cis-1,3-Dichloropropene	U		0.000736	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
trans-1,3-Dichloropropene	U		0.00166	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
2,2-Dichloropropane	U		0.000861	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
Di-isopropyl ether	U		0.000380	0.00100	0.00109	1	01/10/2020 17:10	WG1409185
Ethylbenzene	0.00137	J	0.000575	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
Hexachloro-1,3-butadiene	U		0.0138	0.0250	0.0271	1	01/10/2020 17:10	WG1409185
Isopropylbenzene	U		0.000937	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
p-Isopropyltoluene	0.0131		0.00253	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
2-Butanone (MEK)	U		0.0136	0.0250	0.0271	1	01/10/2020 17:10	WG1409185
Methylene Chloride	U		0.00721	0.0250	0.0271	1	01/10/2020 17:10	WG1409185
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0271	1	01/10/2020 17:10	WG1409185

SB46 (20-22)

Collected date/time: 01/08/20 10:35

SAMPLE RESULTS - 32

L1178043

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000320	0.00100	0.00109	1	01/10/2020 17:10	WG1409185
Naphthalene	U		0.00339	0.0125	0.0136	1	01/10/2020 17:10	WG1409185
n-Propylbenzene	U		0.00128	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
Styrene	U		0.00296	0.0125	0.0136	1	01/10/2020 17:10	WG1409185
1,1,1,2-Tetrachloroethane	U		0.000543	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
1,1,2,2-Tetrachloroethane	U		0.000423	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
1,1,2-Trichlorotrifluoroethane	U		0.000733	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
Tetrachloroethene	U		0.000760	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
Toluene	0.00379	J	0.00136	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
1,2,3-Trichlorobenzene	U		0.000679	0.0125	0.0136	1	01/10/2020 17:10	WG1409185
1,2,4-Trichlorobenzene	U		0.00523	0.0125	0.0136	1	01/10/2020 17:10	WG1409185
1,1,1-Trichloroethane	U		0.000299	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
1,1,2-Trichloroethane	U		0.000959	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
Trichloroethene	U		0.000434	0.00100	0.00109	1	01/10/2020 17:10	WG1409185
Trichlorofluoromethane	U		0.000543	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
1,2,3-Trichloropropane	U		0.00554	0.0125	0.0136	1	01/10/2020 17:10	WG1409185
1,2,4-Trimethylbenzene	U		0.00126	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
1,2,3-Trimethylbenzene	U		0.00125	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
Vinyl chloride	U		0.000742	0.00250	0.00271	1	01/10/2020 17:10	WG1409185
1,3,5-Trimethylbenzene	U		0.00117	0.00500	0.00543	1	01/10/2020 17:10	WG1409185
Xylenes, Total	0.00577	J	0.00519	0.00650	0.00706	1	01/10/2020 17:10	WG1409185
(S) Toluene-d8	*108*				*75.0-131*		*01/10/2020 17:10*	WG1409185
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*01/10/2020 17:10*	WG1409185
(S) 1,2-Dichloroethane-d4	*98.1*				*70.0-130*		*01/10/2020 17:10*	WG1409185

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	4.14	J	1.44	4.00	4.34	1	01/11/2020 19:28	WG1409318
Residual Range Organics (RRO)	24.2		3.62	10.0	10.9	1	01/11/2020 19:28	WG1409318
(S) o-Terphenyl	*66.3*				*18.0-148*		*01/11/2020 19:28*	WG1409318

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.0		1	01/11/2020 16:32	WG1409445

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.253	J	0.0761	0.500	0.543	1	01/11/2020 09:11	WG1409385
Lead	7.75		0.206	0.500	0.543	1	01/11/2020 09:11	WG1409385

SB54 (4-6)

Collected date/time: 01/08/20 10:04

SAMPLE RESULTS - 34

L1178043

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.2		1	01/11/2020 16:32	WG1409445

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.170	J	0.0759	0.500	0.542	1	01/11/2020 09:13	WG1409385
Lead	2.28		0.206	0.500	0.542	1	01/11/2020 09:13	WG1409385

SB54 (8-9)
Collected date/time: 01/08/20 10:06

SAMPLE RESULTS - 35

L1178043

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.9		1	01/11/2020 16:32	WG1409445

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.143	J	0.0762	0.500	0.544	1	01/11/2020 09:21	WG1409385
Lead	2.07		0.207	0.500	0.544	1	01/11/2020 09:21	WG1409385

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.8		1	01/11/2020 16:32	WG1409445

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.412	J	0.0788	0.500	0.563	1	01/11/2020 09:24	WG1409385
Lead	32.2		0.214	0.500	0.563	1	01/11/2020 09:24	WG1409385

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.0		1	01/11/2020 16:05	WG1409446

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.800		0.0796	0.500	0.568	1	01/11/2020 09:27	WG1409385
Lead	91.2		0.216	0.500	0.568	1	01/11/2020 09:27	WG1409385

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.1		1	01/11/2020 16:05	WG1409446

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.610		0.0842	0.500	0.601	1	01/11/2020 09:29	WG1409385
Lead	63.3		0.229	0.500	0.601	1	01/11/2020 09:29	WG1409385

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.5		1	01/11/2020 16:05	WG1409446

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.37		0.497	2.00	2.16	1	01/11/2020 09:32	WG1409385

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.6		1	01/11/2020 16:05	WG1409446

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.60		0.525	2.00	2.28	1	01/11/2020 09:34	WG1409385

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.1		1	01/11/2020 16:05	WG1409446

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.27		0.505	2.00	2.20	1	01/11/2020 08:27	WG1409385

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.4		1	01/11/2020 16:05	WG1409446

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.45		0.498	2.00	2.16	1	01/11/2020 09:37	WG1409385

SB57 (0-1)

Collected date/time: 01/08/20 11:55

SAMPLE RESULTS - 43

L1178043

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.3		1	01/11/2020 16:05	WG1409446

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.909	0.100	2.68	25	01/10/2020 17:19	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*113*				*77.0-120*		*01/10/2020 17:19*	WG1409249

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	81.3	J	71.3	4.00	214	50	01/11/2020 19:41	WG1409318
Residual Range Organics (RRO)	1120		179	10.0	536	50	01/11/2020 19:41	WG1409318
(S) o-Terphenyl	*83.1*	J7			*18.0-148*		*01/11/2020 19:41*	WG1409318

Sample Narrative:

L1178043-43 WG1409318: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.0		1	01/11/2020 16:05	WG1409446

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.12	0.100	3.30	31	01/10/2020 17:39	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*107*				*77.0-120*		*01/10/2020 17:39*	WG1409249

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	15.5	J	7.07	4.00	21.3	5	01/11/2020 20:59	WG1409318
Residual Range Organics (RRO)	147		17.7	10.0	53.2	5	01/11/2020 20:59	WG1409318
(S) o-Terphenyl	*63.5*				*18.0-148*		*01/11/2020 20:59*	WG1409318

Sample Narrative:

L1178043-44 WG1409318: Cannot run at lower dilution due to viscosity of extract

SB58 (0-1)

Collected date/time: 01/08/20 14:30

SAMPLE RESULTS - 45

L1178043

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.1		1	01/11/2020 16:05	WG1409446

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.979	0.100	2.89	26	01/10/2020 18:00	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*116*				*77.0-120*		*01/10/2020 18:00*	WG1409249

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	127	J	73.8	4.00	222	50	01/11/2020 20:06	WG1409318
Residual Range Organics (RRO)	1310		185	10.0	555	50	01/11/2020 20:06	WG1409318
(S) o-Terphenyl	*81.6*	J7			*18.0-148*		*01/11/2020 20:06*	WG1409318

Sample Narrative:

L1178043-45 WG1409318: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.1		1	01/11/2020 16:05	WG1409446

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.941	0.100	2.78	25.3	01/10/2020 18:41	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*116*				*77.0-120*		*01/10/2020 18:41*	WG1409249

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	15.9	J	7.30	4.00	22.0	5	01/11/2020 19:54	WG1409318
Residual Range Organics (RRO)	122		18.3	10.0	54.9	5	01/11/2020 19:54	WG1409318
(S) o-Terphenyl	*59.0*				*18.0-148*		*01/11/2020 19:54*	WG1409318

Sample Narrative:

L1178043-46 WG1409318: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.4		1	01/13/2020 09:36	WG1409447

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.925	0.100	2.73	25.5	01/10/2020 18:20	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*108*				*77.0-120*		*01/10/2020 18:20*	WG1409249

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	223		71.2	4.00	214	50	01/11/2020 20:19	WG1409318
Residual Range Organics (RRO)	1380		178	10.0	535	50	01/11/2020 20:19	WG1409318
(S) o-Terphenyl	*81.3*	J7			*18.0-148*		*01/11/2020 20:19*	WG1409318

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB59 (1-2)

Collected date/time: 01/08/20 14:01

SAMPLE RESULTS - 48

L1178043

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	01/13/2020 09:36	WG1409447

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.02	0.100	3.00	27.8	01/10/2020 19:01	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*108*				*77.0-120*		*01/10/2020 19:01*	WG1409249

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	135	J	71.7	4.00	216	50	01/11/2020 18:51	WG1409318
Residual Range Organics (RRO)	885		180	10.0	539	50	01/11/2020 18:51	WG1409318
(S) o-Terphenyl	*79.1*	J7			*18.0-148*		*01/11/2020 18:51*	WG1409318

Sample Narrative:

L1178043-48 WG1409318: Cannot run at lower dilution due to viscosity of extract

SB60 (0-1)

Collected date/time: 01/08/20 11:40

SAMPLE RESULTS - 49

L1178043

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.4		1	01/13/2020 09:36	WG1409447

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.917	0.100	2.71	25	01/10/2020 19:22	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*117*				*77.0-120*		*01/10/2020 19:22*	WG1409249

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	205	J	144	4.00	433	100	01/11/2020 18:25	WG1409318
Residual Range Organics (RRO)	1860		360	10.0	1080	100	01/11/2020 18:25	WG1409318
(S) o-Terphenyl	*82.3*	J7			*18.0-148*		*01/11/2020 18:25*	WG1409318

Sample Narrative:

L1178043-49 WG1409318: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	01/13/2020 09:36	WG1409447

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.914	0.100	2.70	25	01/10/2020 19:42	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*108*				*77.0-120*		*01/10/2020 19:42*	WG1409249

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		71.7	4.00	216	50	01/11/2020 17:22	WG1409318
Residual Range Organics (RRO)	500	J	180	10.0	539	50	01/11/2020 17:22	WG1409318
(S) o-Terphenyl	*77.1*	J7			*18.0-148*		*01/11/2020 17:22*	WG1409318

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	90.1		1	01/13/2020 09:36	WG1409447

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.941	0.100	2.77	25	01/10/2020 20:03	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*107*				*77.0-120*		*01/10/2020 20:03*	WG1409249

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	79.0	J	73.8	4.00	222	50	01/11/2020 19:16	WG1409318
Residual Range Organics (RRO)	1170		185	10.0	555	50	01/11/2020 19:16	WG1409318
(S) o-Terphenyl	*83.1*	J7			*18.0-148*		*01/11/2020 19:16*	WG1409318

Sample Narrative:

L1178043-51 WG1409318: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.3		1	01/13/2020 09:36	WG1409447

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.908	0.100	2.68	25	01/10/2020 20:23	WG1409249
(S) a,a,a-Trifluorotoluene(FID)	*108*				*77.0-120*		*01/10/2020 20:23*	WG1409249

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	119	J	71.2	4.00	214	50	01/11/2020 20:34	WG1409318
Residual Range Organics (RRO)	1260		178	10.0	536	50	01/11/2020 20:34	WG1409318
(S) o-Terphenyl	*81.0*	J7			*18.0-148*		*01/11/2020 20:34*	WG1409318

Sample Narrative:

L1178043-52 WG1409318: Cannot run at lower dilution due to viscosity of extract

Method Blank (MB)

(MB) R3489815-1 01/10/20 16:04

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1178043-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1178043-01 01/10/20 16:04 • (DUP) R3489815-3 01/10/20 16:04

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	76.9	78.5	1	1.98		10

Laboratory Control Sample (LCS)

(LCS) R3489815-2 01/10/20 16:04

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) R3489816-1 01/10/20 16:21

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1178043-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1178043-12 01/10/20 16:21 • (DUP) R3489816-3 01/10/20 16:21

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.1	78.9	1	3.95		10

Laboratory Control Sample (LCS)

(LCS) R3489816-2 01/10/20 16:21

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3490128-1 01/11/20 16:51

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1178043-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1178043-17 01/11/20 16:51 • (DUP) R3490128-3 01/11/20 16:51

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	86.5	86.5	1	0.0600		10

Laboratory Control Sample (LCS)

(LCS) R3490128-2 01/11/20 16:51

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) R3490122-1 01/11/20 16:32

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1178043-28 Original Sample (OS) • Duplicate (DUP)

(OS) L1178043-28 01/11/20 16:32 • (DUP) R3490122-3 01/11/20 16:32

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	93.3	91.7	1	1.71		10

Laboratory Control Sample (LCS)

(LCS) R3490122-2 01/11/20 16:32

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) R3490113-1 01/11/20 16:05

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1178043-37 Original Sample (OS) • Duplicate (DUP)

(OS) L1178043-37 01/11/20 16:05 • (DUP) R3490113-3 01/11/20 16:05

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.0	88.1	1	0.202		10

Laboratory Control Sample (LCS)

(LCS) R3490113-2 01/11/20 16:05

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) R3490290-1 01/13/20 09:36

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1177995-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1177995-01 01/13/20 09:36 • (DUP) R3490290-3 01/13/20 09:36

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.8	82.1	1	0.787		10

Laboratory Control Sample (LCS)

(LCS) R3490290-2 01/13/20 09:36

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3489870-1 01/11/20 08:22

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Cadmium	U		0.0700	0.500
Lead	U		0.190	0.500

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3489870-2 01/11/20 08:25 • (LCSD) R3489870-3 01/11/20 08:27

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Cadmium	100	94.6	94.3	94.6	94.3	80.0-120			0.381	20
Lead	100	93.6	93.1	93.6	93.1	80.0-120			0.567	20

L1178043-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1178043-14 01/11/20 08:30 • (MS) R3489870-6 01/11/20 08:37 • (MSD) R3489870-7 01/11/20 08:40

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Cadmium	117	U	109	104	93.6	89.4	1	75.0-125			4.59	20
Lead	117	12.1	116	108	88.8	82.7	1	75.0-125			6.36	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3489866-1 01/11/20 08:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Arsenic	U		0.460	2.00
Cadmium	U		0.0700	0.500
Lead	U		0.190	0.500

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3489866-2 01/11/20 08:22 • (LCSD) R3489866-3 01/11/20 08:25

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Arsenic	100	95.6	95.5	95.6	95.5	80.0-120			0.0939	20
Cadmium	100	96.7	96.4	96.7	96.4	80.0-120			0.246	20
Lead	100	96.4	96.6	96.4	96.6	80.0-120			0.151	20

L1178043-41 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1178043-41 01/11/20 08:27 • (MS) R3489866-6 01/11/20 08:35 • (MSD) R3489866-7 01/11/20 08:37

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	110	2.27	101	109	90.3	96.8	1	75.0-125			6.79	20
Cadmium	110	0.155	101	108	91.9	98.6	1	75.0-125			7.06	20
Lead	110	4.80	109	116	95.0	101	1	75.0-125			6.35	20

WG1409249

Volatile Organic Compounds (GC) by Method NWTPHGX

QUALITY CONTROL SUMMARY

L1178043-27,28,29,30,31,32,43,44,45,46,47,48,49,50,51,52

Method Blank (MB)

(MB) R3489824-2 01/10/20 13:55

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)	*108*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3489824-1 01/10/20 12:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.30	96.4	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*118*	*77.0-120*	

L1178043-27 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1178043-27 01/10/20 15:16 • (MS) R3489824-3 01/10/20 20:44 • (MSD) R3489824-4 01/10/20 21:04

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	118	U	84.8	96.9	72.1	82.4	25	10.0-149			13.3	27
(S) a,a,a-Trifluorotoluene(FID)					*114*	*116*		*77.0-120*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3489938-2 01/10/20 11:19

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3489938-2 01/10/20 11:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	U		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	0.00820	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 chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*111*			*75.0-131*
(S) 4-Bromofluorobenzene	*103*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*95.2*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3489938-1 01/10/20 10:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.413	66.1	10.0-160	
Acrylonitrile	0.625	0.465	74.4	45.0-153	
Benzene	0.125	0.107	85.6	70.0-123	
Bromobenzene	0.125	0.129	103	73.0-121	
Bromodichloromethane	0.125	0.114	91.2	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3489938-1 01/10/20 10:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.0947	75.8	64.0-132	
Bromomethane	0.125	0.104	83.2	56.0-147	
n-Butylbenzene	0.125	0.123	98.4	68.0-135	
sec-Butylbenzene	0.125	0.118	94.4	74.0-130	
tert-Butylbenzene	0.125	0.112	89.6	75.0-127	
Carbon tetrachloride	0.125	0.107	85.6	66.0-128	
Chlorobenzene	0.125	0.110	88.0	76.0-128	
Chlorodibromomethane	0.125	0.106	84.8	74.0-127	
Chloroethane	0.125	0.107	85.6	61.0-134	
Chloroform	0.125	0.111	88.8	72.0-123	
Chloromethane	0.125	0.126	101	51.0-138	
2-Chlorotoluene	0.125	0.110	88.0	75.0-124	
4-Chlorotoluene	0.125	0.113	90.4	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.0840	67.2	59.0-130	
1,2-Dibromoethane	0.125	0.109	87.2	74.0-128	
Dibromomethane	0.125	0.111	88.8	75.0-122	
1,2-Dichlorobenzene	0.125	0.123	98.4	76.0-124	
1,3-Dichlorobenzene	0.125	0.119	95.2	76.0-125	
1,4-Dichlorobenzene	0.125	0.125	100	77.0-121	
Dichlorodifluoromethane	0.125	0.129	103	43.0-156	
1,1-Dichloroethane	0.125	0.124	99.2	70.0-127	
1,2-Dichloroethane	0.125	0.101	80.8	65.0-131	
1,1-Dichloroethene	0.125	0.119	95.2	65.0-131	
cis-1,2-Dichloroethene	0.125	0.123	98.4	73.0-125	
trans-1,2-Dichloroethene	0.125	0.110	88.0	71.0-125	
1,2-Dichloropropane	0.125	0.123	98.4	74.0-125	
1,1-Dichloropropene	0.125	0.115	92.0	73.0-125	
1,3-Dichloropropane	0.125	0.113	90.4	80.0-125	
cis-1,3-Dichloropropene	0.125	0.111	88.8	76.0-127	
trans-1,3-Dichloropropene	0.125	0.0992	79.4	73.0-127	
2,2-Dichloropropane	0.125	0.106	84.8	59.0-135	
Di-isopropyl ether	0.125	0.109	87.2	60.0-136	
Ethylbenzene	0.125	0.105	84.0	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.101	80.8	57.0-150	
Isopropylbenzene	0.125	0.0979	78.3	72.0-127	
p-Isopropyltoluene	0.125	0.113	90.4	72.0-133	
2-Butanone (MEK)	0.625	0.608	97.3	30.0-160	
Methylene Chloride	0.125	0.104	83.2	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.532	85.1	56.0-143	
Methyl tert-butyl ether	0.125	0.110	88.0	66.0-132	

Laboratory Control Sample (LCS)

(LCS) R3489938-1 01/10/20 10:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.127	102	59.0-130	
n-Propylbenzene	0.125	0.114	91.2	74.0-126	
Styrene	0.125	0.104	83.2	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.0955	76.4	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.0958	76.6	68.0-128	
Tetrachloroethene	0.125	0.124	99.2	70.0-136	
Toluene	0.125	0.102	81.6	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.117	93.6	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.135	108	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.113	90.4	62.0-137	
1,1,1-Trichloroethane	0.125	0.105	84.0	69.0-126	
1,1,2-Trichloroethane	0.125	0.117	93.6	78.0-123	
Trichloroethene	0.125	0.132	106	76.0-126	
Trichlorofluoromethane	0.125	0.112	89.6	61.0-142	
1,2,3-Trichloropropane	0.125	0.116	92.8	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.114	91.2	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.119	95.2	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.108	86.4	73.0-127	
Vinyl chloride	0.125	0.0993	79.4	63.0-134	
Xylenes, Total	0.375	0.304	81.1	72.0-127	
(S) Toluene-d8			*108*	*75.0-131*	
(S) 4-Bromofluorobenzene			*99.9*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*103*	*70.0-130*	

L1177913-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1177913-01 01/10/20 17:51 • (MS) R3489938-3 01/10/20 21:13 • (MSD) R3489938-4 01/10/20 21:32

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.563	0.0170	0.340	0.318	57.4	53.5	1	10.0-160			6.69	40
Benzene	0.113	0.0727	0.233	0.171	142	87.0	1	10.0-149			30.7	37
Acrylonitrile	0.563	U	0.366	0.359	65.0	63.8	1	10.0-160			1.93	40
Bromodichloromethane	0.113	U	0.101	0.0986	89.4	87.3	1	10.0-143			2.40	37
Bromobenzene	0.113	U	0.116	0.108	103	95.6	1	10.0-156			7.14	38
Bromoform	0.113	U	0.0819	0.0775	72.5	68.6	1	10.0-146			5.52	36
Bromomethane	0.113	U	0.143	0.137	127	121	1	10.0-149			4.29	38
n-Butylbenzene	0.113	0.00403	0.116	0.115	99.1	98.2	1	10.0-160			0.866	40
sec-Butylbenzene	0.113	U	0.107	0.108	94.7	95.6	1	10.0-159			0.930	39
Carbon tetrachloride	0.113	U	0.106	0.106	93.8	93.8	1	10.0-145			0.000	37

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

L1177913-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1177913-01 01/10/20 17:51 • (MS) R3489938-3 01/10/20 21:13 • (MSD) R3489938-4 01/10/20 21:32

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
tert-Butylbenzene	0.113	U	0.104	0.104	92.0	92.0	1	10.0-156			0.000	39
Chlorobenzene	0.113	U	0.112	0.104	99.1	92.0	1	10.0-152			7.41	39
Chlorodibromomethane	0.113	U	0.0981	0.0972	86.8	86.0	1	10.0-146			0.922	37
Chloroethane	0.113	U	0.130	0.149	115	132	1	10.0-146			13.6	40
Chloroform	0.113	U	0.111	0.106	98.2	93.8	1	10.0-146			4.61	37
Chloromethane	0.113	U	0.139	0.125	123	111	1	10.0-159			10.6	37
1,2-Dibromo-3-Chloropropane	0.113	U	0.0553	0.0592	48.9	52.4	1	10.0-151			6.81	39
2-Chlorotoluene	0.113	U	0.0988	0.0939	87.4	83.1	1	10.0-159			5.09	38
1,2-Dibromoethane	0.113	U	0.104	0.0972	92.0	86.0	1	10.0-148			6.76	34
4-Chlorotoluene	0.113	U	0.0999	0.0954	88.4	84.4	1	10.0-155			4.61	39
1,2-Dichlorobenzene	0.113	U	0.106	0.104	93.8	92.0	1	10.0-155			1.90	37
1,3-Dichlorobenzene	0.113	U	0.106	0.104	93.8	92.0	1	10.0-153			1.90	38
Dibromomethane	0.113	U	0.105	0.0998	92.9	88.3	1	10.0-147			5.08	35
1,4-Dichlorobenzene	0.113	U	0.110	0.105	97.3	92.9	1	10.0-151			4.65	38
Dichlorodifluoromethane	0.113	U	0.154	0.138	136	122	1	10.0-160			11.0	35
1,1-Dichloroethane	0.113	U	0.123	0.117	109	104	1	10.0-147			5.00	37
1,2-Dichloroethane	0.113	U	0.0958	0.0845	84.8	74.8	1	10.0-148			12.5	35
1,1-Dichloroethene	0.113	U	0.129	0.119	114	105	1	10.0-155			8.06	37
cis-1,2-Dichloroethene	0.113	U	0.121	0.115	107	102	1	10.0-149			5.08	37
trans-1,2-Dichloroethene	0.113	U	0.108	0.103	95.6	91.2	1	10.0-150			4.74	37
1,2-Dichloropropane	0.113	U	0.121	0.117	107	104	1	10.0-148			3.36	37
1,1-Dichloropropene	0.113	U	0.115	0.109	102	96.5	1	10.0-153			5.36	35
cis-1,3-Dichloropropene	0.113	U	0.113	0.106	100	93.8	1	10.0-151			6.39	37
1,3-Dichloropropane	0.113	U	0.115	0.108	102	95.6	1	10.0-154			6.28	35
trans-1,3-Dichloropropene	0.113	U	0.102	0.0939	90.3	83.1	1	10.0-148			8.27	37
2,2-Dichloropropane	0.113	U	0.0944	0.110	83.5	97.3	1	10.0-138			15.3	36
Ethylbenzene	0.113	0.0168	0.126	0.113	96.6	85.1	1	10.0-160			10.9	38
Di-isopropyl ether	0.113	U	0.109	0.0983	96.5	87.0	1	10.0-147			10.3	36
Hexachloro-1,3-butadiene	0.113	U	0.111	0.106	98.2	93.8	1	10.0-160			4.61	40
Isopropylbenzene	0.113	0.00214	0.102	0.0974	88.4	84.3	1	10.0-155			4.61	38
2-Butanone (MEK)	0.563	U	0.608	0.561	108	99.6	1	10.0-160			8.04	40
Methylene Chloride	0.113	U	0.0962	0.0890	85.1	78.8	1	10.0-141			7.78	37
p-Isopropyltoluene	0.113	0.00293	0.110	0.0991	94.8	85.1	1	10.0-160			10.4	40
4-Methyl-2-pentanone (MIBK)	0.563	U	0.474	0.438	84.2	77.8	1	10.0-160			7.89	35
Methyl tert-butyl ether	0.113	U	0.0859	0.0909	76.0	80.4	1	11.0-147			5.66	35
Naphthalene	0.113	0.348	0.550	0.406	179	51.3	1	10.0-160	J5		30.1	36
n-Propylbenzene	0.113	0.00265	0.109	0.104	94.1	89.7	1	10.0-158			4.69	38
Styrene	0.113	0.00491	0.108	0.101	91.2	85.0	1	10.0-160			6.70	40
1,1,2,2-Tetrachloroethane	0.113	U	0.0837	0.0820	74.1	72.6	1	10.0-160			2.05	35
1,1,1,2-Tetrachloroethane	0.113	U	0.0922	0.0849	81.6	75.1	1	10.0-149			8.24	39

L1177913-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1177913-01 01/10/20 17:51 • (MS) R3489938-3 01/10/20 21:13 • (MSD) R3489938-4 01/10/20 21:32

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.113	U	0.127	0.118	112	104	1	10.0-156			7.35	39
Toluene	0.113	0.0745	0.230	0.170	138	84.5	1	10.0-156			30.0	38
1,1,2-Trichlorotrifluoroethane	0.113	U	0.134	0.133	119	118	1	10.0-160			0.749	36
1,2,3-Trichlorobenzene	0.113	U	0.103	0.114	91.2	101	1	10.0-160			10.1	40
1,2,4-Trichlorobenzene	0.113	U	0.0959	0.101	84.9	89.4	1	10.0-160			5.18	40
1,1,1-Trichloroethane	0.113	U	0.0978	0.0996	86.5	88.1	1	10.0-144			1.82	35
1,1,2-Trichloroethane	0.113	U	0.112	0.108	99.1	95.6	1	10.0-160			3.64	35
Trichloroethene	0.113	U	0.126	0.119	112	105	1	10.0-156			5.71	38
Trichlorofluoromethane	0.113	U	0.127	0.121	112	107	1	10.0-160			4.84	40
1,2,3-Trichloropropane	0.113	U	0.0991	0.0956	87.7	84.6	1	10.0-156			3.60	35
1,2,3-Trimethylbenzene	0.113	0.0255	0.137	0.122	98.7	85.4	1	10.0-160			11.6	36
1,2,4-Trimethylbenzene	0.113	0.0437	0.168	0.144	110	88.8	1	10.0-160			15.4	36
1,3,5-Trimethylbenzene	0.113	0.0169	0.124	0.105	94.8	78.0	1	10.0-160			16.6	38
Vinyl chloride	0.113	U	0.132	0.115	117	102	1	10.0-160			13.8	37
Xylenes, Total	0.337	0.115	0.494	0.396	112	83.4	1	10.0-160			22.0	38
(S) Toluene-d8					*111*	*107*		*75.0-131*				
(S) 4-Bromofluorobenzene					*104*	*102*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*98.4*	*96.8*		*70.0-130*				

Method Blank (MB)

(MB) R3489920-1 01/11/20 13:09

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	*65.3*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3489920-2 01/11/20 13:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	43.7	87.4	50.0-150	
(S) o-Terphenyl			*63.5*	*18.0-148*	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

GLOSSARY OF TERMS

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia[1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky[1,6]	90010
Kentucky[2]	16
Louisiana	AI30792
Louisiana[1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico[1]	n/a
New York	11742
North Carolina	Env375
North Carolina[1]	DW21704
North Carolina[3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee[1,4]	2006
Texas	T104704245-18-15
Texas[5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

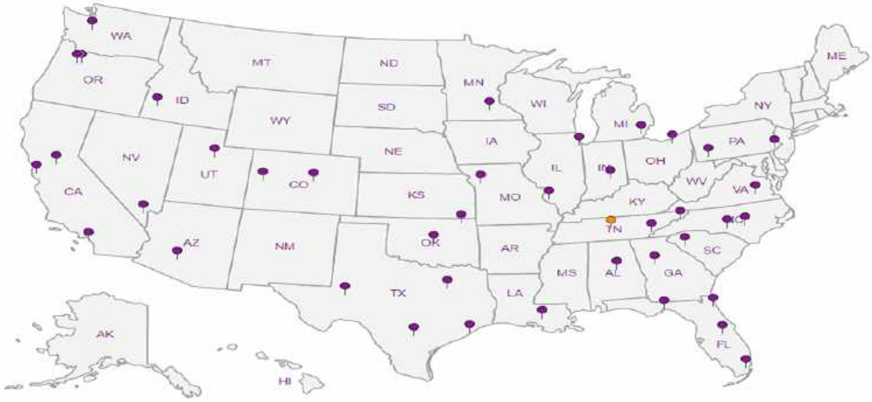
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025[5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): K Barnette

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X 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 ___ 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

SDG # 1178043

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB40(0-1)	Grab	SS	0-1	1/8/20	0815	1								X				
SB40(1-2)	Grab	SS	1-2	1/8/20	816	1								X				
SB40(2-3)	Grab	SS	2-3	1/8/20	817	1		X	X						X			01
SB40(3-4)	Grab	SS	3-4	1/8/20	818	1								X				
SB40(4-6)	Grab	SS	4-6	1/8/20	819	1		X	X						X			02
SB40(6-8)	Grab	SS	6-8	1/8/20	820	1								X				
SB40(8-9)	Grab	SS	8-9	1/8/20	821	1		X	X						X			03
SB40(9-10)	Grab	SS	9-10	1/8/20	822	1								X				
SB40(10-11)	Grab	SS	10-11	1/8/20	823	1		X	X						X			04
SB40(11-12)	Grab	SS	11-12	1/8/20	824	1		X	X						X			05

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ______

Remarks:
0.3/0.1/0.3/0.8/0.5/0.2/0.2/0.2/1.4/0.2/1.1

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ______

Tracking # 1235 8607 1862/1972/1917/1870/1961/ 1928/1940/1906/1858/1250/1891

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)		
K Barnette	1/8/20	1900		Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 6	
Relinquished by : (Signature)	Date: 1-9-20	Time:	Received by: (Signature)	Temp: °C 1.5-.5=1.0	Bottles Received: 217
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20	Time: 9:00

If preservation required by Login: Date/Time

01-047
01-048
01-049
01-050

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): K Barnette

Quote #

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Immediately Packed on Ice N ___ Y X

Chain of Custody Page ___ of ___

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1178043

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB40(14-15)	Grab	SS	14-15	1/8/20	825	1								X				
SB40(16-17)	Grab	SS	16-17	1/8/20	826	1		X	X						X			06
SB40(17-18)	Grab	SS	17-18	1/8/20	827	1								X				
SB40 (19-20)	Grab	SS	19-20	1/8/20	828	1								X				
SB41 (0-1)	Grab	SS	0-1	1/8/20	905	1								X				
SB41 (1-2)	Grab	SS	1-2	1/8/20	906	1								X				
SB41(2-3)	Grab	SS	2-3	1/8/20	907	1		X	X						X			07
SB41 (3-4)	Grab	SS	3-4	1/8/20	908	1								X				
SB41 (4-6)	Grab	SS	4-6	1/8/20	909	1		X	X						X			08
SB41 (6-8)	Grab	SS	6-8	1/8/20	910	1								X				

* 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) K Barnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: Yes / [✓ No] HCL / MeoH TBR 6	
Relinquished by : (Signature)	Date: 1-9-20	Time: 1700	Received by: (Signature)	Temp: °C 1.5-.5=1.0	Bottles Received: 27
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20	Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page ___ of ___

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Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.08

Lab Project #
TGERESHTX-R13411

SDG # 1178043

Table #

Collected by (print): KBarnette

Site/Facility ID #

P.O. #
8772

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB41 (8-9)	Grab	SS	8-9	1/8/20	911	1		X	X						X			09
SB41 (9-10)	Grab	SS	9-10	1/8/20	912	1								X				
SB41 (10-11)	Grab	SS	10-11	1/8/20	913	1		X	X						X			10
SB41 (11-12)	Grab	SS	11-12	1/8/20	914	1		X	X						X			11
SB41 (14-15)	Grab	SS	14-15	1/8/20	915	1								X				
SB41 (16-17)	Grab	SS	16-17	1/8/20	916	1		X	X						X			12
SB41 (17-18)	Grab	SS	17-18	1/8/20	917	1								X				
SB41 (19-20)	Grab	SS	19-20	1/8/20	918	1								X				
SB42 (0-1)	Grab	SS	0-1	1/8/20	755	1								X				
SB42 (1-2)	Grab	SS	1-2	1/8/20	756	1								X				

*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) KBarnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 6 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 1-9-20	Time: 1700	Received by: (Signature)	Temp: °C 1.5-.5=1.0* Bottles Received: 217	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20 Time: 9:00	Hold: Condition: NCF / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

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Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.08

Lab Project #
TGERESHTX-R13411

Collected by (print): K Barnette

Site/Facility ID #

P.O. #
8772

Collected by (signature): K Barnette

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 1172043

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB42 (2-3)	Grab	SS	2-3	1/8/20	757	1		X	X						X			13
SB42 (3-4)	Grab	SS	3-4	1/8/20	758	1								X				
SB42 (4-6)	Grab	SS	4-6	1/8/20	759	1		X	X						X			14
SB42 (6-8)	Grab	SS	6-8	1/8/20	800	1								X				
SB42 (8-9)	Grab	SS	8-9	1/8/20	801	1		X	X						X			15
SB42 (9-10)	Grab	SS	9-10	1/8/20	802	1								X				
SB42 (10-11)	Grab	SS	10-11	1/8/20	803	1		X	X						X			16
SB42 (11-12)	Grab	SS	11-12	1/8/20	804	1		X	X						X			17
SB42 (14-15)	Grab	SS	14-15	1/8/20	805	1								X				
SB42 (16-17)	Grab	SS	16-17	1/8/20	806	1		X	X						X			18

* 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) K Barnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCL / MeoH TBR 6	
Relinquished by : (Signature)	Date: 1-9-20	Time: 1700	Received by: (Signature)	Temp: 1.5-.5=1.0 °C Bottles Received: 217	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20 Time: 9:00	Hold: Condition: [✓ NC] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): K Barnette

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 1178643

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB42(17-18)	Grab	SS	17-18	1/8/20	807	1								X				
SB42(19-20)	Grab	SS	19-20	1/8/20	808	1								X				
SB43(0-1)	Grab	SS	0-1	1/8/20	840	1								X				
SB43(1-2)	Grab	SS	1-2	1/8/20	841	1								X				
SB43(2-3)	Grab	SS	2-3	1/8/20	842	1		X	X						X			19
SB43(3-4)	Grab	SS	3-4	1/8/20	843	1								X				
SB43(4-6)	Grab	SS	4-6	1/8/20	844	1		X	X						X			20
SB43(6-8)	Grab	SS	6-8	1/8/20	845	1								X				
SB43(8-9)	Grab	SS	8-9	1/8/20	846	1		X	X						X			21
SB43(9-10)	Grab	SS	9-10	1/8/20	847	1								X				

* 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) K Barnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 6 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 1-9-20	Time: 1700	Received by: (Signature)	Temp: 15-5=10 °C Bottles Received: 217
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.08

Lab Project #
TGERESHTX-R13411

Collected by (print): KBarnette

Site/Facility ID #

P.O. #
8772

Collected by (signature): KBarnett

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Chain of Custody Page ___ of ___

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Phone: 615-758-5858
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Fax: 615-758-5859

SDG # 1178043

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB43(10-11)	Grab	SS	10-11	1/8/20	848	1		X	X						X			22
SB43(11-12)	Grab	SS	11-12	1/8/20	849	1		X	X						X			23
SB43 (14-15)	Grab	SS	14-15	1/8/20	850	1								X				
SB43 (16-17)	Grab	SS	16-17	1/8/20	851	1		X	X						X			24
SB43(17-18)	Grab	SS	17-18	1/8/20	852	1								X				
SB43(19-20)	Grab	SS	19-20	1/8/20	853	1								X				
SB45(0-1)	Grab	SS	0-1	1/8/20	1310	1	X								X			25
SB45(1-2)	Grab	SS	1-2	1/8/20	1311	1	X								X			26
SB45(2-3)	Grab	SS	2-3	1/8/20	1312	1								X				
SB45(3-4)	Grab	SS	3-4	1/8/20	1313	1								X				

* 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 #

[illegible]
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) KBarnett	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 6 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date: 1-9-20	Time: 1700	Received by: (Signature)	Temp: °C 15:5=1.0	Bottles Received: 217
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20	Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #: **R13411.08**

Lab Project #: **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #:

P.O. #: **8772**

Collected by (signature): K Barnett

Quote #:

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed:

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Fax: 615-758-5859

SDG # 1179043

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB45(4-6)	Grab	SS	4-6	1/8/20	1314	1								X				
SB45(6-8)	Grab	SS	6-8	1/8/20	1315	1								X				
SB46(0-1)	Grab	SS	0-1	1/8/20	1025	3				X	X		X		X			27
SB46(1-2)	Grab	SS	1-2	1/8/20	1026	3				X	X		X		X			28
SB46(2-3)	Grab	SS	2-3	1/8/20	1027	3								X				
SB46(3-4)	Grab	SS	3-4	1/8/20	1028	3								X				
SB46(6-8)	Grab	SS	6-8	1/8/20	1029	3								X				
SB46(9-10)	Grab	SS	9-10	1/8/20	1030	3				X	X		X		X			29
SB46(14-15)	Grab	SS	1415	1/8/20	1031	3				X	X		X		X			30
SB46(15-16)	Grab	SS	1516	1/8/20	1032	3								X				

* 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 ✓
[illegible]
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) Barnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 6 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 1-9-20	Time: 17[illegible]	Received by: (Signature)	Temp: 15-.5=1.0 °C Bottles Received: 217
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
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Houston, TX 77040

Pres Chk

Chain of Custody Page ___ of ___

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Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

SDG # 1178043

Table #

Acctnum: **TGERESHTX**

Template: **T160680**

Prelogin: **P747407**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB46 (16-18)	Grab	SS	16-18	1/8/20	1033	3				X	X		X		X			31
SB46 (18-20)	Grab	SS	18-20	1/8/20	1034	3								X				
SB46 (20-22)	Grab	SS	20-22	1/8/20	1035	3				X	X		X		X			32
SB46 (22-24)	Grab	SS	22-24	1/8/20	1036	3								X				
SB46 (24-26)	Grab	SS	24-26	1/8/20	1037	3								X				
SB46 (26-28)	Grab	SS	26-28	1/8/20	1038	3								X				
SB46 (28-30)	Grab	SS	28-30	1/8/20	1039	3								X				
SB54 (0-1)	Grab	SS	0-1	1/8/20	1000	1								X				
SB54 (1-2)	Grab	SS	1-2	1/8/20	1001	1								X				
SB54 (2-3)	Grab	SS	2-3	1/8/20	1002	1		X	X						X			33

* 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 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) KBarnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 6	
Relinquished by : (Signature)	Date: 1-9-20	Time: 1700	Received by: (Signature)	Temp: 1.5-.5=1.0 °C	Bottles Received: 217	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Chemr	Date: 1/10/20	Time: 9:00	Hold:	Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
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Pres Chk

Chain of Custody Page ___ of ___

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Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): K Barnette

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

SDG # 1178043

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 Mark W. Beasley**
PB: 12/23/19 MB
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB54(3-4)	Grab	SS	3-4	1/8/20	1003	1								X				
SB54(4-6)	Grab	SS	4-6	1/8/20	1004	1		X	X						X			34
SB54(6-8)	Grab	SS	6-8	1/8/20	1005	1								X				
SB54(8-9)	Grab	SS	8-9	1/8/20	1006	1		X	X						X			35
SB54(9-10)	Grab	SS	9-10	1/8/20	1007	1								X				
SB54(10-11)	Grab	SS	10-11	1/8/20	1008	1		X	X						X			36
SB54(11-12)	Grab	SS	11-12	1/8/20	1009	1		X	X						X			37
SB54(14-15)	Grab	SS	14-15	1/8/20	1010	1								X				
SB54(16-17)	Grab	SS	16-17	1/8/20	1011	1		X	X						X			38
SB54(17-18)	Grab	SS	17-18	1/8/20	1012	1								X				

* 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) K Barnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 6 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 1-9-20	Time: 1800	Received by: (Signature)	Temp: °C 1.5-.5=1.0	Bottles Received: 217
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20	Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
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Houston, TX 77040

Pres Chk

Chain of Custody Page ___ of ___

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Report to: **Kristi Barnette**

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Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): K Barnett

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N___ Y X

SDG # 1178043

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB: 12/23/19 mb
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB554 (19-20)	Grab	SS	19-20	1/8/20	1013	1								X				
SB555 (0-1)	Grab	SS	0-1	1/8/20	1325	1	X								X			39
SB555 (1-2)	Grab	SS	1-2	1/8/20	1326	1	X								X			40
SB555 (2-3)	Grab	SS	2-3	1/8/20	1327	1								X				
SB555 (3-4)	Grab	SS	3-4	1/8/20	1328	1								X				
SB555 (4-6)	Grab	SS	4-6	1/8/20	1329	1								X				
SB555 (6-8)	Grab	SS	6-8	1/8/20	1330	1								X				
SB556 (0-1)	Grab	SS	0-1	1/8/20	1300	1	X								X			41
SB556 (1-2)	Grab	SS	1-2	1/8/20	1301	1	X								X			42
SB556 (2-3)	Grab	SS	2-3	1/8/20	1302	1								X				

* 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) K Barnett	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 6	
Relinquished by : (Signature)	Date: 1-9-20	Time: 1700	Received by: (Signature)	Temp: 1.5-.5=1.0 °C	Bottles Received: 217
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20	Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page ___ of ___

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Mount Juliet, TN 37122
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Phone: 800-767-5859
Fax: 615-758-5859

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnett

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

SDG # 1178043

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB: 12/23/19 MW
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB56(3-4)	Grab	SS	3-4	1/8/20	1303	1								X				
SB56(4-6)	Grab	SS	4-6	1/8/20	1304	1								X				
SB56(6-8)	Grab	SS	6-8	1/8/20	1305	1								X				
SB57(0-1)	Grab	SS	0-1	1/8/20	1155	3				X	X				X			43
SB57(1-2)	Grab	SS	1-2	1/8/20	1156	3				X	X				X			44
SB57(2-3)	Grab	SS	2-3	1/8/20	1157	3								X				
SB57(3-4)	Grab	SS	3-4	1/8/20	1158	3								X				
SB57(5-6)	Grab	SS	5-6	1/8/20	1159	3								X				
SB58(0-1)	Grab	SS	0-1	1/8/20	1430	3				X	X				X			45
SB58(1-2)	Grab	SS	1-2	1/8/20	1431	3				X	X				X			46

* 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
[illegible]
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) KBarnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCl / MeoH TBR 6	
Relinquished by : (Signature)	Date: 1-9-20	Time: [illegible]	Received by: (Signature)	Temp: 1.5-.5=1.0 °C Bottles Received: 217	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20 Time: 9:00	Hold: Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #: **R13411.08**

Lab Project #: **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #:

P.O. #: **8772**

Collected by (signature): K Barnett

Quote #:

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed:

Chain of Custody Page ___ of ___

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 1178043

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB: 12/23/19 MO
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB58(2-3)	Grab	SS	2-3	1/8/20	1432	3								X				
SB58(3-4)	Grab	SS	3-4	1/8/20	1433	3								X				
SB58(5-6)	Grab	SS	5-6	1/8/20	1434	3								X				
SB59(0-1)	Grab	SS	0-1	1/8/20	1400	3				X	X				X			47
SB59(1-2)	Grab	SS	1-2	1/8/20	1401	3				X	X				X			48
SB59(2-3)	Grab	SS	2-3	1/8/20	1402	3								X				
SB59(3-4)	Grab	SS	3-4	1/8/20	1403	3								X				
SB59(5-6)	Grab	SS	5-6	1/8/20	1404	3								X				
SB100(0-1)	Grab	SS	0-1	1/8/20	1140	3				X	X				X			49
SB100(1-2)	Grab	SS	1-2	1/8/20	1141	3				X	X				X			50

* 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) KBarnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 6 HCL / MeoH TBR	
Relinquished by : (Signature)	Date: 1-9-20	Time: 129	Received by: (Signature)	Temp: 1.5-.5=1.0 °C Bottles Received: 2/7	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20 Time: 9:00	Hold: Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): K Barnett

Quote #

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Fax: 615-758-5859

SDG # 1173643

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB: 12/23/19 Mb
Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB60(2-3)	Grab	SS	2-3	1/8/20	1142	3								X				
SB60(3-4)	Grab	SS	3-4	1/8/20	1143	3								X				
SB60(5-6)	Grab	SS	5-6	1/8/20	1144	3								X				
SB61(0-1)	Grab	SS	0-1	1/8/20	1345	3				X	X				X			51
SB61(1-2)	Grab	SS	1-2	1/8/20	1346	3				X	X				X			52
SB61(2-3)	Grab	SS	2-3	1/8/20	1347	3								X				
SB61(3-4)	Grab	SS	3-4	1/8/20	1348	3								X				
SB61(5-6)	Grab	SS	5-6	1/8/20	1349	3								X				
		SS																
		SS																

* 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) K Barnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: Yes / No 6 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature) MC	Date: 1-9-20	Time: 1700	Received by: (Signature)	Temp: °C 1.5-.5=1.0 Bottles Received: 217	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20 Time: 9:00	Hold:

Condition: [✓ NCF] / OK

TGE Resources 8048 Northcourt Road Houston, TX 77040	Billing Information: **Accounts Payable** **8048 Northcourt Road** **Houston, TX 77040**	Pres Chk
Report to: **Kristi Barnette**	Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**	
Project Description: **Future Federal Way Hospital**	City/State Collected: Federal Way WA	Please Circle: PT MT CT ET
Phone: **713-744-5800** Fax: **713-744-5888**	Client Project # **R13411.08**	Lab Project # **TGERESHTX-R13411**
Collected by (print): K Barnette	Site/Facility ID #	P.O. # **8772**
Collected by (signature): KBarnett Immediately Packed on Ice N ___ Y X	***Rush?*** (Lab MUST Be Notified) ___ Same Day X 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	MRCRA8+Cu,Ni,Zn 250mlHDPE-HNO3	NWTPHDX w/o SGT 40mlAmb-HCl-BT	NWTPHGX 40mlAmb HCl	V8260 40mlAmb-HCl	Remarks	Sample # (lab only)
IDW Water	Comp	GW	—	1/8/20	1520	9	X	X	X	X		53
		GW										

Chain of Custody Page ___ of ___

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SDG # 1178043

Table #

Acctnum: **TGERESHTX**

Template: **T160684**

Prelogin: **P747406**

PM: **134 - Mark W. Beasley**

PB: 12/23/19 MB

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 #

Relinquished by : (Signature) KBarnett	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR
Relinquished by : (Signature)	Date: 1-9-20	Time: 1700	Received by: (Signature)	Temp: 15-5=1.0 °C Bottles Received: 217
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20 Time: 9:00

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

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

Matt Shacklock

Pace Analytical®
National Center for Testing & Innovation

Login #:1178043	**Client: TGERESHTX**	**Date:1/10/2020**	**Evaluated by:Carol K**

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 / Couri
	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:
x	Broken container:		Chain of Custody is missing		Date/Time:
x	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: Received SB55 1-2 broke, but salvaged . Possible cooler water contamination

Client informed by:	Call	Email	Voice Mail	Date: 1/10/20	Time: 1350
TSR Initials: MB	Client Contact:				

Login Instructions:

Run as rec'd

ANALYTICAL REPORT

January 14, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1178820
Samples Received:	01/09/2020
Project Number:	R13411.08
Description:	Future Federal Way Hospital

Report To:

Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SAMPLE SUMMARY

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9 Al
10 Sc

SB-33 (11-12) L1178820-01 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:07	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1410441	1	01/14/20 07:04	01/14/20 07:21	KBC	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1410432	1	01/14/20 08:13	01/14/20 14:24	HMH	Mt. Juliet, TN

SB-38 (3-3.5) L1178820-02 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:53	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1410441	1	01/14/20 07:04	01/14/20 07:21	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409902	1	01/13/20 18:08	01/14/20 03:19	TRB	Mt. Juliet, TN

SB-38 (4.5-5) L1178820-03 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:55	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1410441	1	01/14/20 07:04	01/14/20 07:21	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409902	1	01/13/20 18:08	01/14/20 03:27	TRB	Mt. Juliet, TN

SB-38 (6-7) L1178820-04 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:57	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1410441	1	01/14/20 07:04	01/14/20 07:21	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1409902	1	01/13/20 18:08	01/14/20 03:29	TRB	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 01/14/2020 15:56
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1178820-01, 02, 03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1409902, WG1410441 and WG1410432

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 01/14/2020 15:56
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1178820-01, 02, 03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1409902, WG1410441 and WG1410432

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 01/14/2020 15:56
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1178820-01, 02, 03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1409902, WG1410441 and WG1410432

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	89.5		1	01/14/2020 07:21	WG1410441

Pesticides (GC) by Method 8081

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Aldrin	U		0.00151	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Alpha BHC	U		0.00152	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Beta BHC	U		0.00179	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Delta BHC	U		0.00160	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Gamma BHC	U		0.00162	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Chlordane	U		0.0436	0.200	0.224	1	01/14/2020 14:24	WG1410432
4,4-DDD	U		0.00174	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
4,4-DDE	U		0.00172	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
4,4-DDT	U		0.00224	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Dieldrin	U		0.00170	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Endosulfan I	U		0.00167	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Endosulfan II	U		0.00179	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Endosulfan sulfate	U		0.00169	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Endrin	U		0.00175	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Endrin aldehyde	U		0.00144	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Endrin ketone	U		0.00184	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Hexachlorobenzene	U		0.00139	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Heptachlor	U		0.00172	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Heptachlor epoxide	U		0.00180	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Methoxychlor	U		0.00199	0.0200	0.0224	1	01/14/2020 14:24	WG1410432
Toxaphene	U		0.0402	0.400	0.447	1	01/14/2020 14:24	WG1410432
(S) Decachlorobiphenyl	*69.5*				*10.0-135*		*01/14/2020 14:24*	WG1410432
(S) Tetrachloro-m-xylene	*82.7*				*10.0-139*		*01/14/2020 14:24*	WG1410432

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.7		1	01/14/2020 07:21	WG1410441

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	22.8		0.519	2.00	2.25	1	01/14/2020 03:19	WG1409902

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	91.8		1	01/14/2020 07:21	WG1410441

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	20.7		0.501	2.00	2.18	1	01/14/2020 03:27	WG1409902

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.6		1	01/14/2020 07:21	WG1410441

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	36.9		0.508	2.00	2.21	1	01/14/2020 03:29	WG1409902

Method Blank (MB)

(MB) R3490625-1 01/14/20 07:21

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00400			

L1178820-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1178820-01 01/14/20 07:21 • (DUP) R3490625-3 01/14/20 07:21

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.5	86.6	1	3.27		10

Laboratory Control Sample (LCS)

(LCS) R3490625-2 01/14/20 07:21

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) R3490441-1 01/14/20 02:25

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3490441-2 01/14/20 02:27 • (LCSD) R3490441-3 01/14/20 02:29

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 %
Arsenic	100	90.4	88.5	90.4	88.5	80.0-120			2.09	20

L1178150-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1178150-02 01/14/20 02:32 • (MS) R3490441-6 01/14/20 02:40 • (MSD) R3490441-7 01/14/20 02:42

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	ND	97.2	99.2	95.5	97.5	1	75.0-125			2.04	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3490656-1 01/14/20 13:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00135	0.0200
Alpha BHC	U		0.00136	0.0200
Beta BHC	U		0.00160	0.0200
Delta BHC	U		0.00143	0.0200
Gamma BHC	U		0.00145	0.0200
4,4-DDD	U		0.00156	0.0200
4,4-DDE	U		0.00154	0.0200
4,4-DDT	U		0.00200	0.0200
Dieldrin	U		0.00152	0.0200
Endosulfan I	U		0.00149	0.0200
Endosulfan II	U		0.00160	0.0200
Endosulfan sulfate	U		0.00151	0.0200
Endrin	U		0.00157	0.0200
Endrin aldehyde	U		0.00129	0.0200
Endrin ketone	U		0.00165	0.0200
Heptachlor	U		0.00154	0.0200
Heptachlor epoxide	U		0.00161	0.0200
Hexachlorobenzene	U		0.00124	0.0200
Methoxychlor	U		0.00178	0.0200
Chlordane	U		0.0390	0.200
Toxaphene	U		0.0360	0.400
(S) Decachlorobiphenyl	*72.5*			*10.0-135*
(S) Tetrachloro-m-xylene	*75.2*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3490656-2 01/14/20 14:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0564	84.7	34.0-136	
Alpha BHC	0.0666	0.0604	90.7	34.0-139	
Beta BHC	0.0666	0.0630	94.6	34.0-133	
Delta BHC	0.0666	0.0586	88.0	34.0-135	
Gamma BHC	0.0666	0.0602	90.4	34.0-136	
4,4-DDD	0.0666	0.0564	84.7	33.0-141	
4,4-DDE	0.0666	0.0528	79.3	34.0-134	
4,4-DDT	0.0666	0.0642	96.4	30.0-143	
Dieldrin	0.0666	0.0548	82.3	35.0-137	
Endosulfan I	0.0666	0.0556	83.5	34.0-134	

Laboratory Control Sample (LCS)

(LCS) R3490656-2 01/14/20 14:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0525	78.8	35.0-132	
Endosulfan sulfate	0.0666	0.0532	79.9	35.0-132	
Endrin	0.0666	0.0571	85.7	34.0-137	
Endrin aldehyde	0.0666	0.0490	73.6	23.0-121	
Endrin ketone	0.0666	0.0526	79.0	35.0-144	
Heptachlor	0.0666	0.0658	98.8	36.0-141	
Heptachlor epoxide	0.0666	0.0579	86.9	36.0-134	
Hexachlorobenzene	0.0666	0.0621	93.2	33.0-129	
Methoxychlor	0.0666	0.0644	96.7	28.0-150	
(S) Decachlorobiphenyl			*77.3*	*10.0-135*	
(S) Tetrachloro-m-xylene			*80.2*	*10.0-139*	

L1178820-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1178820-01 01/14/20 14:24 • (MS) R3490656-3 01/14/20 14:37 • (MSD) R3490656-4 01/14/20 14:49

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 %
Aldrin	0.0744	U	0.0668	0.0641	89.8	86.2	1	20.0-135			4.10	37
Alpha BHC	0.0744	U	0.0734	0.0713	98.6	95.8	1	27.0-140			2.93	35
Beta BHC	0.0744	U	0.0752	0.0730	101	98.0	1	23.0-141			3.02	37
Delta BHC	0.0744	U	0.0698	0.0677	93.8	91.0	1	21.0-138			3.09	35
Gamma BHC	0.0744	U	0.0717	0.0694	96.4	93.2	1	27.0-137			3.33	36
4,4-DDD	0.0744	U	0.0650	0.0625	87.4	83.9	1	15.0-152			4.03	39
4,4-DDE	0.0744	U	0.0617	0.0589	82.9	79.1	1	10.0-152			4.63	40
4,4-DDT	0.0744	U	0.0741	0.0713	99.5	95.8	1	10.0-151			3.84	40
Dieldrin	0.0744	U	0.0663	0.0636	89.0	85.4	1	17.0-145			4.13	37
Endosulfan I	0.0744	U	0.0653	0.0629	87.7	84.5	1	20.0-137			3.66	36
Endosulfan II	0.0744	U	0.0605	0.0587	81.2	78.8	1	15.0-141			3.00	37
Endosulfan sulfate	0.0744	U	0.0605	0.0591	81.2	79.4	1	15.0-143			2.24	38
Endrin	0.0744	U	0.0672	0.0647	90.2	86.9	1	19.0-143			3.73	37
Endrin aldehyde	0.0744	U	0.0589	0.0572	79.1	76.9	1	10.0-139			2.89	40
Endrin ketone	0.0744	U	0.0601	0.0586	80.8	78.7	1	17.0-149			2.64	38
Heptachlor	0.0744	U	0.0783	0.0755	105	102	1	22.0-138			3.63	37
Heptachlor epoxide	0.0744	U	0.0668	0.0640	89.8	86.0	1	22.0-138			4.27	36
Hexachlorobenzene	0.0744	U	0.0747	0.0719	100	96.5	1	25.0-126			3.81	35
Methoxychlor	0.0744	U	0.0723	0.0707	97.1	95.0	1	10.0-159			2.19	40
(S) Decachlorobiphenyl					*79.9*	*77.2*		*10.0-135*				
(S) Tetrachloro-m-xylene					*86.9*	*84.4*		*10.0-139*				

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1 6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1 4]	2006
Texas	T104704245-18-15
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

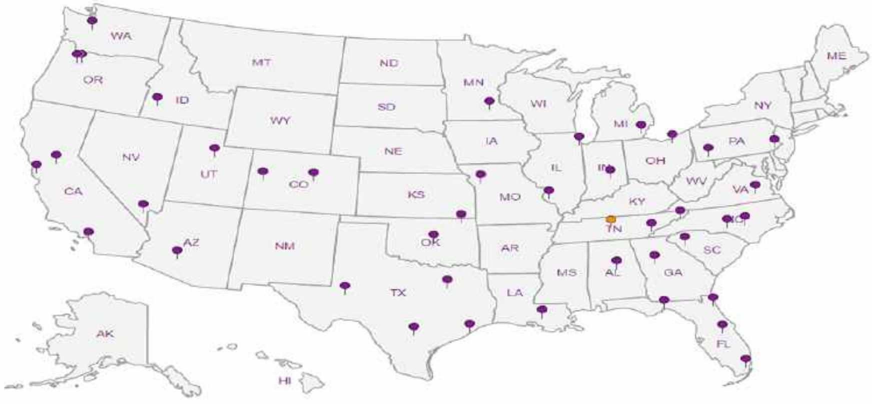
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

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

SDG # ~~117542~~

Table # L1178820

AV
1/13/20

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB33(6-7)	Grab	SS	6-7	1/7/20	902	1								X				
SB33(7-8)	Grab	SS	7-8	1/7/20	903	1								X				
SB33(8-9)	Grab	SS	8-9	1/7/20	904	1	X	X	X			X			X			-11
SB33 (9-10)	Grab	SS	9-10	1/7/20	905	1								X				
SB33 (10-11)	Grab	SS	10-11	1/7/20	906	1	X	X	X			X			X			-12
SB33 (11-12)	Grab	SS	11-12	1/7/20	907	1								X				
SB34 (0-.5)	Grab	SS	0-.5	1/7/20	1053	1								X				
SB34 (.5-1)	Grab	SS	.5-1	1/7/20	1054	1	X	X	X			X			X			-13
SB34 (1-1.5)	Grab	SS	1-1.5	1/7/20	1055	1	X	X	X			X			X			-14
SB34 (1.5-2)	Grab	SS	1.5-2	1/7/20	1056	1	X	X	X			X			X			-15

-01

* 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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCL / MeoH TBR 10	
Relinquished by : (Signature)	Date: 1-7-20	Time: 1800	Received by: (Signature)	Temp: 2.8-.3=2.5 °C	Bottles Received: 148
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/9/20	Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnette

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
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___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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National Center for Testing & Innovation

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Mount Juliet, TN 37122
Phone: 615-758-5858
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Fax: 615-758-5859

SDG # ~~[illegible]~~ 1179542

Table # L1178820

AV 1/13/20

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: 134 - Mark W. Beasley
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Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)	
SB38 (1-1.5)	Grab	SS	1-1.5	1/7/20	952	1	X	X	X			X			X			~~38~~	
SB38 (3-3.5)	Grab	SS	3-3.5	1/7/20	953	1								X					-02
SB38 (4.5-5)	Grab	SS	4.5-5	1/7/20	955	1								X					-03
SB38 (5-6)	Grab	SS	5-6	1/7/20	956	1	X	X	X			X			X			~~39~~	
SB38 (6-7)	Grab	SS	6-7	1/7/20	957	1								X					-04
SB38 (7-8)	Grab	SS	7-8	1/7/20	958	1								X					
SB38 (8-9)	Grab	SS	8-9	1/7/20	959	1	X	X	X			X			X			~~40~~	
SB38 (9-10)	Grab	SS	9-10	1/7/20	1000	1								X					
SB38 (10-11)	Grab	SS	10-11	1/7/20	1001	1	X	X	X			X			X			~~41~~	
		SS																	

* 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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCL / MeoH TBR 10	
Relinquished by : (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: 2.2-.3=1.9 °C Bottles Received: 198	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/9/20 Time: 8:30	Hold: Condition: [✓ NCF] / OK

Andy Vann

From: Mark Beasley
Sent: Monday, January 13, 2020 4:33 PM
To: Project Service; Extractions; Due Metals; Due SVOC
Subject: L1177542 *TGERESHTX* rush R2 hold samples

Log the below samples previously on hold as R2 due 1/14. Use PO#8826.

SB-33 (11-12)	SV8081 & TS
SB-38 (3-3.5)	ASICP & TS
SB-38 (4.5-5)	ASICP & TS
SB-38 (6-7)	ASICP & TS

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Monday, January 13, 2020 4:29 PM
To: Mark Beasley
Subject: additional samples requested expedited TAT

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please run these on next day TAT please. PO attached.

SB33(11-12) – OC pesticides and TS only
SB38(3-3.5) – arsenic and TS only
SB38(4.5-5) – arsenic and TS only
SB38(6-7) – arsenic and TS only

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

TGERESOURCES,INC.

WBENC & SBA Certified Woman Owned Small Business
DUNS# 929574051
CAGE Code 08PQ6

ANALYTICAL REPORT

January 14, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

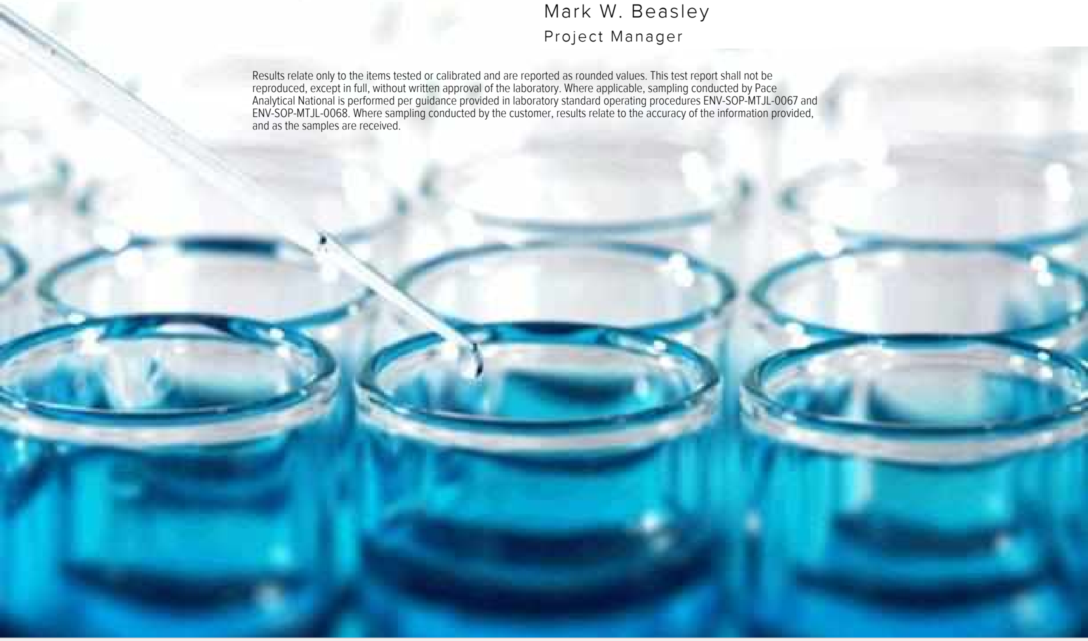
Sample Delivery Group: L1178849
Samples Received: 01/10/2020
Project Number: R13411.08
Description: Future Federal Way Hospital

Report To: Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SAMPLE SUMMARY

SB58 (0-1) L1178849-01 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 14:30	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409446	1	01/11/20 15:51	01/11/20 16:05	MAS	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1410638	1	01/14/20 11:18	01/14/20 13:15	TRB	Mt. Juliet, TN

SB58 (1-2) L1178849-02 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 14:31	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409446	1	01/11/20 15:51	01/11/20 16:05	MAS	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1410638	1	01/14/20 11:18	01/14/20 13:17	TRB	Mt. Juliet, TN

SB59 (0-1) L1178849-03 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 14:00	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409447	1	01/13/20 09:26	01/13/20 09:36	MAS	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1410638	1	01/14/20 11:18	01/14/20 13:25	TRB	Mt. Juliet, TN

SB59 (1-2) L1178849-04 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 14:01	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409447	1	01/13/20 09:26	01/13/20 09:36	MAS	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1410638	1	01/14/20 11:18	01/14/20 13:28	TRB	Mt. Juliet, TN

SB58 (3-4) L1178849-05 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 14:33	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1410635	1	01/14/20 10:18	01/14/20 10:23	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1410638	1	01/14/20 11:18	01/14/20 13:30	TRB	Mt. Juliet, TN

SB59 (3-4) L1178849-06 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 14:03	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1410635	1	01/14/20 10:18	01/14/20 10:23	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1410638	1	01/14/20 11:18	01/14/20 13:33	TRB	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 01/14/2020 16:36
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1178849-01, 02, 03, 04, 05 and 06
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1409446, WG1409447, WG1410638 and WG1410635

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 01/14/2020 16:36
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1178849-01, 02, 03, 04, 05 and 06
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1409446, WG1409447, WG1410638 and WG1410635

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 01/14/2020 16:36
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1178849-01, 02, 03, 04, 05 and 06
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1409446, WG1409447, WG1410638 and WG1410635

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

SB58 (0-1)
Collected date/time: 01/08/20 14:30

SAMPLE RESULTS - 01

L1178849

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.1		1	01/11/2020 16:05	WG1409446

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	34.6		0.511	2.00	2.22	1	01/14/2020 13:15	WG1410638

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB58 (1-2)

Collected date/time: 01/08/20 14:31

SAMPLE RESULTS - 02

L1178849

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.1		1	01/11/2020 16:05	WG1409446

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	47.7		0.505	2.00	2.20	1	01/14/2020 13:17	WG1410638

SB59 (0-1)

Collected date/time: 01/08/20 14:00

SAMPLE RESULTS - 03

L1178849

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.4		1	01/13/2020 09:36	WG1409447

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	17.1		0.492	2.00	2.14	1	01/14/2020 13:25	WG1410638

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	01/13/2020 09:36	WG1409447

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	13.1		0.496	2.00	2.16	1	01/14/2020 13:28	WG1410638

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.1		1	01/14/2020 10:23	WG1410635

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.03		0.582	2.00	2.53	1	01/14/2020 13:30	WG1410638

SB59 (3-4)
Collected date/time: 01/08/20 14:03

SAMPLE RESULTS - 06

L1178849

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	91.1		1	01/14/2020 10:23	WG1410635

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	3.92		0.505	2.00	2.20	1	01/14/2020 13:33	WG1410638

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

QUALITY CONTROL SUMMARY

L1178849-01,02

Method Blank (MB)

(MB) R3490113-1 01/11/20 16:05

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1178043-37 Original Sample (OS) • Duplicate (DUP)

(OS) L1178043-37 01/11/20 16:05 • (DUP) R3490113-3 01/11/20 16:05

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.0	88.1	1	0.202		10

Laboratory Control Sample (LCS)

(LCS) R3490113-2 01/11/20 16:05

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) R3490290-1 01/13/20 09:36

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1177995-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1177995-01 01/13/20 09:36 • (DUP) R3490290-3 01/13/20 09:36

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.8	82.1	1	0.787		10

Laboratory Control Sample (LCS)

(LCS) R3490290-2 01/13/20 09:36

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

WG1410635

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1178849-05,06

Method Blank (MB)

(MB) R3490691-1 01/14/20 10:23

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.000			

L1178849-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1178849-05 01/14/20 10:23 • (DUP) R3490691-3 01/14/20 10:23

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	79.1	80.2	1	1.37		10

Laboratory Control Sample (LCS)

(LCS) R3490691-2 01/14/20 10:23

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3490621-1 01/14/20 12:55

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3490621-2 01/14/20 12:57 • (LCSD) R3490621-3 01/14/20 13:00

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 %
Arsenic	100	93.4	93.4	93.4	93.4	80.0-120			0.0226	20

L1178879-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1178879-01 01/14/20 13:02 • (MS) R3490621-6 01/14/20 13:10 • (MSD) R3490621-7 01/14/20 13:12

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	4.13	92.2	89.5	88.1	85.4	1	75.0-125			2.98	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

GLOSSARY OF TERMS

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1] [6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1] [4]	2006
Texas	T104704245-18-15
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

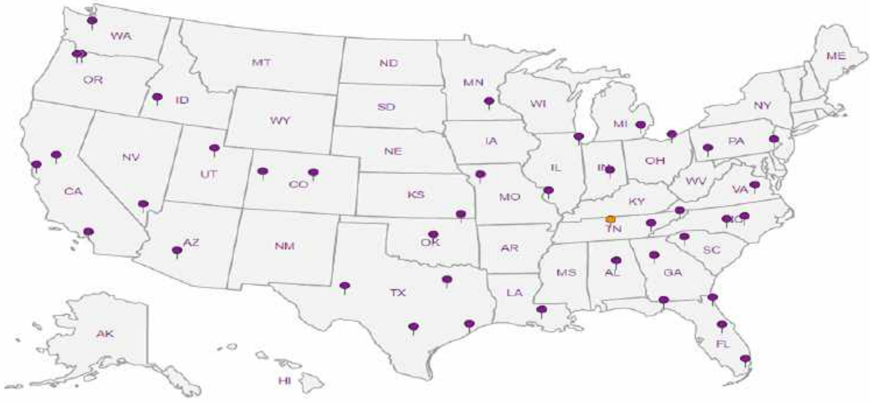
A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnett

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

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

SDG # L1180477 | 1178345

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: 134 - Mark W. Beasley
PB: 12/23/19 MW
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB56(3-4)	Grab	SS	3-4	1/8/20	1303	1								X				
SB56(4-6)	Grab	SS	4-6	1/8/20	1304	1								X				
SB56(6-8)	Grab	SS	6-8	1/8/20	1305	1								X				
SB57(0-1)	Grab	SS	0-1	1/8/20	1155	3				X	X				X			43
SB57(1-2)	Grab	SS	1-2	1/8/20	1156	3				X	X				X			44
SB57(2-3)	Grab	SS	2-3	1/8/20	1157	3								X				
SB57(3-4)	Grab	SS	3-4	1/8/20	1158	3								X				
SB57(5-6)	Grab	SS	5-6	1/8/20	1159	3								X				
SB58(0-1)	Grab	SS	0-1	1/8/20	1430	3				X	X				X			01 45
SB58(1-2)	Grab	SS	1-2	1/8/20	1431	3				X	X				X			02 46

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks:

Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking #

Sample Receipt Checklist
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) KBarnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCL / MeoH TBR 6	
Relinquished by : (Signature)	Date: 1-9-20	Time: 1	Received by: (Signature)	Temp: 1.5-.5=1.0 °C Bottles Received: 217	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20 Time: 9:00	Hold: Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): K Barnett

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

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

SDG # 1148043 RM 1148849

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB: 12/23/19 MB
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB58 (2-3)	Grab	SS	2-3	1/8/20	1432	3								X				
SB58 (3-4)	Grab	SS	3-4	1/8/20	1433	3								X				
SB58 (5-6)	Grab	SS	5-6	1/8/20	1434	3								X				
SB59 (0-1)	Grab	SS	0-1	1/8/20	1400	3				X	X				X			03 47
SB59 (1-2)	Grab	SS	1-2	1/8/20	1401	3				X	X				X			04 48
SB59 (2-3)	Grab	SS	2-3	1/8/20	1402	3								X				
SB59 (3-4)	Grab	SS	3-4	1/8/20	1403	3								X				
SB59 (5-6)	Grab	SS	5-6	1/8/20	1404	3								X				
SB60 (0-1)	Grab	SS	0-1	1/8/20	1140	3				X	X				X			49
SB60 (1-2)	Grab	SS	1-2	1/8/20	1141	3				X	X				X			50

* 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 #

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) K Barnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCL / MeoH TBR 6	
Relinquished by : (Signature)	Date: 1-9-20	Time: 1??	Received by: (Signature)	Temp: 1.5-.5=1.0 °C	Bottles Received: 217
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20	Time: 9:10

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

Matt Shacklock

From: Mark Beasley
Sent: Tuesday, January 14, 2020 9:09 AM
To: Project Service; Due Metals
Subject: L1178043 *TGERESHTX* rush R1 hold samples

Importance: High

Log the below samples previously on hold as R1 due 1/14:

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Tuesday, January 14, 2020 8:51 AM
To: Mark Beasley
Subject: cost please?
Importance: High

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

How much to get results today vs tomorrow morning for the following samples for As and total solids only?

SB59(0-1)	ASICP & TS
SB59(1-2)	ASICP & TS
SB59(3-4)	ASICP & TS
SB58(0-1)	ASICP & TS
SB58(1-2)	ASICP & TS
SB58(3-4)	ASICP & TS

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGERESOURCES,INC.

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

WBENC & SBA Certified Woman Owned Small Business
DUNS# 929574051
CAGE Code 08PQ6

ANALYTICAL REPORT

January 31, 2020

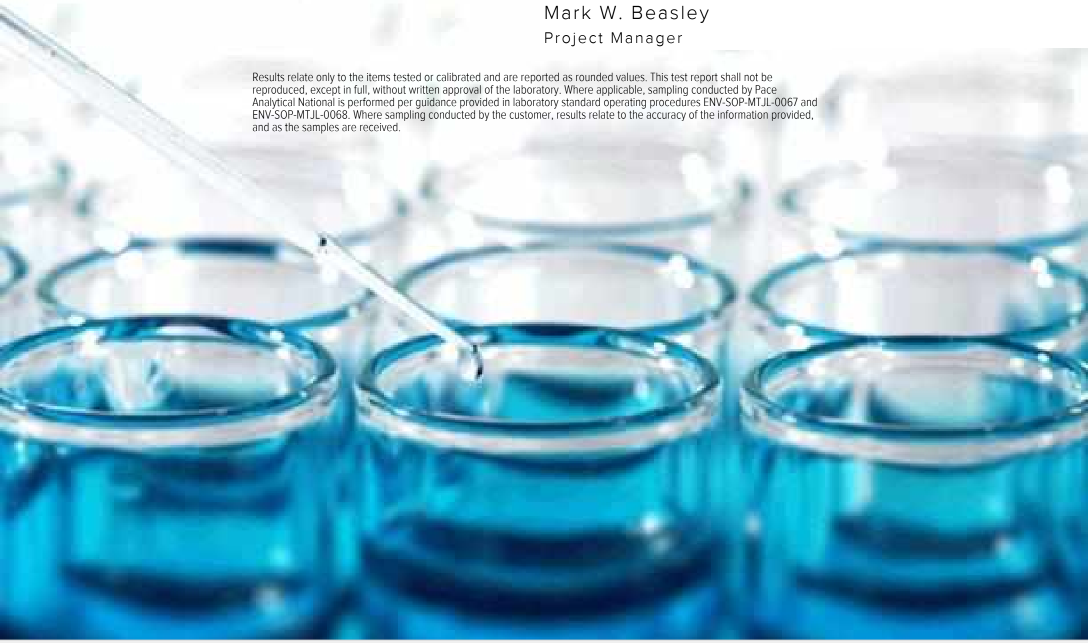
1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1180378
Samples Received:	11/16/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SB-15A (0-1) L1180378-08 Solid

Collected by	Collected date/time	Received date/time
	11/14/19 11:25	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1389700	1	12/03/19 09:40	12/03/19 09:50	JAV	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1418114	1	01/28/20 15:37	01/29/20 03:18	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1418154	5	01/28/20 12:52	01/28/20 21:37	LEA	Mt. Juliet, TN

SB35 (.5-1) L1180378-09 GW

Collected by	Collected date/time	Received date/time
	01/07/20 09:09	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1312	WG1413554	1	01/18/20 15:49	01/18/20 15:49	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1415079	1	01/22/20 08:55	01/22/20 12:09	EL	Mt. Juliet, TN

SB50 (0-1) L1180378-10 Solid

Collected by	Collected date/time	Received date/time
	01/07/20 13:20	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1408466	1	01/09/20 14:18	01/09/20 14:28	JAV	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1415403	1	01/22/20 20:35	01/23/20 02:50	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1414122	1	01/21/20 11:33	01/22/20 14:30	AAT	Mt. Juliet, TN

SB40 (8-9) L1180378-11 GW

Collected by	Collected date/time	Received date/time
	01/08/20 08:21	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1312	WG1413554	1	01/18/20 15:49	01/18/20 15:49	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1415079	1	01/22/20 08:55	01/22/20 11:58	EL	Mt. Juliet, TN

SB46 (1-2) L1180378-12 Solid

Collected by	Collected date/time	Received date/time
	01/08/20 10:26	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1409445	1	01/11/20 16:07	01/11/20 16:32	JAV	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1415403	1	01/22/20 20:35	01/23/20 03:04	ADF	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1414122	1	01/21/20 11:33	01/22/20 14:09	AAT	Mt. Juliet, TN

CASE NARRATIVE

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 01/31/2020 13:29
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1180378-08, 09, 10, 11 and 12
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1389700, WG1408466, WG1409445, WG1414122, WG1415079, WG1415403, WG1418154, WG1418114 and WG1413554

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?		X			1
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			2
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			3
		Were MS/MSD RPDs within laboratory QC limits?		X			4
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 01/31/2020 13:29
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1180378-08, 09, 10, 11 and 12
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1389700, WG1408466, WG1409445, WG1414122, WG1415079, WG1415403, WG1418154, WG1418114 and WG1413554

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?		X			5
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 01/31/2020 13:29
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1180378-08, 09, 10, 11 and 12
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1389700, WG1408466, WG1409445, WG1414122, WG1415079, WG1415403, WG1418154, WG1418114 and WG1413554

ER #[1]	**Description**
1	8270E-SIM WG1418154 L1180378-08: Prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.
2	WG1418114 Decachlorobiphenyl, Tetrachloro-m-xylene R3494993-1, 2, 3 and 4: Percent Recovery is outside of established control limits.
3	8270E-SIM WG1414122 Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Dibenz(a,h)anthracene, Indeno(1,2,3-cd)pyrene: Percent Recovery is outside of established control limits.
4	8270E-SIM WG1414122 Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Dibenz(a,h)anthracene, Indeno(1,2,3-cd)pyrene: Relative Percent Difference is outside of established control limits.
5	8270E-SIM WG1414122 Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Dibenz(a,h)anthracene, Indeno(1,2,3-cd)pyrene: Area counts were outside of method-required criteria.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
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4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

SB-15A (0-1)

Collected date/time: 11/14/19 11:25

SAMPLE RESULTS - 08

L1180378

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	94.7		1	12/03/2019 09:50	WG1389700

Polychlorinated Biphenyls (GC) by Method 8082 A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
PCB 1016	U		0.00370	0.0170	0.0179	1	01/29/2020 03:18	WG1418114
PCB 1221	U		0.00567	0.0170	0.0179	1	01/29/2020 03:18	WG1418114
PCB 1232	U		0.00440	0.0170	0.0179	1	01/29/2020 03:18	WG1418114
PCB 1242	U		0.00335	0.0170	0.0179	1	01/29/2020 03:18	WG1418114
PCB 1248	U		0.00332	0.0170	0.0179	1	01/29/2020 03:18	WG1418114
PCB 1254	U		0.00498	0.0170	0.0179	1	01/29/2020 03:18	WG1418114
PCB 1260	0.0105	J	0.00522	0.0170	0.0179	1	01/29/2020 03:18	WG1418114
(S) Decachlorobiphenyl	*79.5*				*10.0-135*		*01/29/2020 03:18*	WG1418114
(S) Tetrachloro-m-xylene	*97.1*				*10.0-139*		*01/29/2020 03:18*	WG1418114

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Anthracene	U	T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Acenaphthene	0.00715	J T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Acenaphthylene	U	T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Benzo(a)anthracene	0.00825	J T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Benzo(a)pyrene	U	T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Benzo(b)fluoranthene	U	T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Benzo(g,h,i)perylene	0.0117	J T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Benzo(k)fluoranthene	U	T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Chrysene	0.0164	J T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Dibenz(a,h)anthracene	U	T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Fluoranthene	U	T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Fluorene	U	T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Indeno(1,2,3-cd)pyrene	U	T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Naphthalene	U	T8	0.0106	0.0200	0.106	5	01/28/2020 21:37	WG1418154
Phenanthrene	0.00538	J T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
Pyrene	0.0154	J T8	0.00317	0.00600	0.0317	5	01/28/2020 21:37	WG1418154
1-Methylnaphthalene	0.0221	J T8	0.0106	0.0200	0.106	5	01/28/2020 21:37	WG1418154
2-Methylnaphthalene	U	T8	0.0106	0.0200	0.106	5	01/28/2020 21:37	WG1418154
2-Chloronaphthalene	U	T8	0.0106	0.0200	0.106	5	01/28/2020 21:37	WG1418154
(S) Nitrobenzene-d5	*80.7*				*14.0-149*		*01/28/2020 21:37*	WG1418154
(S) 2-Fluorobiphenyl	*91.2*				*34.0-125*		*01/28/2020 21:37*	WG1418154
(S) p-Terphenyl-d14	*105*				*23.0-120*		*01/28/2020 21:37*	WG1418154

Sample Narrative:

L1180378-08 WG1418154: Dilution due to matrix.

Preparation by Method 1312

Analyte	Result	Qualifier	Prep date / time	Batch
SPLP Extraction	-		1/18/2020 3:49:37 PM	WG1413554
Fluid	2		1/18/2020 3:49:37 PM	WG1413554
Final pH	6.32		1/18/2020 3:49:37 PM	WG1413554

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.124		0.00650	0.0100	0.0100	1	01/22/2020 12:09	WG1415079

SB50 (0-1)

Collected date/time: 01/07/20 13:20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.9		1	01/09/2020 14:28	WG1408466

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.00381	0.0170	0.0185	1	01/23/2020 02:50	WG1415403
PCB 1221	U		0.00584	0.0170	0.0185	1	01/23/2020 02:50	WG1415403
PCB 1232	U		0.00454	0.0170	0.0185	1	01/23/2020 02:50	WG1415403
PCB 1242	U		0.00346	0.0170	0.0185	1	01/23/2020 02:50	WG1415403
PCB 1248	U		0.00343	0.0170	0.0185	1	01/23/2020 02:50	WG1415403
PCB 1254	0.00971	J	0.00514	0.0170	0.0185	1	01/23/2020 02:50	WG1415403
PCB 1260	U		0.00538	0.0170	0.0185	1	01/23/2020 02:50	WG1415403
(S) Decachlorobiphenyl	*75.1*				*10.0-135*		*01/23/2020 02:50*	WG1415403
(S) Tetrachloro-m-xylene	*96.2*				*10.0-139*		*01/23/2020 02:50*	WG1415403

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00131	J	0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Acenaphthene	U		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Acenaphthylene	U		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Benzo(a)anthracene	0.0175		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Benzo(a)pyrene	0.0364		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Benzo(b)fluoranthene	U		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Benzo(g,h,i)perylene	0.0145		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Benzo(k)fluoranthene	U		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Chrysene	0.0447		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Dibenz(a,h)anthracene	U		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Fluoranthene	0.00978		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Fluorene	0.000931	J	0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Indeno(1,2,3-cd)pyrene	U		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Naphthalene	0.00230	J	0.00218	0.0200	0.0218	1	01/22/2020 14:30	WG1414122
Phenanthrene	0.0152		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
Pyrene	0.0336		0.000653	0.00600	0.00653	1	01/22/2020 14:30	WG1414122
1-Methylnaphthalene	0.00264	J	0.00218	0.0200	0.0218	1	01/22/2020 14:30	WG1414122
2-Methylnaphthalene	0.00222	J	0.00218	0.0200	0.0218	1	01/22/2020 14:30	WG1414122
2-Chloronaphthalene	U		0.00218	0.0200	0.0218	1	01/22/2020 14:30	WG1414122
(S) Nitrobenzene-d5	*80.1*				*14.0-149*		*01/22/2020 14:30*	WG1414122
(S) 2-Fluorobiphenyl	*86.9*				*34.0-125*		*01/22/2020 14:30*	WG1414122
(S) p-Terphenyl-d14	*91.4*				*23.0-120*		*01/22/2020 14:30*	WG1414122

Preparation by Method 1312

Analyte	Result	Qualifier	Prep date / time	Batch
SPLP Extraction	-		1/18/2020 3:49:37 PM	WG1413554
Fluid	2		1/18/2020 3:49:37 PM	WG1413554
Final pH	6.31		1/18/2020 3:49:37 PM	WG1413554

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Cadmium	0.000763	J	0.000700	0.00200	0.00200	1	01/22/2020 11:58	WG1415079
Lead	0.405		0.00190	0.00500	0.00500	1	01/22/2020 11:58	WG1415079

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.3		1	01/11/2020 16:32	WG1409445

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.00376	0.0170	0.0182	1	01/23/2020 03:04	WG1415403
PCB 1221	U		0.00575	0.0170	0.0182	1	01/23/2020 03:04	WG1415403
PCB 1232	U		0.00447	0.0170	0.0182	1	01/23/2020 03:04	WG1415403
PCB 1242	U		0.00340	0.0170	0.0182	1	01/23/2020 03:04	WG1415403
PCB 1248	U		0.00337	0.0170	0.0182	1	01/23/2020 03:04	WG1415403
PCB 1254	0.00855	J	0.00506	0.0170	0.0182	1	01/23/2020 03:04	WG1415403
PCB 1260	U		0.00530	0.0170	0.0182	1	01/23/2020 03:04	WG1415403
(S) Decachlorobiphenyl	*70.6*				*10.0-135*		*01/23/2020 03:04*	WG1415403
(S) Tetrachloro-m-xylene	*84.2*				*10.0-139*		*01/23/2020 03:04*	WG1415403

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00266	J	0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Acenaphthene	U		0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Acenaphthylene	U		0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Benzo(a)anthracene	0.00603	J	0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Benzo(a)pyrene	0.0126		0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Benzo(b)fluoranthene	U		0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Benzo(g,h,i)perylene	0.00445	J	0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Benzo(k)fluoranthene	U		0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Chrysene	0.0141		0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Dibenz(a,h)anthracene	U		0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Fluoranthene	0.0114		0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Fluorene	U		0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Indeno(1,2,3-cd)pyrene	U		0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Naphthalene	0.00261	J	0.00214	0.0200	0.0214	1	01/22/2020 14:09	WG1414122
Phenanthrene	0.00918		0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
Pyrene	0.0124		0.000643	0.00600	0.00643	1	01/22/2020 14:09	WG1414122
1-Methylnaphthalene	U		0.00214	0.0200	0.0214	1	01/22/2020 14:09	WG1414122
2-Methylnaphthalene	0.00223	J	0.00214	0.0200	0.0214	1	01/22/2020 14:09	WG1414122
2-Chloronaphthalene	U		0.00214	0.0200	0.0214	1	01/22/2020 14:09	WG1414122
(S) Nitrobenzene-d5	*72.9*				*14.0-149*		*01/22/2020 14:09*	WG1414122
(S) 2-Fluorobiphenyl	*80.1*				*34.0-125*		*01/22/2020 14:09*	WG1414122
(S) p-Terphenyl-d14	*90.9*				*23.0-120*		*01/22/2020 14:09*	WG1414122

Method Blank (MB)

(MB) R3478795-1 12/03/19 09:50

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1165628-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1165628-04 12/03/19 09:50 • (DUP) R3478795-3 12/03/19 09:50

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.3	95.2	1	0.919		10

Laboratory Control Sample (LCS)

(LCS) R3478795-2 12/03/19 09:50

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) R3489559-1 01/09/20 14:28

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1177542-55 Original Sample (OS) • Duplicate (DUP)

(OS) L1177542-55 01/09/20 14:28 • (DUP) R3489559-3 01/09/20 14:28

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.0	94.6	1	0.678		10

Laboratory Control Sample (LCS)

(LCS) R3489559-2 01/09/20 14:28

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) R3490122-1 01/11/20 16:32

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1178043-28 Original Sample (OS) • Duplicate (DUP)

(OS) L1178043-28 01/11/20 16:32 • (DUP) R3490122-3 01/11/20 16:32

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	93.3	91.7	1	1.71		10

Laboratory Control Sample (LCS)

(LCS) R3490122-2 01/11/20 16:32

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) R3493039-1 01/22/20 11:50

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Arsenic	U		0.00650	0.0100
Cadmium	U		0.000700	0.00200
Lead	U		0.00190	0.00500

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3493039-2 01/22/20 11:53 • (LCSD) R3493039-3 01/22/20 11:55

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Arsenic	1.00	0.927	0.931	92.7	93.1	80.0-120			0.422	20
Cadmium	1.00	0.959	0.966	95.9	96.6	80.0-120			0.677	20
Lead	1.00	0.950	0.950	95.0	95.0	80.0-120			0.0744	20

L1180378-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1180378-11 01/22/20 11:58 • (MS) R3493039-5 01/22/20 12:03 • (MSD) R3493039-6 01/22/20 12:06

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Arsenic	1.00	0.00900	0.924	0.943	91.5	93.4	1	75.0-125			2.04	20
Cadmium	1.00	0.000763	0.948	0.975	94.7	97.4	1	75.0-125			2.79	20
Lead	1.00	0.405	1.34	1.36	93.7	96.0	1	75.0-125			1.68	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3493330-1 01/22/20 23:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
PCB 1016	U		0.00350	0.0170
PCB 1221	U		0.00537	0.0170
PCB 1232	U		0.00417	0.0170
PCB 1242	U		0.00318	0.0170
PCB 1248	U		0.00315	0.0170
PCB 1254	U		0.00472	0.0170
PCB 1260	U		0.00494	0.0170
(S) Decachlorobiphenyl	*95.6*			*10.0-135*
(S) Tetrachloro-m-xylene	*89.9*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3493330-2 01/23/20 00:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1260	0.166	0.155	93.4	37.0-145	
PCB 1016	0.166	0.140	84.3	36.0-141	
(S) Decachlorobiphenyl			*91.0*	*10.0-135*	
(S) Tetrachloro-m-xylene			*84.8*	*10.0-139*	

L1181586-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1181586-01 01/23/20 00:58 • (MS) R3493330-3 01/23/20 01:12 • (MSD) R3493330-4 01/23/20 01:26

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 %
PCB 1260	0.216	ND	0.259	0.190	120	88.0	1	10.0-160			31.0	38
PCB 1016	0.216	ND	0.209	0.172	97.0	79.6	1	10.0-160			19.7	37
(S) Decachlorobiphenyl					*101*	*75.7*		*10.0-135*				
(S) Tetrachloro-m-xylene					*94.6*	*79.4*		*10.0-139*				

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3494993-1 01/29/20 00:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
PCB 1016	U		0.00350	0.0170
PCB 1221	U		0.00537	0.0170
PCB 1232	U		0.00417	0.0170
PCB 1242	U		0.00318	0.0170
PCB 1248	U		0.00315	0.0170
PCB 1254	U		0.00472	0.0170
PCB 1260	U		0.00494	0.0170
(S) Decachlorobiphenyl	*165*	J1		*10.0-135*
(S) Tetrachloro-m-xylene	*161*	J1		*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3494993-2 01/29/20 00:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1260	0.167	0.228	137	37.0-145	
PCB 1016	0.167	0.223	134	36.0-141	
(S) Decachlorobiphenyl			*153*	*10.0-135*	J1
(S) Tetrachloro-m-xylene			*146*	*10.0-139*	J1

L1183089-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1183089-02 01/29/20 00:49 • (MS) R3494993-3 01/29/20 01:02 • (MSD) R3494993-4 01/29/20 01:14

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 %
PCB 1260	0.190	ND	0.273	0.255	144	134	1	10.0-160			6.90	38
PCB 1016	0.190	ND	0.227	0.209	120	110	1	10.0-160			8.33	37
(S) Decachlorobiphenyl					*153*	*146*		*10.0-135*	J1	J1		
(S) Tetrachloro-m-xylene					*119*	*113*		*10.0-139*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3492758-2 01/21/20 17:16

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.000600	0.00600
Acenaphthene	U		0.000600	0.00600
Acenaphthylene	U		0.000600	0.00600
Benzo(a)anthracene	U		0.000600	0.00600
Benzo(a)pyrene	U		0.000600	0.00600
Benzo(b)fluoranthene	U		0.000600	0.00600
Benzo(g,h,i)perylene	U		0.000600	0.00600
Benzo(k)fluoranthene	U		0.000600	0.00600
Chrysene	U		0.000600	0.00600
Dibenz(a,h)anthracene	U		0.000600	0.00600
Fluoranthene	U		0.000600	0.00600
Fluorene	U		0.000600	0.00600
Indeno(1,2,3-cd)pyrene	U		0.000600	0.00600
Naphthalene	U		0.00200	0.0200
Phenanthrene	U		0.000600	0.00600
Pyrene	U		0.000600	0.00600
1-Methylnaphthalene	U		0.00200	0.0200
2-Methylnaphthalene	U		0.00200	0.0200
2-Chloronaphthalene	U		0.00200	0.0200
(S) Nitrobenzene-d5	*94.1*			*14.0-149*
(S) 2-Fluorobiphenyl	*85.9*			*34.0-125*
(S) p-Terphenyl-d14	*98.7*			*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R3492758-1 01/21/20 16:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0681	85.1	50.0-126	
Acenaphthene	0.0800	0.0707	88.4	50.0-120	
Acenaphthylene	0.0800	0.0755	94.4	50.0-120	
Benzo(a)anthracene	0.0800	0.0724	90.5	45.0-120	
Benzo(a)pyrene	0.0800	0.0542	67.8	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0714	89.3	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0646	80.7	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0686	85.8	49.0-125	
Chrysene	0.0800	0.0672	84.0	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0672	84.0	47.0-125	
Fluoranthene	0.0800	0.0735	91.9	49.0-129	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS)

(LCS) R3492758-1 01/21/20 16:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0712	89.0	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0668	83.5	46.0-125	
Naphthalene	0.0800	0.0683	85.4	50.0-120	
Phenanthrene	0.0800	0.0697	87.1	47.0-120	
Pyrene	0.0800	0.0677	84.6	43.0-123	
1-Methylnaphthalene	0.0800	0.0704	88.0	51.0-121	
2-Methylnaphthalene	0.0800	0.0674	84.3	50.0-120	
2-Chloronaphthalene	0.0800	0.0681	85.1	50.0-120	
(S) Nitrobenzene-d5			*91.0*	*14.0-149*	
(S) 2-Fluorobiphenyl			*87.8*	*34.0-125*	
(S) p-Terphenyl-d14			*103*	*23.0-120*	

L1181106-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1181106-01 01/21/20 17:37 • (MS) R3492758-3 01/21/20 17:57 • (MSD) R3492758-4 01/21/20 18:18

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 %
Anthracene	0.0845	0.0136	0.0838	0.0821	83.1	80.2	1	10.0-145			2.09	30
Acenaphthene	0.0845	ND	0.0701	0.0726	77.7	79.8	1	14.0-127			3.49	27
Acenaphthylene	0.0845	ND	0.0681	0.0732	80.6	85.8	1	21.0-124			7.20	25
Benzo(a)anthracene	0.0845	ND	0.0463	0.0649	54.7	76.0	1	10.0-139		J3	33.5	30
Benzo(a)pyrene	0.0845	ND	0.0478	0.0668	56.5	78.3	1	10.0-141	V3	J3	33.3	31
Benzo(b)fluoranthene	0.0845	ND	0.327	0.0686	387	80.3	1	10.0-140	J5 V3	J3	131	36
Benzo(g,h,i)perylene	0.0845	0.0522	0.266	0.0919	254	46.4	1	10.0-140	J5 V3	J3	97.5	33
Benzo(k)fluoranthene	0.0845	ND	0.0556	0.0840	65.8	98.4	1	10.0-137	V3	J3	40.7	31
Chrysene	0.0845	ND	0.117	0.107	138	125	1	10.0-145			9.20	30
Dibenz(a,h)anthracene	0.0845	ND	0.131	0.0578	155	67.8	1	10.0-132	J5 V3	J3	77.5	31
Fluoranthene	0.0845	0.0265	0.112	0.128	101	119	1	10.0-153			13.6	33
Fluorene	0.0845	ND	0.0765	0.0795	90.5	93.1	1	11.0-130			3.89	29
Indeno(1,2,3-cd)pyrene	0.0845	0.0172	0.169	0.0698	180	61.5	1	10.0-137	J5 V3	J3	83.1	32
Naphthalene	0.0845	ND	0.0675	0.0673	79.9	78.8	1	10.0-135			0.322	27
Phenanthrene	0.0845	0.0232	0.102	0.106	93.1	96.7	1	10.0-144			3.76	31
Pyrene	0.0845	0.0338	0.112	0.122	92.1	104	1	10.0-148			9.26	35
1-Methylnaphthalene	0.0845	ND	0.0701	0.0705	78.4	78.2	1	10.0-142			0.616	28
2-Methylnaphthalene	0.0845	ND	0.0697	0.0699	78.9	78.4	1	10.0-137			0.311	28
2-Chloronaphthalene	0.0845	ND	0.0640	0.0673	75.8	78.8	1	29.0-120			4.95	24
(S) Nitrobenzene-d5					*129*	*100*		*14.0-149*				
(S) 2-Fluorobiphenyl					*77.2*	*80.8*		*34.0-125*				
(S) p-Terphenyl-d14					*103*	*93.2*		*23.0-120*				

Method Blank (MB)

(MB) R3494876-2 01/28/20 15:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.000600	0.00600
Acenaphthene	U		0.000600	0.00600
Acenaphthylene	U		0.000600	0.00600
Benzo(a)anthracene	U		0.000600	0.00600
Benzo(a)pyrene	U		0.000600	0.00600
Benzo(b)fluoranthene	U		0.000600	0.00600
Benzo(g,h,i)perylene	U		0.000600	0.00600
Benzo(k)fluoranthene	U		0.000600	0.00600
Chrysene	U		0.000600	0.00600
Dibenz(a,h)anthracene	U		0.000600	0.00600
Fluoranthene	U		0.000600	0.00600
Fluorene	U		0.000600	0.00600
Indeno(1,2,3-cd)pyrene	U		0.000600	0.00600
Naphthalene	U		0.00200	0.0200
Phenanthrene	U		0.000600	0.00600
Pyrene	U		0.000600	0.00600
1-Methylnaphthalene	U		0.00200	0.0200
2-Methylnaphthalene	U		0.00200	0.0200
2-Chloronaphthalene	U		0.00200	0.0200
(S) Nitrobenzene-d5	*81.9*			*14.0-149*
(S) 2-Fluorobiphenyl	*87.3*			*34.0-125*
(S) p-Terphenyl-d14	*92.1*			*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R3494876-1 01/28/20 15:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0672	84.0	50.0-126	
Acenaphthene	0.0800	0.0696	87.0	50.0-120	
Acenaphthylene	0.0800	0.0722	90.3	50.0-120	
Benzo(a)anthracene	0.0800	0.0715	89.4	45.0-120	
Benzo(a)pyrene	0.0800	0.0619	77.4	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0689	86.1	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0687	85.9	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0713	89.1	49.0-125	
Chrysene	0.0800	0.0714	89.3	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0724	90.5	47.0-125	
Fluoranthene	0.0800	0.0674	84.3	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3494876-1 01/28/20 15:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0713	89.1	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0717	89.6	46.0-125	
Naphthalene	0.0800	0.0646	80.7	50.0-120	
Phenanthrene	0.0800	0.0713	89.1	47.0-120	
Pyrene	0.0800	0.0703	87.9	43.0-123	
1-Methylnaphthalene	0.0800	0.0668	83.5	51.0-121	
2-Methylnaphthalene	0.0800	0.0650	81.3	50.0-120	
2-Chloronaphthalene	0.0800	0.0707	88.4	50.0-120	
(S) Nitrobenzene-d5			*82.6*	*14.0-149*	
(S) 2-Fluorobiphenyl			*87.6*	*34.0-125*	
(S) p-Terphenyl-d14			*90.6*	*23.0-120*	

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
T8	Sample(s) received past/too close to holding time expiration.

Qualifier	Description
V3	The internal standard exhibited poor recovery due to sample matrix interference. The analytical results will be biased high. BDL results will be unaffected.

ACCREDITATIONS & LOCATIONS

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

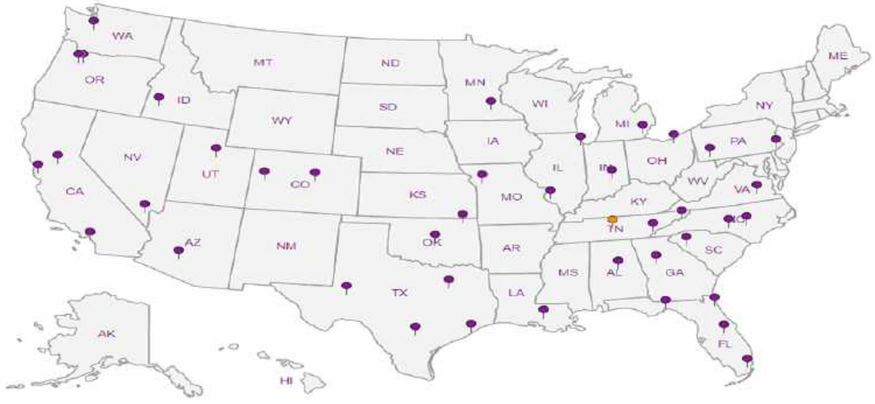
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 8

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# ~~L1116424~~ 1✓ 1/17/20

D212
L1180378

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB: 11/13/19 MWB
Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-15 (0-1)	Grab	SS	0-1	11/14/19	1145	~~3~~ 2	X	X	X		X		-01 -01
SB-15 (1-2)	Grab	SS	1-2	11/14/19	1146	3						Hold	
SB-15 (2-3)	Grab	SS	2-3	11/14/19	1147	3	X	X	X		X		02
SB-15 (3-4)	Grab	SS	3-4	11/14/19	1148	3							
SB-15 (6-8)	Grab	SS	6-8	11/14/19	1149	3						Hold	
SB-15 (10-12)	Grab	SS	10-12	11/14/19	1150	2	X	X	X		X	Hold	03
SB-15A (0-1)	Grab	SS	0-1	11/14/19	1125	3						Hold	
SB-15A (1-2)	Grab	SS	1-2	11/14/19	1126	3						Hold	
SB-15A (2-3)	Grab	SS	2-3	11/14/19	1127	3						Hold	
SB-15A (3-4)	Grab	SS	3-4	11/14/19	1128	3						Hold	

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: 4510 1662 0396/0411/0536/0514/0488/0400/0503/0422/0444/0433/0477/0525/0466/0455

pH ______ Temp ______
Flow ______ Other ______

Samples returned via: ___ UPS X FedEx ___ Courier ________

Tracking # 4686 6470 7042

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: 11/15/19 Time: 1230
Received by: (Signature)

Trip Blank Received: [✓ Yes] No
5 [✓ HCl] / MeoH
TBR

Relinquished by : (Signature)
Date: 11-15 Time: 1720
Received by: (Signature)

Temp [illegible] °C Bottles Received:
02-1=01 223

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date: Time:
Received for lab by: (Signature)

Date: 11-16-19 Time: 9:00

11-131

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N ___ Y ✓

Chain of Custody Page 7 of 18

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 # L1161934

Table # L1180378

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-20 (2-3)	Grab	SS	2-3	11/14/19	0935	3	X	X	X		X							-15
SB-20 (3-4)	Grab	SS	3-4	11/14/19	0936	3											Hold	
SB-20 (4-6)	Grab	SS	4-6	11/14/19	0937	3	X	X	X		X							-16
SB-20 (6-8)	Grab	SS	6-8	11/14/19	0938	3											Hold	
SB-20 (10-11)	Grab	SS	10-11	11/14/19	0939	3	X	X	X		X							-17
SB-20 (12-14)	Grab	SS	12-14	11/14/19	0940	3											Hold	
SB-21 (0-1)	Grab	SS	0-1	11/14/19	1005	3											Hold	
SB-21 (1-2)	Grab	SS	1-2	11/14/19	1006	3											Hold	
SB-21 (2-3)	Grab	SS	2-3	11/14/19	1007	3	X	X	X		X							-18 -02
SB-21 (3-4)	Grab	SS	3-4	11/14/19	1008	3											Hold	

* 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: 11/15/19	Time: 1258	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5	
Relinquished by: (Signature)	Date: 11-15	Time: 1700	Received by: (Signature)	Temp: AH °C 0.2-1=0.1 Bottles Received: 223	If preservation required by Login: Date/Time
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00	Hold: 11-125 Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 10 of 18

Pace Analytical®
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12065 Lebanon Rd
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Phone: 615-758-5858
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Fax: 615-758-5859

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #: **R13411.07**

Lab Project #: **TGERESHTX-R13411**

SDG # L1161924

Table # L1180378

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #: **8657**

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Priority**

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-24 (0-1)	Grab	SS	0-1	11/14/19	1158	3	X	X	X		X		27 -03
SB-24 (1-2)	Grab	SS	1-2	11/14/19	1159	3						Held	
SB-24 (2-3)	Grab	SS	2-3	11/14/19	1200	3	X	X	X		X		28
SB-24 (3-4)	Grab	SS	3-4	11/14/19	1201	3						Held	
SB-24 (4-6)	Grab	SS	4-6	11/14/19	1202	3	X	X	X		X		29
SB-24 (6-8)	Grab	SS	6-8	11/14/19	1203	3						Held	
SB-24 (9-11)	Grab	SS	9-11	11/14/19	1204	3						Held	
SB-24 (12-14)	Grab	SS	12-14	11/14/19	1205	3						Held	
SB-25 (0-1)	Grab	SS	0-1	11/14/19	0952	3						Held	
SB-25 (1-2)	Grab	SS	1-2	11/14/19	0953	3	X	X	X		X		30

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] No 5 [✓ HCL] / MeoH TBR	
Relinquished by: (Signature)	Date: 11-15-19	Time:	Received by: (Signature)	Temp: Ab °C 0.2-.1=0.1	Bottles Received: 223
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

Hold

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

Collected by (print):
Tim Crump

Site/Facility ID #

P.O. #
8657

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

Quote #

Date Results Needed

Chain of Custody Page 17 of 18

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SDG # ~~L1161920~~

Table # L1180378

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739846**
PM: 134 - Mark W. Beasley
PB:

Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-29 (8-9)	Grab	SS	8-9	11/14/19	1046	3						Hold	
SB-29 (9-10)	Grab	SS	9-10	11/14/19	1047	3	X	X	X		X		~~61~~
SB-29 (10-11)	Grab	SS	10-11	11/14/19	1048	3						Hold	
SB-29 (11-12)	Grab	SS	11-12	11/14/19	1049	3	X	X	X		X		~~62~~
SB-29 (14-15)	Grab	SS	14-15	11/14/19	1050	3						Hold	
SB-29 (16-17)	Grab	SS	16-17	11/14/19	1051	3	X	X	X		X		~~63~~
SB-29 (17-18)	Grab	SS	17-18	11/14/19	1052	3						Hold	
SB-29 (19-20)	Grab	SS	19-20	11/14/19	1053	3	X	X	X		X		~~64~~
SB-30 (0-0.5)	Grab	SS	0-0.5	11/14/19	1335	4	X	X	X	X	X		~~65~~ -04
SB-30 (0.5-1)	Grab	SS	0.5-1	11/14/19	1336	4	X	X	X	X	X		~~66~~

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: [✓ Yes] / No
5
[✓ HCL] MeoH
TBR

Temp: Amb °C
0.2+1=0.1
Bottles Received: 223

Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 18 of 18

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Fax: 615-758-5859

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N ___ Y X

SDG # L1161924

Table # L1180378

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739846**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-30(1-1.5)	Grab	SS	1-1.5	11/14/19	1337	4	X	X	X	X	X		~~67~~
SB-30(1.5-2)	Grab	SS	1.5-2	11/14/19	1338	4	X	X	X	X	X		~~68~~
SB-30(3-3.5)	Grab	SS	3-3.5	11/14/19	1339	4						Hold	
SB-30(4.5-5)	Grab	SS	4.5-5	11/14/19	1340	4						Hold	
SB-31(0-0.5)	Grab	SS	0-0.5	11/14/19	1430	4							
SB-31(0.5-1)	Grab	SS	0.5-1	11/14/19	1431	4	X	X	X	X	X		~~69~~ -05
SB-31(1-1.5)	Grab	SS	1-1.5	11/14/19	1432	4	X	X	X	X	X		~~70~~
SB-31(1.5-2)	Grab	SS	1.5-2	11/14/19	1433	4	X	X	X	X	X		~~71~~ -06
SB-31(3-3.5)	Grab	SS	3-3.5	11/14/19	1434	4	X	X	X	X	X		~~72~~ -07
SB-31(4.5-5)	Grab	SS	4.5-5	11/14/19	1435	4						Hold	
												Hold	

* 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: 11/15/19
Time: 1220
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
5
[✓ HCL] / MeoH
TBR

Relinquished by : (Signature)
Date: 1145
Time:
Received by: (Signature)

Temp: 1.6 2 °C
IR2-1=0.1
Bottles Received: 293

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature)

Date: 11-16-19
Time: 9:00

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: Future Federal Way Hospital

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 18

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L1180378

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Fax: 615-758-5859

SDG # ~~L1161424~~
D212
~~L1165678~~

Acctnum: TGERESHTX
Template: T158754
Prelogin: P740770
PM: 134 - Mark W. Beasley
PB: 11/13/19 MWB
Shipped Via: FedEX Priority

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-15 (0-1)	Grab	SS	0-1	11/14/19	1145	~~3~~ 2	X	X	X		X		-01
SB-15 (1-2)	Grab	SS	1-2	11/14/19	1146	3						Hold	-
SB-15 (2-3)	Grab	SS	2-3	11/14/19	1147	3	X	X	X		X		02
SB-15 (3-4)	Grab	SS	3-4	11/14/19	1148	3						Hold	
SB-15 (6-8)	Grab	SS	6-8	11/14/19	1149	3						Hold	
SB-15 (10-12)	Grab	SS	10-12	11/14/19	1150	2	X	X	X		X		03
~~SB-15A (0-1)~~	~~Grab~~	~~SS~~	~~0-1~~	~~11/14/19~~	~~1125~~	~~3~~						~~Hold~~	08
SB-15A (1-2)	Grab	SS	1-2	11/14/19	1126	3						Hold	
~~SB-15A (2-3)~~	~~Grab~~	~~SS~~	~~2-3~~	~~11/14/19~~	~~1127~~	~~3~~						~~Hold~~	02
SB-15A (3-4)	Grab	SS	3-4	11/14/19	1128	3						Hold	

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ______

Remarks: 4510 1662 0396/0411/0536/0514/ 0488/0400/ 0503/0432/0444/0433/0471/0525/0466/0455

pH ______ Temp ______
Flow ______ Other ______

Samples returned via: ___ UPS X FedEx ___ Courier ______

Tracking # 4686 6470 7042

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)	
	11/15/19	1230		Trip Blank Received: [✓ Yes] No 5 [✓ HCL] / MeoH TBR
	11-15	1720		Temp 4.2 °C Bottles Received: 02-1-01 223
			Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-131

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
- ___ Same Day
- X Next Day
- ___ Two Day
- ___ Three Day
- ___ Five Day
- ___ 5 Day (Rad Only)
- ___ 10 Day (Rad Only)

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Chain of Custody Page ___ of ___

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SDG # J1???54

Table # L1180378

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB35 (.5-1)	Grab	SS	.5-1	1/7/20	909	1	X	X	X			X			X			19 -09
SB35 (1-1.5)	Grab	SS	1-1.5	1/7/20	910	1	X	X	X			X			X			20
SB35 (1.5-2)	Grab	SS	1.5-2	1/7/20	911	1	X	X	X			X			X			21
SB35 (3-3.5)	Grab	SS	3-3.5	1/7/20	912	1								X				
SB35 (~~4~~4.5-5)	Grab	SS	~~4~~4.5-5	1/7/20	913	1								X				
SB35 (5-6)	Grab	SS	5-6	1/7/20	914	1	X	V	X			X			X			22
SB35 (6-7)	Grab	SS	6-7	1/7/20	915	1								X				
SB35 (7-8)	Grab	SS	7-8	1/7/20	916	1								X				
SB35 (8-9)	Grab	SS	8-9	1/7/20	917	1	X	X	X			X			X			23
SB35 (9-10)	Grab	SS	9-10	1/7/20	918	1								X				

* 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) VBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR 10
Relinquished by : (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: 22-3=?°C Bottles Received: 148
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/9/20 Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnette

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Chain of Custody Page ___ of ___

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Fax: 615-758-5859

SDG # ~~1199542~~

Table # L1180378

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: 134 - Mark W. Beasley
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB49 (3-4)	Grab	SS	3-4	1/7/20	1253	3								X				
SB49 (5-6)	Grab	SS	5-6	1/7/20	1254	3								X				
SB50 (0-1)	Grab	SS	0-1	1/7/20	1320	3				X	X				X			~~58~~ -10
SB50 (1-2)	Grab	SS	1-2	1/7/20	1321	3				X	X				X			~~59~~
SB50 (2-3)	Grab	SS	2-3	1/7/20	1322	3								X				
SB50 (3-4)	Grab	SS	3-4	1/7/20	1323	3								X				
SB50 (5-6)	Grab	SS	5-6	1/7/20	1324	3								X				
SB51 (0-1)	Grab	SS	0-1	1/7/20	1258	3				X	X				X			~~60~~
SB51 (1-2)	Grab	SS	1-2	1/7/20	1259	3				X	X				X			~~61~~
SB51 (2-3)	Grab	SS	2-3	1/7/20	1300	3								X				

* 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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR 10	
Relinquished by : (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: °C 2.2-.3=1.9	Bottles Received 148
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/9/20	Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: Future Federal Way Hospital

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.08

Lab Project # TGERESHTX-R13411

Collected by (print): K Barnette

Site/Facility ID #

P.O. # 8772

Collected by (signature): K Barnett

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

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

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

SDG # ~~H79045~~

Table # L1190378

Acctnum: TGERESHTX

Template: T160680

Prelogin: P747407

PM: 134 - Mark W. Beasley

PB:

Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB40(0-1)	Grab	SS	0-1	1/8/20	0815	1								X				
SB40(1-2)	Grab	SS	1-2	1/8/20	816	1								X				
SB40(2-3)	Grab	SS	2-3	1/8/20	817	1		X	X						X			01
SB40(3-4)	Grab	SS	3-4	1/8/20	818	1								X				
SB40(4-6)	Grab	SS	4-6	1/8/20	819	1		X	X						X			02
SB40(6-8)	Grab	SS	6-8	1/8/20	820	1								X				
SB40(8-9)	Grab	SS	8-9	1/8/20	821	1		X	X						X			03 -11
SB40(9-10)	Grab	SS	9-10	1/8/20	822	1								X				
SB40(10-11)	Grab	SS	10-11	1/8/20	823	1		X	X						X			04
SB40(11-12)	Grab	SS	11-12	1/8/20	824	1		X	X						X			05

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ___

Remarks: 0.3/0.1/0.3/0.8/0.5/0.2/0.2/0.2/1.4/0.2/1.1

pH ___ Temp ___

Flow ___ Other ___

Samples returned via: ___ UPS ___ FedEx ___ Courier ___

Tracking # 1235 8607 1862/1972/1917/1870/1961/1929/1940/1906/1858/1750/1791

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) K Barnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 6 [✓ HCL] / MeoH TBR		
Relinquished by: (Signature)	Date: 1-9-20	Time:	Received by: (Signature)	Temp: 1.5-.5=1.0 °C	Bottles Received: 217	If preservation required by Login: Date/Time
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20	Time: 9:00	Condition: [✓ NCF] / OK

01-047
01-048
01-049
01-050

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): K Barnett

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 ___ of ___

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 1179043

Table # L1180378

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB45(4-6)	Grab	SS	4-6	1/8/20	1314	1								X				
SB45(6-8)	Grab	SS	6-8	1/8/20	1315	1								X				
SB46(0-1)	Grab	SS	0-1	1/8/20	1025	3				X	X		X		X			-27
SB46(1-2)	Grab	SS	1-2	1/8/20	1026	3				X	X		X		X			-28 -12
SB46(2-3)	Grab	SS	2-3	1/8/20	1027	3								X				
SB46(3-4)	Grab	SS	3-4	1/8/20	1028	3								X				
SB46(6-8)	Grab	SS	6-8	1/8/20	1029	3								X				
SB46(9-10)	Grab	SS	9-10	1/8/20	1030	3				X	X		X		X			-29
SB46(14-15)	Grab	SS	14-15	1/8/20	1031	3				X	X		X		X			-30
SB46(15-16)	Grab	SS	15-16	1/8/20	1032	3								X				

* 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 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) Barnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: Yes / No [✓ HCL] / MeoH TBR 6	
Relinquished by : (Signature) MC	Date: 1-9-20	Time: 1?8	Received by: (Signature)	Temp: 1.5-.5=1.0 °C Bottles Received: 217	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20 Time: 9:00	Hold:
					Condition: [✓ NCF] / OK

Andy Vann

From: Mark Beasley
Sent: Thursday, January 16, 2020 1:45 PM
To: Project Service; Sample Storage
Subject: *TGERESHTX* relogs

Relog the below samples as Ex due 1/23. Some samples have been relogged – but sample #'s listed below. SPLP GRO/DRO – Log to a separate SDG as SPLP NWTPHGX & NWTPHDXLVINOSGT. Run OOH per client.

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Thursday, January 16, 2020 12:55 PM
To: Mark Beasley
Subject: Request additional Federal Way Samples

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please run the following samples under a standard TAT (PO attached)

TGE Sample ID	Lab ID	Requested Analysis		
SB15(0-1)	L1161924-01 L1165576-01	PAH PCBs		
SB15(0-1)	L1161924-01 L1165576-01	SPLP GRO/DRO	This to be issued on stand along report	
SB15A(0-1)	L1165628-01 L1168120-01	PAH PCBs		
SB15A(0-1)	L1165628-01 L1168120-01	SPLP GRO/DRO	This to be issued on stand along report. Can be with other GRO/DRO SPLP report	
SB21(2-3)	L1161924-18 L1165576-07	SPLP Lead		
SB24(0-1)	L1161924-27	SPLP Arsenic		
SB30(0-0.5)	L1161924-65	SPLP Lead and Arsenic		
SB31(1.5-2)	L1161924-72	SPLP Cadmium		
SB31(0-0.5)	L1161924-69	SPLP Arsenic		
SB31(1-1.5)	L1161924-71	SPLP Arsenic		
SB35(.5-1)	L1177542-19	SPLP Arsenic		
SB40(8-9)	L1178043-03	SPLP Cadmium and Lead		
SB46(1-2)	L1178043-28	PAHs PCBs		

SB46(1-2)	L1178043-28	SPLP GRO/DRO	This to be issued on stand along report. Can be with other GRO/DRO SPLP report	
SB50(0-1)	L1177542-58	PAHs PCBs		
SB50(0-1)	L1177542-58	SPLP GRO/DRO	This to be issued on stand along report. Can be with other GRO/DRO SPLP report	

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

TGERESOURCES,INC.

WBENC & SBA Certified Woman Owned Small Business
DUNS# 929574051
CAGE Code 08PQ6

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Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

January 31, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

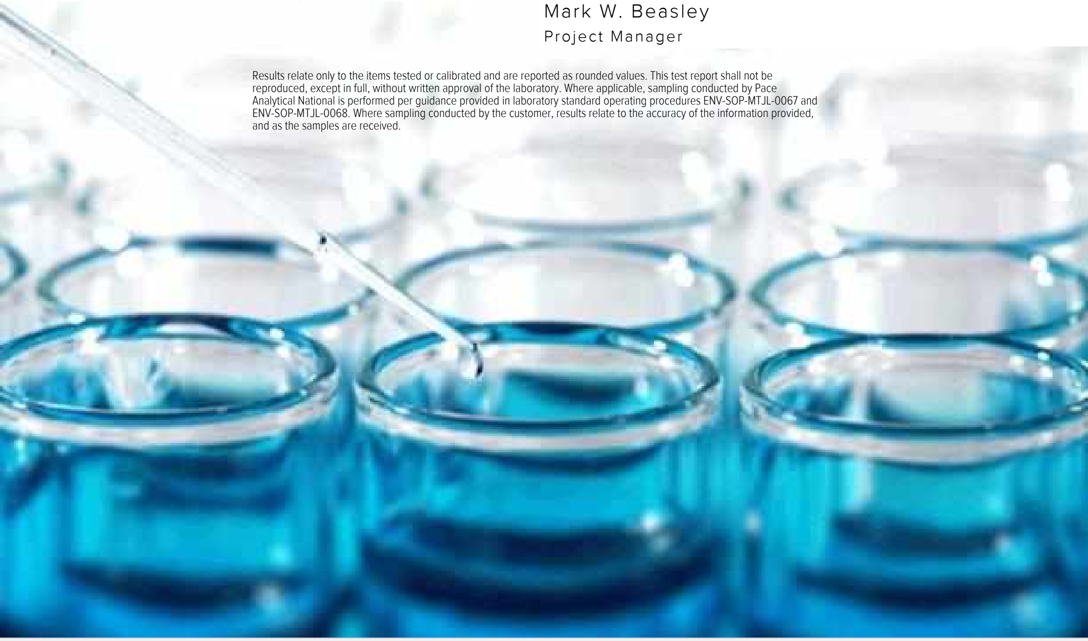
TGE Resources

Sample Delivery Group:	L1180387
Samples Received:	01/09/2020
Project Number:	R13411.07
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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	Collected by	Collected date/time	Received date/time
## SB46 (1-2) L1180387-03 GW		01/08/20 10:26	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1312	WG1413554	1	01/18/20 15:49	01/18/20 15:49	CGD	Mt. Juliet, TN
Preparation by Method 1312	WG1414892	1	01/21/20 18:54	01/21/20 18:54	CGD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1415491	1	01/22/20 19:04	01/22/20 19:04	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1415667	2	01/23/20 07:50	01/23/20 14:50	TJD	Mt. Juliet, TN

	Collected by	Collected date/time	Received date/time
SB50 (0-1) L1180387-04 GW		01/07/20 13:20	01/09/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1312	WG1413554	1	01/18/20 15:49	01/18/20 15:49	CGD	Mt. Juliet, TN
Preparation by Method 1312	WG1414892	1	01/21/20 18:54	01/21/20 18:54	CGD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1415491	1	01/22/20 19:28	01/22/20 19:28	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1415667	2	01/23/20 07:50	01/23/20 16:15	TJD	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.

Mark W. Beasley
Project Manager

Sample Delivery Group (SDG) Narrative

Sample quantity was not sufficient to complete analysis per recommended method guidelines.

Lab Sample ID	Project Sample ID	Method
L1180387-03	SB46 (1-2)	1312
L1180387-04	SB50 (0-1)	1312

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 01/31/2020 14:17
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1180387-03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1415491, WG1415667, WG1413554 and WG1414892

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		X			1
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?		X			2
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			3
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 01/31/2020 14:17
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1180387-03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1415491, WG1415667, WG1413554 and WG1414892

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 01/31/2020 14:17
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1180387-03 and 04
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1415491, WG1415667, WG1413554 and WG1414892

ER #[1]	**Description**
1	1312 WG1413554 L1180387-03 and 04: Sample quantity was not sufficient to complete analysis per recommended method guidelines.
2	NWTPHDX-NO SGT WG1415667 L1180387-03 and 04: Prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values. NWTPHGX WG1415491 L1180387-03 and 04: Prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.
3	NWTPHDX-NO SGT WG1415667 o-Terphenyl L1180387-04: Percent Recovery is outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

SAMPLE RESULTS - 03

L1180387

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Preparation by Method 1312

Analyte	Result	Qualifier	Prep date / time	Batch
SPLP Extraction	-		1/18/2020 3:49:37 PM	WG1413554
SPLP ZHE Extraction	-		1/21/2020 6:54:20 PM	WG1414892
Fluid	2		1/18/2020 3:49:37 PM	WG1413554
Final pH	6.79		1/18/2020 3:49:37 PM	WG1413554

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U	T8	0.0316	0.100	0.100	1	01/22/2020 19:04	WG1415491
(S) a,a,a-Trifluorotoluene(FID)	*110*				*78.0-120*		*01/22/2020 19:04*	WG1415491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U	T8	0.133	0.200	0.400	2	01/23/2020 14:50	WG1415667
Residual Range Organics (RRO)	U	T8	0.167	0.250	0.500	2	01/23/2020 14:50	WG1415667
(S) o-Terphenyl	*53.0*				*52.0-156*		*01/23/2020 14:50*	WG1415667

Sample Narrative:

L1180387-03 WG1415667: Dilution due to matrix impact during extraction procedure

SB50 (0-1)

Collected date/time: 01/07/20 13:20

SAMPLE RESULTS - 04

L1180387

Preparation by Method 1312

Analyte	Result	Qualifier	Prep date / time	Batch
SPLP Extraction	-		1/18/2020 3:49:37 PM	WG1413554
SPLP ZHE Extraction	-		1/21/2020 6:54:20 PM	WG1414892
Fluid	2		1/18/2020 3:49:37 PM	WG1413554
Final pH	6.92		1/18/2020 3:49:37 PM	WG1413554

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U	T8	0.0316	0.100	0.100	1	01/22/2020 19:28	WG1415491
(S) a,a,a-Trifluorotoluene(FID)	*111*				*78.0-120*		*01/22/2020 19:28*	WG1415491

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U	T8	0.133	0.200	0.400	2	01/23/2020 16:15	WG1415667
Residual Range Organics (RRO)	0.342	J T8	0.167	0.250	0.500	2	01/23/2020 16:15	WG1415667
(S) o-Terphenyl	*47.6*	J2			*52.0-156*		*01/23/2020 16:15*	WG1415667

Sample Narrative:

L1180387-04 WG1415667: Sample produced heavy emulsion during Extraction process, low surr/spike recoveries due to matrix

Method Blank (MB)

(MB) R3493282-4 01/22/20 20:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Gasoline Range Organics-NWTPH	U		0.0316	0.100
(S) a,a,a-Trifluorotoluene(FID)	*110*			*78.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3493282-2 01/22/20 17:05 • (LCSD) R3493282-3 01/22/20 18:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5.50	5.86	5.70	107	104	70.0-124			2.77	20
(S) a,a,a-Trifluorotoluene(FID)				*91.2*	*92.6*	*78.0-120*				

Method Blank (MB)

(MB) R3493587-1 01/23/20 13:24

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Diesel Range Organics (DRO)	U		0.0667	0.200
Residual Range Organics (RRO)	U		0.0833	0.250
(S) o-Terphenyl	*58.5*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3493587-2 01/23/20 13:46 • (LCSD) R3493587-3 01/23/20 14:07

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1.50	1.36	1.35	90.7	90.0	50.0-150			0.738	20
(S) o-Terphenyl				*91.0*	*90.0*	*52.0-156*				

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.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

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

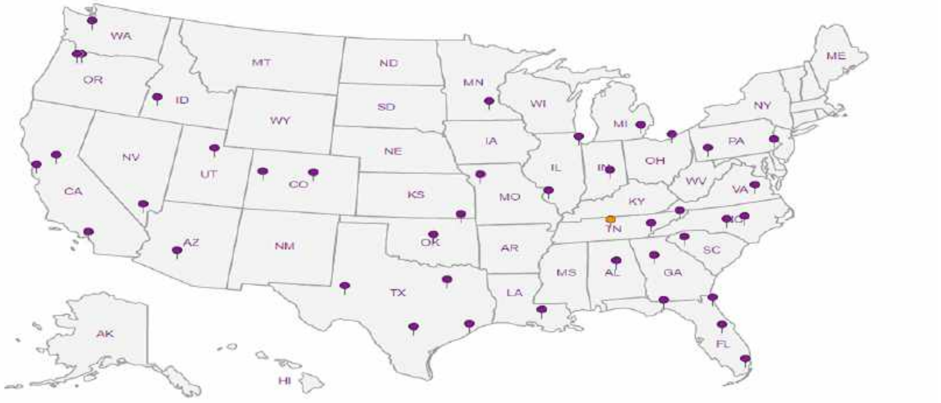
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #
8657

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

Quote #

Date Results Needed

Chain of Custody Page 1 of 8

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 # ~~L1161424~~ **D212** L1180387 NV 1/17/20

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: 134 - Mark W. Beasley

PB: 11/13/19 MWB

Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-15 (0-1)	Grab	SS	0-1	11/14/19	1145	~~3~~ 2	X	X	X		X							~~-01~~ -01
SB-15 (1-2)	Grab	SS	1-2	11/14/19	1146	3											Hold	
SB-15 (2-3)	Grab	SS	2-3	11/14/19	1147	3	X	X	X		X							-02
SB-15 (3-4)	Grab	SS	3-4	11/14/19	1148	3											Hold	
SB-15 (6-8)	Grab	SS	6-8	11/14/19	1149	3											Hold	
SB-15 (10-12)	Grab	SS	10-12	11/14/19	1150	3	X	X	X		X							-03
SB-15A (0-1)	Grab	SS	0-1	11/14/19	1125	3											Hold	
SB-15A (1-2)	Grab	SS	1-2	11/14/19	1126	3											Hold	
SB-15A (2-3)	Grab	SS	2-3	11/14/19	1127	3											Hold	
SB-15A (3-4)	Grab	SS	3-4	11/14/19	1128	3											Hold	

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ______

Remarks:
4510 1662 0396/0411/0536/0514/0488/0400/
0503/0422/0444/0433/0477/0525/0466/0455

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS X FedEx __ Courier ______

Tracking # 4686 6470 7042

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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] No [✓ HCl] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp 4.6 °C Bottles Received: 0.2-1=0.1 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-131

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: Future Federal Way Hospital

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # 8657

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 18

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National Center for Testing & Innovation

L1180387

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~L1161424~~ D212 ~~L1165678~~

Acctnum: TGERESHTX
Template: T158754
Prelogin: P740770
PM: 134 - Mark W. Beasley
PB: 11/13/19 MWB
Shipped Via: FedEX Priority

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRAB 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-15 (0-1)	Grab	SS	0-1	11/14/19	1145	~~3~~ 2	X	X	X		X		-01
SB-15 (1-2)	Grab	SS	1-2	11/14/19	1146	3						Hold	
SB-15 (2-3)	Grab	SS	2-3	11/14/19	1147	2	X	X	X		X		-02
SB-15 (3-4)	Grab	SS	3-4	11/14/19	1148	3						Hold	
SB-15 (6-8)	Grab	SS	6-8	11/14/19	1149	3						Hold	
SB-15 (10-12)	Grab	SS	10-12	11/14/19	1150	2	X	X	X		X		-03
~~SB-15A (0-1)~~	~~Grab~~	~~SS~~	~~0-1~~	~~11/14/19~~	~~1125~~	~~3~~						~~Hold~~	-01 -02
SB-15A (1-2)	Grab	SS	1-2	11/14/19	1126	3						Hold	
~~SB-15A (2-3)~~	~~Grab~~	~~SS~~	~~2-3~~	~~11/14/19~~	~~1127~~	~~3~~						~~Hold~~	-02
SB-15A (3-4)	Grab	SS	3-4	11/14/19	1128	3						Hold	

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: 4510 1662 0396/0411/0536/0514/ 0488/0400/ 0503/0432/0444/0433/0477/0525/0466/0455

pH ______ Temp ______
Flow ______ Other ______

Samples returned via: ___ UPS X FedEx ___ Courier

Tracking # 4686 6470 7042

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 5
	11/15/19	1230		
Relinquished by : (Signature)	Date: 11-15	Time: 1700	Received by: (Signature)	Temp: 4.0 °C Bottles Received: 223 .02=1.04
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

11-131

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Report to:
Kristi Barnette

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): K Barnett

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

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

SDG # 1179043

Table # L1180387

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB45(4-6)	Grab	SS	4-6	1/8/20	1314	1								X				
SB45(6-8)	Grab	SS	6-8	1/8/20	1315	1								X				
SB46(0-1)	Grab	SS	0-1	1/8/20	1025	3				X	X		X		X			-27
SB46(1-2)	Grab	SS	1-2	1/8/20	1026	3				X	X		X		X			-28 -03
SB46(2-3)	Grab	SS	2-3	1/8/20	1027	3								X				
SB46(3-4)	Grab	SS	3-4	1/8/20	1028	3								X				
SB46(6-8)	Grab	SS	6-8	1/8/20	1029	3								X				
SB46(9-10)	Grab	SS	9-10	1/8/20	1030	3				X	X		X		X			-29
SB46(14-15)	Grab	SS	14-15	1/8/20	1031	3				X	X		X		X			-30
SB46(15-16)	Grab	SS	15-16	1/8/20	1032	3								X				

* 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 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) Barnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 6 [✓ HCL] / MeoH TBR
Relinquished by : (Signature) MCK	Date: 1-9-20	Time: 1780	Received by: (Signature)	Temp: 1.5-.5=1.0 °C Bottles Received: 217
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20 Time: 9:20

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnette

Quote #

Immediately Packed on Ice N___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Analysis / Container / Preservative

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

SDG # L1179542

Table #

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: 134 - Mark W. Beasley
PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB49 (3-4)	Grab	SS	3-4	1/7/20	1253	3								X				
SB49 (5-6)	Grab	SS	5-6	1/7/20	1254	3								X				
SB50 (0-1)	Grab	SS	0-1	1/7/20	1320	3				X	X				X			-56
SB50 (1-2)	Grab	SS	1-2	1/7/20	1321	3				X	X				X			-54
SB50 (2-3)	Grab	SS	2-3	1/7/20	1322	3								X				
SB50 (3-4)	Grab	SS	3-4	1/7/20	1323	3								X				
SB50 (5-6)	Grab	SS	5-6	1/7/20	1324	3								X				
SB51 (0-1)	Grab	SS	0-1	1/7/20	1258	3				X	X				X			-60
SB51 (1-2)	Grab	SS	1-2	1/7/20	1259	3				X	X				X			-61
SB51 (2-3)	Grab	SS	2-3	1/7/20	1300	3								X				

-04

* 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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR 10
Relinquished by : (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: 2.2-.3=1.9 °C Bottles Received: 148
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/9/20 Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

Andy Vann

From: Mark Beasley
Sent: Thursday, January 16, 2020 1:45 PM
To: Project Service; Sample Storage
Subject: *TGERESHTX* relogs

Relog the below samples as Ex due 1/23. Some samples have been relogged – but sample #'s listed below. SPLP GRO/DRO – Log to a separate SDG as SPLP NWTPHGX & NWTPHDXLVINOSGT. Run OOH per client.

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Thursday, January 16, 2020 12:55 PM
To: Mark Beasley
Subject: Request additional Federal Way Samples

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please run the following samples under a standard TAT (PO attached)

TGE Sample ID	Lab ID	Requested Analysis		
SB15(0-1)	L1161924-01 L1165576-01	PAH PCBs		
SB15(0-1)	L1161924-01 L1165576-01	SPLP GRO/DRO	This to be issued on stand along report	
SB15A(0-1)	L1165628-01 L1168120-01	PAH PCBs		
SB15A(0-1)	L1165628-01 L1168120-01	SPLP GRO/DRO	This to be issued on stand along report. Can be with other GRO/DRO SPLP report	
SB21(2-3)	L1161924-18 L1165576-07	SPLP Lead		
SB24(0-1)	L1161924-27	SPLP Arsenic		
SB30(0-0.5)	L1161924-65	SPLP Lead and Arsenic		
SB31(1.5-2)	L1161924-72	SPLP Cadmium		
SB31(0-0.5)	L1161924-69	SPLP Arsenic		
SB31(1-1.5)	L1161924-71	SPLP Arsenic		
SB35(.5-1)	L1177542-19	SPLP Arsenic		
SB40(8-9)	L1178043-03	SPLP Cadmium and Lead		
SB46(1-2)	L1178043-28	PAHs PCBs		

SB46(1-2)	L1178043-28	SPLP GRO/DRO	This to be issued on stand along report. Can be with other GRO/DRO SPLP report	
SB50(0-1)	L1177542-58	PAHs PCBs		
SB50(0-1)	L1177542-58	SPLP GRO/DRO	This to be issued on stand along report. Can be with other GRO/DRO SPLP report	

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

TGERESOURCES,INC.

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DUNS# 929574051
CAGE Code 08PQ6

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Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

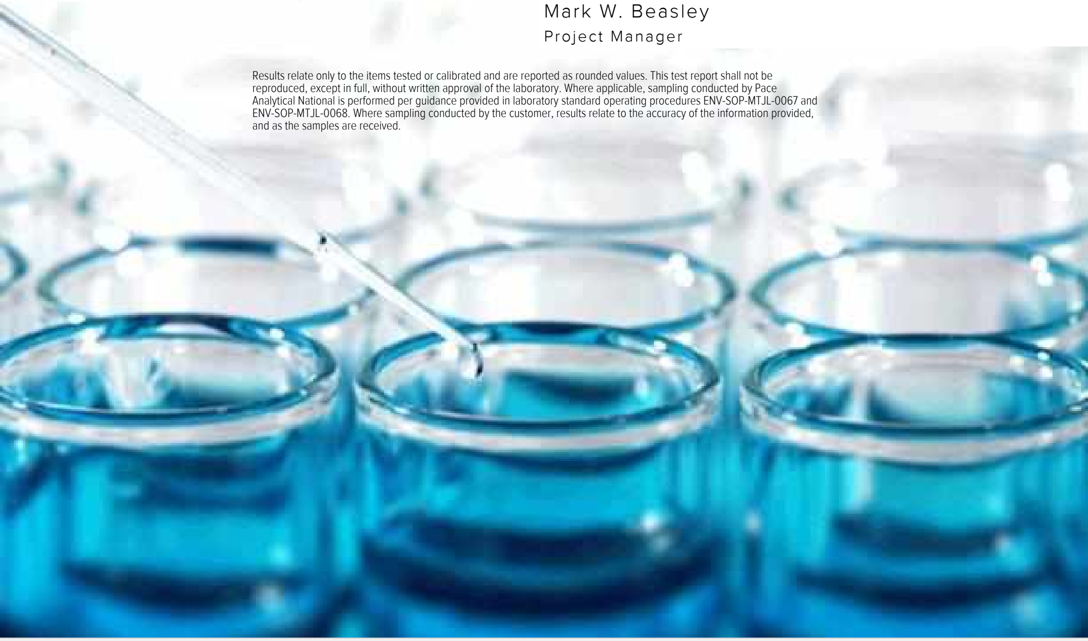
February 06, 2020

TGE Resources

Sample Delivery Group:	L1184715
Samples Received:	01/31/2020
Project Number:	R13411.07
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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	Collected by	Collected date/time	Received date/time
SUMP LINE MIDPOINT L1184715-01 Solid	K. Barnette	01/30/20 10:40	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1421886	1	02/04/20 23:50	02/04/20 23:59	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1421354	1	02/02/20 17:22	02/03/20 10:12	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 20:44	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1420877	36	01/30/20 10:40	02/01/20 19:12	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1420887	2.88	01/30/20 10:40	02/01/20 19:01	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1420924	1	02/01/20 15:04	02/02/20 01:20	JDG	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 02/06/2020 10:23
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1184715-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1420887, WG1420924, WG1420877, WG1421354, WG1421187 and WG1421886

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?		X			1
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 02/06/2020 10:23
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1184715-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1420887, WG1420924, WG1420877, WG1421354, WG1421187 and WG1421886

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			3
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 02/06/2020 10:23
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1184715-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1420887, WG1420924, WG1420877, WG1421354, WG1421187 and WG1421886

ER #[1]	**Description**
1	8260B WG1420887 2-Butanone (MEK) L1184715-01: Concentration in the Blank >MQL.
2	8260B WG1420887 Acetone, Acrylonitrile: Percent Recovery is outside of established control limits.
3	6010D WG1421187 Silver: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	65.1		1	02/04/2020 23:59	WG1421886

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.162		0.00430	0.0300	0.0461	1	02/03/2020 10:12	WG1421354

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	8.24		0.706	2.00	3.07	1	02/03/2020 20:44	WG1421187
Barium	163		0.261	0.500	0.768	1	02/03/2020 20:44	WG1421187
Cadmium	1.04		0.107	0.500	0.768	1	02/03/2020 20:44	WG1421187
Chromium	52.8		0.215	1.00	1.54	1	02/03/2020 20:44	WG1421187
Lead	94.5		0.292	0.500	0.768	1	02/03/2020 20:44	WG1421187
Selenium	U		0.952	2.00	3.07	1	02/03/2020 20:44	WG1421187
Silver	U		0.184	1.00	1.54	1	02/03/2020 20:44	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	6.56	B	1.87	0.100	5.53	36	02/01/2020 19:12	WG1420877
(S) a,a,a-Trifluorotoluene(FID)	*104*				*77.0-120*		*02/01/2020 19:12*	WG1420877

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U	J4	0.0606	0.0250	0.111	2.88	02/01/2020 19:01	WG1420887
Acrylonitrile	U	J4	0.00840	0.0125	0.0553	2.88	02/01/2020 19:01	WG1420887
Benzene	U		0.00177	0.00100	0.00442	2.88	02/01/2020 19:01	WG1420887
Bromobenzene	U		0.00464	0.0125	0.0553	2.88	02/01/2020 19:01	WG1420887
Bromodichloromethane	U		0.00348	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
Bromoform	U		0.0264	0.0250	0.111	2.88	02/01/2020 19:01	WG1420887
Bromomethane	U		0.0164	0.0125	0.0553	2.88	02/01/2020 19:01	WG1420887
n-Butylbenzene	U		0.0170	0.0125	0.0553	2.88	02/01/2020 19:01	WG1420887
sec-Butylbenzene	U		0.0112	0.0125	0.0553	2.88	02/01/2020 19:01	WG1420887
tert-Butylbenzene	U		0.00685	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
Carbon tetrachloride	U		0.00478	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
Chlorobenzene	U		0.00253	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
Chlorodibromomethane	U		0.00199	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
Chloroethane	U		0.00478	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
Chloroform	U		0.00184	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
Chloromethane	U		0.00615	0.0125	0.0553	2.88	02/01/2020 19:01	WG1420887
2-Chlorotoluene	U		0.00407	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
4-Chlorotoluene	U		0.00500	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
1,2-Dibromo-3-Chloropropane	U		0.0226	0.0250	0.111	2.88	02/01/2020 19:01	WG1420887
1,2-Dibromoethane	U		0.00232	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
Dibromomethane	U		0.00442	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
1,2-Dichlorobenzene	U		0.00641	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
1,3-Dichlorobenzene	U		0.00752	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
1,4-Dichlorobenzene	U		0.00871	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
Dichlorodifluoromethane	U		0.00362	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
1,1-Dichloroethane	U		0.00254	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
1,2-Dichloroethane	U		0.00210	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887

SUMP LINE MIDPOINT

Collected date/time: 01/30/20 10:40

SAMPLE RESULTS - 01

L1184715

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.00221	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
cis-1,2-Dichloroethene	U		0.00305	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
trans-1,2-Dichloroethene	U		0.00632	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
1,2-Dichloropropane	U		0.00562	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
1,1-Dichloropropene	U		0.00310	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
1,3-Dichloropropane	U		0.00774	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
cis-1,3-Dichloropropene	U		0.00300	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
trans-1,3-Dichloropropene	U		0.00677	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
2,2-Dichloropropane	U		0.00351	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
Di-isopropyl ether	U		0.00155	0.00100	0.00442	2.88	02/01/2020 19:01	WG1420887
Ethylbenzene	U		0.00234	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
Hexachloro-1,3-butadiene	U		0.0562	0.0250	0.111	2.88	02/01/2020 19:01	WG1420887
Isopropylbenzene	U		0.00382	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
p-Isopropyltoluene	U		0.0103	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
2-Butanone (MEK)	0.141	B	0.0553	0.0250	0.111	2.88	02/01/2020 19:01	WG1420887
Methylene Chloride	U		0.0294	0.0250	0.111	2.88	02/01/2020 19:01	WG1420887
4-Methyl-2-pentanone (MIBK)	U		0.0442	0.0250	0.111	2.88	02/01/2020 19:01	WG1420887
Methyl tert-butyl ether	U		0.00130	0.00100	0.00442	2.88	02/01/2020 19:01	WG1420887
Naphthalene	U		0.0138	0.0125	0.0553	2.88	02/01/2020 19:01	WG1420887
n-Propylbenzene	U		0.00522	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
Styrene	0.0298	J	0.0121	0.0125	0.0553	2.88	02/01/2020 19:01	WG1420887
1,1,1,2-Tetrachloroethane	U		0.00221	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
1,1,2,2-Tetrachloroethane	U		0.00172	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
1,1,2-Trichlorotrifluoroethane	U		0.00299	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
Tetrachloroethene	0.00553	J	0.00310	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
Toluene	0.0349		0.00553	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
1,2,3-Trichlorobenzene	U		0.00276	0.0125	0.0553	2.88	02/01/2020 19:01	WG1420887
1,2,4-Trichlorobenzene	U		0.0213	0.0125	0.0553	2.88	02/01/2020 19:01	WG1420887
1,1,1-Trichloroethane	U		0.00122	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
1,1,2-Trichloroethane	U		0.00390	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
Trichloroethene	U		0.00177	0.00100	0.00442	2.88	02/01/2020 19:01	WG1420887
Trichlorofluoromethane	U		0.00221	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
1,2,3-Trichloropropane	U		0.0226	0.0125	0.0553	2.88	02/01/2020 19:01	WG1420887
1,2,4-Trimethylbenzene	0.00995	B J	0.00513	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
1,2,3-Trimethylbenzene	U		0.00509	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
1,3,5-Trimethylbenzene	0.00487	J	0.00478	0.00500	0.0221	2.88	02/01/2020 19:01	WG1420887
Vinyl chloride	U		0.00302	0.00250	0.0111	2.88	02/01/2020 19:01	WG1420887
Xylenes, Total	0.0412		0.0211	0.00650	0.0287	2.88	02/01/2020 19:01	WG1420887
(S) Toluene-d8	*102*				*75.0-131*		*02/01/2020 19:01*	WG1420887
(S) 4-Bromofluorobenzene	*89.6*				*67.0-138*		*02/01/2020 19:01*	WG1420887
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*02/01/2020 19:01*	WG1420887

Sample Narrative:

L1184715-01 WG1420887: Dilution due to limited sample volume.

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	60.7		2.04	4.00	6.14	1	02/02/2020 01:20	WG1420924
Residual Range Organics (RRO)	190		5.11	10.0	15.4	1	02/02/2020 01:20	WG1420924
(S) o-Terphenyl	*56.8*				*18.0-148*		*02/02/2020 01:20*	WG1420924

Method Blank (MB)

(MB) R3497187-1 02/04/20 23:59

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1184740-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1184740-01 02/04/20 23:59 • (DUP) R3497187-3 02/04/20 23:59

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	85.0	85.4	1	0.383		10

Laboratory Control Sample (LCS)

(LCS) R3497187-2 02/04/20 23:59

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) R3496461-1 02/03/20 09:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.00280	0.0300

Laboratory Control Sample (LCS)

(LCS) R3496461-2 02/03/20 09:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.500	0.532	106	80.0-120	

L1184612-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184612-01 02/03/20 09:39 • (MS) R3496461-3 02/03/20 09:41 • (MSD) R3496461-4 02/03/20 09:44

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.500	0.184	0.780	0.756	119	114	1	75.0-125			3.17	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3496582-1 02/03/20 20:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	U		0.120	1.00

Laboratory Control Sample (LCS)

(LCS) R3496582-2 02/03/20 20:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	97.3	97.3	80.0-120	
Barium	100	103	103	80.0-120	
Cadmium	100	97.4	97.4	80.0-120	
Chromium	100	98.8	98.8	80.0-120	
Lead	100	99.0	99.0	80.0-120	
Selenium	100	98.3	98.3	80.0-120	
Silver	20.0	17.4	86.9	80.0-120	

L1184753-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184753-03 02/03/20 20:32 • (MS) R3496582-5 02/03/20 20:39 • (MSD) R3496582-6 02/03/20 20:42

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	6.48	96.3	97.3	89.8	90.8	1	75.0-125			1.04	20
Barium	100	57.1	160	148	103	90.6	1	75.0-125			7.79	20
Cadmium	100	U	90.6	90.1	90.6	90.1	1	75.0-125			0.468	20
Chromium	100	33.1	133	121	99.8	87.6	1	75.0-125			9.59	20
Lead	100	75.4	198	173	123	97.1	1	75.0-125			13.9	20
Selenium	100	U	89.6	89.3	89.6	89.3	1	75.0-125			0.395	20
Silver	20.0	U	16.1	15.8	80.4	79.2	1	75.0-125			1.52	20

WG1420877

Volatile Organic Compounds (GC) by Method NWTPHGX

Method Blank (MB)

(MB) R3496294-3 02/01/20 13:03

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Gasoline Range Organics-NWTPH	0.0456	J	0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*103*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3496294-2 02/01/20 12:01

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Gasoline Range Organics-NWTPH	5.50	6.22	113	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*114*	*77.0-120*	

L1183587-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1183587-01 02/01/20 14:40 • (MS) R3496294-7 02/01/20 20:34 • (MSD) R3496294-6 02/01/20 20:13

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Gasoline Range Organics-NWTPH	117	ND	112	122	89.6	98.2	25	10.0-149			8.55	27
(S) a,a,a-Trifluorotoluene(FID)					*111*	*111*		*77.0-120*				

Method Blank (MB)

(MB) R3496120-3 02/01/20 11:07

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3496120-3 02/01/20 11:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0567		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	0.00178	J	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	0.00125	J	0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*104*			*75.0-131*
(S) 4-Bromofluorobenzene	*88.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3496120-1 02/01/20 09:51 • (LCSD) R3496120-2 02/01/20 10:10

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	1.08	1.16	173	186	10.0-160	J4	J4	7.14	31
Acrylonitrile	0.625	1.03	1.16	165	186	45.0-153	J4	J4	11.9	22
Benzene	0.125	0.108	0.110	86.4	88.0	70.0-123			1.83	20
Bromobenzene	0.125	0.105	0.111	84.0	88.8	73.0-121			5.56	20
Bromodichloromethane	0.125	0.131	0.134	105	107	73.0-121			2.26	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3496120-1 02/01/20 09:51 • (LCSD) R3496120-2 02/01/20 10:10

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Bromoform	0.125	0.115	0.119	92.0	95.2	64.0-132			3.42	20
Bromomethane	0.125	0.116	0.113	92.8	90.4	56.0-147			2.62	20
n-Butylbenzene	0.125	0.119	0.125	95.2	100	68.0-135			4.92	20
sec-Butylbenzene	0.125	0.111	0.115	88.8	92.0	74.0-130			3.54	20
tert-Butylbenzene	0.125	0.109	0.107	87.2	85.6	75.0-127			1.85	20
Carbon tetrachloride	0.125	0.130	0.129	104	103	66.0-128			0.772	20
Chlorobenzene	0.125	0.108	0.105	86.4	84.0	76.0-128			2.82	20
Chlorodibromomethane	0.125	0.121	0.122	96.8	97.6	74.0-127			0.823	20
Chloroethane	0.125	0.106	0.105	84.8	84.0	61.0-134			0.948	20
Chloroform	0.125	0.100	0.102	80.0	81.6	72.0-123			1.98	20
Chloromethane	0.125	0.120	0.120	96.0	96.0	51.0-138			0.000	20
2-Chlorotoluene	0.125	0.113	0.115	90.4	92.0	75.0-124			1.75	20
4-Chlorotoluene	0.125	0.122	0.123	97.6	98.4	75.0-124			0.816	20
1,2-Dibromo-3-Chloropropane	0.125	0.113	0.126	90.4	101	59.0-130			10.9	20
1,2-Dibromoethane	0.125	0.121	0.119	96.8	95.2	74.0-128			1.67	20
Dibromomethane	0.125	0.128	0.133	102	106	75.0-122			3.83	20
1,2-Dichlorobenzene	0.125	0.121	0.130	96.8	104	76.0-124			7.17	20
1,3-Dichlorobenzene	0.125	0.112	0.117	89.6	93.6	76.0-125			4.37	20
1,4-Dichlorobenzene	0.125	0.110	0.113	88.0	90.4	77.0-121			2.69	20
Dichlorodifluoromethane	0.125	0.122	0.121	97.6	96.8	43.0-156			0.823	20
1,1-Dichloroethane	0.125	0.114	0.118	91.2	94.4	70.0-127			3.45	20
1,2-Dichloroethane	0.125	0.113	0.117	90.4	93.6	65.0-131			3.48	20
1,1-Dichloroethene	0.125	0.126	0.124	101	99.2	65.0-131			1.60	20
cis-1,2-Dichloroethene	0.125	0.109	0.109	87.2	87.2	73.0-125			0.000	20
trans-1,2-Dichloroethene	0.125	0.102	0.103	81.6	82.4	71.0-125			0.976	20
1,2-Dichloropropane	0.125	0.113	0.119	90.4	95.2	74.0-125			5.17	20
1,1-Dichloropropene	0.125	0.104	0.103	83.2	82.4	73.0-125			0.966	20
1,3-Dichloropropane	0.125	0.125	0.125	100	100	80.0-125			0.000	20
cis-1,3-Dichloropropene	0.125	0.124	0.120	99.2	96.0	76.0-127			3.28	20
trans-1,3-Dichloropropene	0.125	0.134	0.139	107	111	73.0-127			3.66	20
2,2-Dichloropropane	0.125	0.111	0.114	88.8	91.2	59.0-135			2.67	20
Di-isopropyl ether	0.125	0.130	0.135	104	108	60.0-136			3.77	20
Ethylbenzene	0.125	0.107	0.106	85.6	84.8	74.0-126			0.939	20
Hexachloro-1,3-butadiene	0.125	0.104	0.109	83.2	87.2	57.0-150			4.69	20
Isopropylbenzene	0.125	0.109	0.109	87.2	87.2	72.0-127			0.000	20
p-Isopropyltoluene	0.125	0.112	0.116	89.6	92.8	72.0-133			3.51	20
2-Butanone (MEK)	0.625	0.945	0.989	151	158	30.0-160			4.55	24
Methylene Chloride	0.125	0.101	0.105	80.8	84.0	68.0-123			3.88	20
4-Methyl-2-pentanone (MIBK)	0.625	0.854	0.866	137	139	56.0-143			1.40	20
Methyl tert-butyl ether	0.125	0.134	0.140	107	112	66.0-132			4.38	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3496120-1 02/01/20 09:51 • (LCSD) R3496120-2 02/01/20 10:10

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 %
Naphthalene	0.125	0.110	0.129	88.0	103	59.0-130			15.9	20
n-Propylbenzene	0.125	0.124	0.124	99.2	99.2	74.0-126			0.000	20
Styrene	0.125	0.110	0.112	88.0	89.6	72.0-127			1.80	20
1,1,1,2-Tetrachloroethane	0.125	0.109	0.112	87.2	89.6	74.0-129			2.71	20
1,1,2,2-Tetrachloroethane	0.125	0.115	0.122	92.0	97.6	68.0-128			5.91	20
Tetrachloroethene	0.125	0.0963	0.0970	77.0	77.6	70.0-136			0.724	20
Toluene	0.125	0.121	0.118	96.8	94.4	75.0-121			2.51	20
1,1,2-Trichlorotrifluoroethane	0.125	0.125	0.123	100	98.4	61.0-139			1.61	20
1,2,3-Trichlorobenzene	0.125	0.106	0.122	84.8	97.6	59.0-139			14.0	20
1,2,4-Trichlorobenzene	0.125	0.115	0.124	92.0	99.2	62.0-137			7.53	20
1,1,1-Trichloroethane	0.125	0.129	0.130	103	104	69.0-126			0.772	20
1,1,2-Trichloroethane	0.125	0.106	0.113	84.8	90.4	78.0-123			6.39	20
Trichloroethene	0.125	0.124	0.118	99.2	94.4	76.0-126			4.96	20
Trichlorofluoromethane	0.125	0.138	0.135	110	108	61.0-142			2.20	20
1,2,3-Trichloropropane	0.125	0.129	0.134	103	107	67.0-129			3.80	20
1,2,3-Trimethylbenzene	0.125	0.107	0.112	85.6	89.6	74.0-124			4.57	20
1,2,4-Trimethylbenzene	0.125	0.117	0.121	93.6	96.8	70.0-126			3.36	20
1,3,5-Trimethylbenzene	0.125	0.116	0.121	92.8	96.8	73.0-127			4.22	20
Vinyl chloride	0.125	0.132	0.131	106	105	63.0-134			0.760	20
Xylenes, Total	0.375	0.341	0.344	90.9	91.7	72.0-127			0.876	20
(S) Toluene-d8				*99.2*	*97.7*	*75.0-131*				
(S) 4-Bromofluorobenzene				*94.9*	*91.6*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*116*	*121*	*70.0-130*				

L1184413-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184413-01 02/01/20 12:59 • (MS) R3496120-4 02/01/20 19:20 • (MSD) R3496120-5 02/01/20 19:39

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	ND	0.413	0.477	66.1	76.3	1	10.0-160			14.4	40
Acrylonitrile	0.625	ND	0.820	0.895	131	143	1	10.0-160			8.75	40
Benzene	0.125	ND	0.0881	0.0829	70.5	66.3	1	10.0-149			6.08	37
Bromobenzene	0.125	ND	0.0985	0.0975	78.8	78.0	1	10.0-156			1.02	38
Bromodichloromethane	0.125	ND	0.103	0.106	82.4	84.8	1	10.0-143			2.87	37
Bromoform	0.125	ND	0.0863	0.0962	69.0	77.0	1	10.0-146			10.8	36
Bromomethane	0.125	ND	0.0765	0.0777	61.2	62.2	1	10.0-149			1.56	38
n-Butylbenzene	0.125	ND	0.0991	0.101	79.3	80.8	1	10.0-160			1.90	40
sec-Butylbenzene	0.125	ND	0.0959	0.0966	76.7	77.3	1	10.0-159			0.727	39
tert-Butylbenzene	0.125	ND	0.0916	0.0932	73.3	74.6	1	10.0-156			1.73	39

L1184413-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184413-01 02/01/20 12:59 • (MS) R3496120-4 02/01/20 19:20 • (MSD) R3496120-5 02/01/20 19:39

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.125	ND	0.0980	0.0854	78.4	68.3	1	10.0-145			13.7	37
Chlorobenzene	0.125	ND	0.0892	0.0880	71.4	70.4	1	10.0-152			1.35	39
Chlorodibromomethane	0.125	ND	0.0971	0.107	77.7	85.6	1	10.0-146			9.70	37
Chloroethane	0.125	ND	0.0768	0.0698	61.4	55.8	1	10.0-146			9.55	40
Chloroform	0.125	ND	0.0794	0.0816	63.5	65.3	1	10.0-146			2.73	37
Chloromethane	0.125	ND	0.0976	0.0899	78.1	71.9	1	10.0-159			8.21	37
2-Chlorotoluene	0.125	ND	0.101	0.0886	80.8	70.9	1	10.0-159			13.1	38
4-Chlorotoluene	0.125	ND	0.106	0.0983	84.8	78.6	1	10.0-155			7.54	39
1,2-Dibromo-3-Chloropropane	0.125	ND	0.0910	0.0893	72.8	71.4	1	10.0-151			1.89	39
1,2-Dibromoethane	0.125	ND	0.102	0.111	81.6	88.8	1	10.0-148			8.45	34
Dibromomethane	0.125	ND	0.101	0.115	80.8	92.0	1	10.0-147			13.0	35
1,2-Dichlorobenzene	0.125	ND	0.108	0.102	86.4	81.6	1	10.0-155			5.71	37
1,3-Dichlorobenzene	0.125	ND	0.0956	0.0927	76.5	74.2	1	10.0-153			3.08	38
1,4-Dichlorobenzene	0.125	ND	0.0936	0.0959	74.9	76.7	1	10.0-151			2.43	38
Dichlorodifluoromethane	0.125	ND	0.0964	0.0782	77.1	62.6	1	10.0-160			20.8	35
1,1-Dichloroethane	0.125	ND	0.0931	0.0889	74.5	71.1	1	10.0-147			4.62	37
1,2-Dichloroethane	0.125	ND	0.0929	0.101	74.3	80.8	1	10.0-148			8.35	35
1,1-Dichloroethene	0.125	ND	0.104	0.0941	83.2	75.3	1	10.0-155			9.99	37
cis-1,2-Dichloroethene	0.125	ND	0.0860	0.0861	68.8	68.9	1	10.0-149			0.116	37
trans-1,2-Dichloroethene	0.125	ND	0.0847	0.0769	67.8	61.5	1	10.0-150			9.65	37
1,2-Dichloropropane	0.125	ND	0.0906	0.0911	72.5	72.9	1	10.0-148			0.550	37
1,1-Dichloropropene	0.125	ND	0.0797	0.0702	63.8	56.2	1	10.0-153			12.7	35
1,3-Dichloropropane	0.125	ND	0.112	0.118	89.6	94.4	1	10.0-154			5.22	35
cis-1,3-Dichloropropene	0.125	ND	0.0994	0.101	79.5	80.8	1	10.0-151			1.60	37
trans-1,3-Dichloropropene	0.125	ND	0.118	0.125	94.4	100	1	10.0-148			5.76	37
2,2-Dichloropropane	0.125	ND	0.0741	0.0622	59.3	49.8	1	10.0-138			17.5	36
Di-isopropyl ether	0.125	ND	0.111	0.111	88.8	88.8	1	10.0-147			0.000	36
Ethylbenzene	0.125	ND	0.0795	0.0802	63.6	64.2	1	10.0-160			0.877	38
Hexachloro-1,3-butadiene	0.125	ND	0.0898	0.0932	71.8	74.6	1	10.0-160			3.72	40
Isopropylbenzene	0.125	ND	0.0814	0.0807	65.1	64.6	1	10.0-155			0.864	38
p-Isopropyltoluene	0.125	ND	0.0909	0.0906	72.7	72.5	1	10.0-160			0.331	40
2-Butanone (MEK)	0.625	0.0371	0.628	0.728	94.5	111	1	10.0-160			14.7	40
Methylene Chloride	0.125	ND	0.0975	0.0947	78.0	75.8	1	10.0-141			2.91	37
4-Methyl-2-pentanone (MIBK)	0.625	ND	0.640	0.724	102	116	1	10.0-160			12.3	35
Methyl tert-butyl ether	0.125	ND	0.0918	0.0942	73.4	75.4	1	11.0-147			2.58	35
Naphthalene	0.125	ND	0.0914	0.0915	73.1	73.2	1	10.0-160			0.109	36
n-Propylbenzene	0.125	ND	0.0995	0.0977	79.6	78.2	1	10.0-158			1.83	38
Styrene	0.125	ND	0.0853	0.0867	68.2	69.4	1	10.0-160			1.63	40
1,1,1,2-Tetrachloroethane	0.125	ND	0.0899	0.0910	71.9	72.8	1	10.0-149			1.22	39
1,1,2,2-Tetrachloroethane	0.125	ND	0.105	0.104	84.0	83.2	1	10.0-160			0.957	35

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

L1184413-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184413-01 02/01/20 12:59 • (MS) R3496120-4 02/01/20 19:20 • (MSD) R3496120-5 02/01/20 19:39

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Tetrachloroethene	0.125	ND	0.0758	0.0692	60.6	55.4	1	10.0-156			9.10	39
Toluene	0.125	ND	0.0994	0.0944	79.5	75.5	1	10.0-156			5.16	38
1,1,2-Trichlorotrifluoroethane	0.125	ND	0.106	0.0950	84.8	76.0	1	10.0-160			10.9	36
1,2,3-Trichlorobenzene	0.125	ND	0.0942	0.0968	75.4	77.4	1	10.0-160			2.72	40
1,2,4-Trichlorobenzene	0.125	ND	0.0937	0.0904	75.0	72.3	1	10.0-160			3.59	40
1,1,1-Trichloroethane	0.125	ND	0.0998	0.0874	79.8	69.9	1	10.0-144			13.2	35
1,1,2-Trichloroethane	0.125	ND	0.101	0.109	80.8	87.2	1	10.0-160			7.62	35
Trichloroethene	0.125	ND	0.0907	0.0969	72.6	77.5	1	10.0-156			6.61	38
Trichlorofluoromethane	0.125	ND	0.113	0.101	90.4	80.8	1	10.0-160			11.2	40
1,2,3-Trichloropropane	0.125	ND	0.114	0.120	91.2	96.0	1	10.0-156			5.13	35
1,2,3-Trimethylbenzene	0.125	ND	0.0902	0.0914	72.2	73.1	1	10.0-160			1.32	36
1,2,4-Trimethylbenzene	0.125	ND	0.0965	0.0911	77.2	72.9	1	10.0-160			5.76	36
1,3,5-Trimethylbenzene	0.125	ND	0.0976	0.0967	78.1	77.4	1	10.0-160			0.926	38
Vinyl chloride	0.125	ND	0.0994	0.0951	79.5	76.1	1	10.0-160			4.42	37
Xylenes, Total	0.375	ND	0.266	0.260	70.9	69.3	1	10.0-160			2.28	38
(S) Toluene-d8					*99.6*	*101*		*75.0-131*				
(S) 4-Bromofluorobenzene					*90.3*	*89.6*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*110*	*110*		*70.0-130*				

Method Blank (MB)

(MB) R3496200-1 02/01/20 20:48

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	*65.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3496200-2 02/01/20 21:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	41.8	83.6	50.0-150	
(S) o-Terphenyl			*85.9*	*18.0-148*	

L1184503-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184503-03 02/01/20 22:47 • (MS) R3496200-3 02/01/20 23:00 • (MSD) R3496200-4 02/01/20 23:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	50.0	3.06	39.3	47.5	72.5	88.9	1	50.0-150			18.9	20
(S) o-Terphenyl					*77.2*	*102*		*18.0-148*				

GLOSSARY OF TERMS

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
J4	The associated batch QC was outside the established quality control range for accuracy.

ACCREDITATIONS & LOCATIONS

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

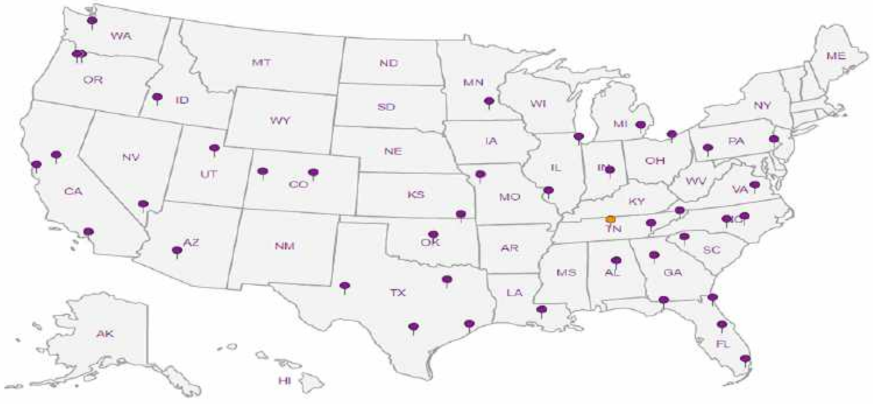
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Email To: **krbarnette@tgeresources.com**

Report to:
Kristi Barnette

Project Description: **Future Federal Way Emergency**

City/State Collected: Fed Way WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # **TGERESHTX-FEDERALWAY**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8859**

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N___ Y X

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8270 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold				Remarks	Sample # (lab only)
SumpLine Midpnt	Grab	SS	1	1/30/20	1040	3	X	X	X		X						-01
SumpLine Midpnt 2' blw	Grab	SS	3	1/30/20	1045	3						X					
		SS															
		SS															

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

SDG # L1184715

F062

Acctnum: **TGERESHTX**

Template: **T162172**

Prelogin: **P752605**

PM: **134 - Mark W. Beasley**

PB: LC 1/27

Shipped Via: **FedEX Priority**

* 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 # 1382 4819 3235

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) KBarnette	Date: 1/30/20	Time: 1200	Received by: (Signature)	Trip Blank Received: Yes / [✓ No] [✓ HCL] / MeoH TBR 0	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.5+.1=1.6 °C	Bottles Received: 6
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/31/20	Time: 840

If preservation required by Login: Date/Time

01-203

Condition: NCF / [✓ OK]

ANALYTICAL REPORT

February 06, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1184753
Samples Received:	01/31/2020
Project Number:	R13411.07
Description:	Future Federal Way Emergency Center

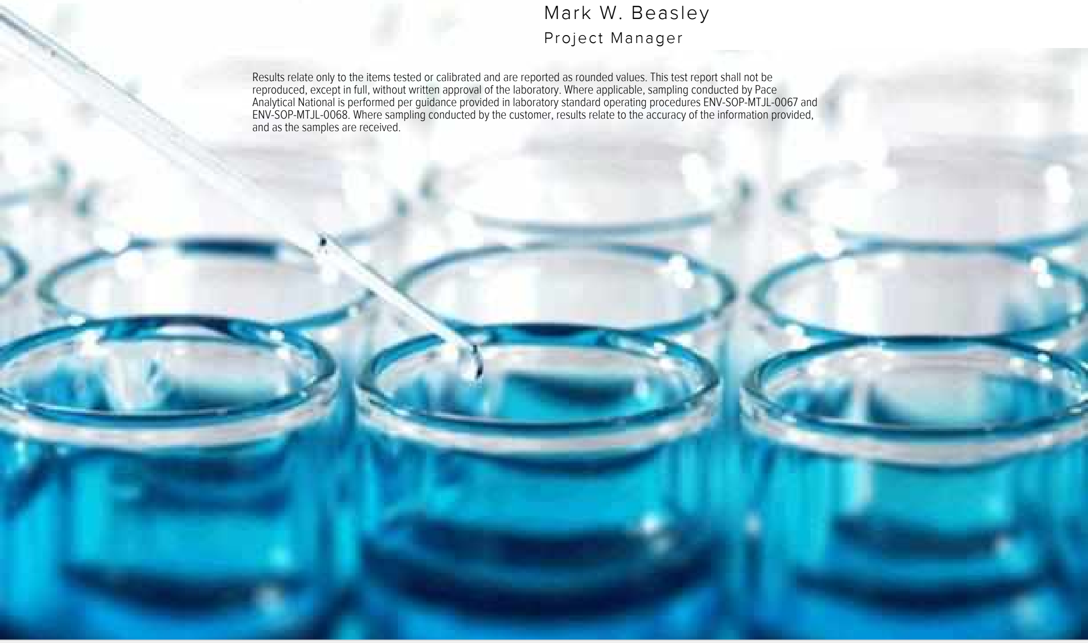
Report To:

Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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7 Qc
8 Gl
9 Al
10 Sc

EXT SUMP E SIDEWALL L1184753-01 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 12:19	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422020	1	02/04/20 17:27	02/04/20 17:37	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 20:58	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 20:47	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421058	25	01/29/20 12:19	02/02/20 03:30	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/29/20 12:19	02/02/20 13:17	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	1	02/04/20 15:52	02/04/20 23:39	KME	Mt. Juliet, TN

EXT SUMP W SIDEWALL L1184753-02 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 12:20	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422020	1	02/04/20 17:27	02/04/20 17:37	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:00	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 20:49	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421058	25	01/29/20 12:20	02/02/20 03:50	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/29/20 12:20	02/02/20 13:36	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	1	02/04/20 15:52	02/04/20 23:52	KME	Mt. Juliet, TN

BAY 1 SUMP BASE L1184753-03 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 13:30	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422020	1	02/04/20 17:27	02/04/20 17:37	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:03	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 20:32	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421058	29.3	01/29/20 13:30	02/02/20 04:11	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/29/20 13:30	02/02/20 13:55	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	1	02/04/20 15:52	02/05/20 01:48	KME	Mt. Juliet, TN

BAY 1 SUMP N SIDEWALL L1184753-04 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 13:32	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422020	1	02/04/20 17:27	02/04/20 17:37	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:10	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 20:57	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421058	25	01/29/20 13:32	02/02/20 04:32	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/29/20 13:32	02/02/20 14:14	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	1	02/04/20 15:52	02/05/20 02:01	KME	Mt. Juliet, TN

BAY 1 SUMP S SIDEWALL L1184753-05 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 13:33	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422020	1	02/04/20 17:27	02/04/20 17:37	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:13	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:00	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421058	25	01/29/20 13:33	02/02/20 04:53	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/29/20 13:33	02/02/20 14:33	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	1	02/04/20 15:52	02/05/20 15:54	FM	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

BAY 1 SUMP W SIDEWALL L1184753-06 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 13:34	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422021	1	02/04/20 17:16	02/04/20 17:25	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:16	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:02	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421058	25	01/29/20 13:34	02/02/20 05:13	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/29/20 13:34	02/02/20 14:52	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	1	02/04/20 15:52	02/05/20 00:58	KME	Mt. Juliet, TN

BAY 1 SUMP E SIDEWALL L1184753-07 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 13:35	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422021	1	02/04/20 17:16	02/04/20 17:25	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:18	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:05	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421058	36.3	01/29/20 13:35	02/02/20 05:34	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	2.78	01/29/20 13:35	02/02/20 15:12	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	1	02/04/20 15:52	02/05/20 01:36	KME	Mt. Juliet, TN

BAY 4 SUMP LINE END L1184753-08 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/30/20 10:30	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422021	1	02/04/20 17:16	02/04/20 17:25	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:21	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:08	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421058	25	01/30/20 10:30	02/02/20 05:55	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/30/20 10:30	02/02/20 15:31	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	5	02/04/20 15:52	02/05/20 16:19	FM	Mt. Juliet, TN

BAY 3 SUMP BASE L1184753-09 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 11:00	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422021	1	02/04/20 17:16	02/04/20 17:25	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:23	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:10	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421058	26.5	01/29/20 11:00	02/02/20 06:15	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/29/20 11:00	02/02/20 15:50	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	10	02/04/20 15:52	02/05/20 03:42	KME	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	50	02/04/20 15:52	02/05/20 17:35	FM	Mt. Juliet, TN

BAY 3 N SIDEWALL L1184753-10 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 11:02	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422021	1	02/04/20 17:16	02/04/20 17:25	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:26	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:13	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421058	29.5	01/29/20 11:02	02/02/20 06:36	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/29/20 11:02	02/02/20 16:08	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	1	02/04/20 15:52	02/05/20 02:39	KME	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	5	02/04/20 15:52	02/05/20 16:57	FM	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 11:03	01/31/20 08:40

BAY 3 S SIDEWALL L1184753-11 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422021	1	02/04/20 17:16	02/04/20 17:25	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:29	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:15	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421058	25	01/29/20 11:03	02/02/20 06:57	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/29/20 11:03	02/02/20 16:27	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	5	02/04/20 15:52	02/05/20 16:06	FM	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 11:04	01/31/20 08:40

BAY 3 E SIDEWALL L1184753-12 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422021	1	02/04/20 17:16	02/04/20 17:25	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:31	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:18	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421058	25	01/29/20 11:04	02/02/20 07:17	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/29/20 11:04	02/02/20 16:46	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	10	02/04/20 15:52	02/05/20 02:51	KME	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 11:05	01/31/20 08:40

BAY 3 W SIDEWALL L1184753-13 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422021	1	02/04/20 17:16	02/04/20 17:25	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:34	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:20	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1420951	25	01/29/20 11:05	02/02/20 06:42	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1.17	01/29/20 11:05	02/02/20 17:05	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	1	02/04/20 15:52	02/05/20 02:13	KME	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	5	02/04/20 15:52	02/05/20 16:44	FM	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 12:15	01/31/20 08:40

EXTERIOR SUMP BASE L1184753-14 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422021	1	02/04/20 17:16	02/04/20 17:25	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:41	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:28	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1420951	25	01/29/20 12:15	02/02/20 07:06	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/29/20 12:15	02/02/20 17:24	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	1	02/04/20 15:52	02/05/20 00:04	KME	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 12:17	01/31/20 08:40

EXT SUMP N SIDEWALL L1184753-15 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422021	1	02/04/20 17:16	02/04/20 17:25	KDW	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 21:44	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:31	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1420951	25	01/29/20 12:17	02/02/20 07:30	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1422596	1	01/29/20 12:17	02/05/20 00:45	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	1	02/04/20 15:52	02/05/20 15:28	FM	Mt. Juliet, TN

	Collected by	Collected date/time	Received date/time
EXT SUMP S SIDEWALL L1184753-16 Solid	K. Barnette	01/29/20 12:18	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422022	1	02/04/20 23:33	02/04/20 23:45	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1421356	1	02/03/20 11:34	02/03/20 20:50	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:33	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1421659	25	01/29/20 12:18	02/03/20 16:57	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1421220	1	01/29/20 12:18	02/02/20 18:02	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1422362	1	02/04/20 15:52	02/05/20 01:10	KME	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 02/06/2020 14:57
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1184753-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15 and 16
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1421058, WG1420951, WG1421659, WG1421356, WG1421187, WG1421220, WG1422362, WG1422021, WG1422020, WG1422022 and WG1422596

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?		X			2
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 02/06/2020 14:57
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1184753-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15 and 16
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1421058, WG1420951, WG1421659, WG1421356, WG1421187, WG1421220, WG1422362, WG1422021, WG1422020, WG1422022 and WG1422596

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			3
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 02/06/2020 14:57
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1184753-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15 and 16
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1421058, WG1420951, WG1421659, WG1421356, WG1421187, WG1421220, WG1422362, WG1422021, WG1422020, WG1422022 and WG1422596

ER #[1]	**Description**
1	NWTPHDX-NO SGT WG1422362 o-Terphenyl L1184753-09: Percent Recovery is outside of established control limits.
2	8260D WG1421220 2-Butanone (MEK) L1184753-07, 08, 09, 10, 11 and 12: Concentration in the Blank >MQL.
3	6010D WG1421187 Silver: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.2		1	02/04/2020 17:37	WG1422020

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0234	J	0.00321	0.0300	0.0344	1	02/03/2020 20:58	WG1421356

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.49	J	0.527	2.00	2.29	1	02/03/2020 20:47	WG1421187
Barium	49.9		0.195	0.500	0.573	1	02/03/2020 20:47	WG1421187
Cadmium	U		0.0803	0.500	0.573	1	02/03/2020 20:47	WG1421187
Chromium	31.5		0.161	1.00	1.15	1	02/03/2020 20:47	WG1421187
Lead	24.9		0.218	0.500	0.573	1	02/03/2020 20:47	WG1421187
Selenium	U		0.711	2.00	2.29	1	02/03/2020 20:47	WG1421187
Silver	U		0.138	1.00	1.15	1	02/03/2020 20:47	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.972	0.100	2.87	25	02/02/2020 03:30	WG1421058
(S) a,a,a-Trifluorotoluene(FID)	*92.2*				*77.0-120*		*02/02/2020 03:30*	WG1421058

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0157	0.0250	0.0287	1	02/02/2020 13:17	WG1421220
Acrylonitrile	U		0.00218	0.0125	0.0143	1	02/02/2020 13:17	WG1421220
Benzene	U		0.000459	0.00100	0.00115	1	02/02/2020 13:17	WG1421220
Bromobenzene	U		0.00120	0.0125	0.0143	1	02/02/2020 13:17	WG1421220
Bromodichloromethane	U		0.000904	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
Bromoform	U		0.00686	0.0250	0.0287	1	02/02/2020 13:17	WG1421220
Bromomethane	U		0.00424	0.0125	0.0143	1	02/02/2020 13:17	WG1421220
n-Butylbenzene	U		0.00440	0.0125	0.0143	1	02/02/2020 13:17	WG1421220
sec-Butylbenzene	U		0.00290	0.0125	0.0143	1	02/02/2020 13:17	WG1421220
tert-Butylbenzene	U		0.00178	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
Carbon tetrachloride	U		0.00124	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
Chlorobenzene	U		0.000657	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
Chlorodibromomethane	U		0.000516	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
Chloroethane	U		0.00124	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
Chloroform	U		0.000476	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
Chloromethane	U		0.00159	0.0125	0.0143	1	02/02/2020 13:17	WG1421220
2-Chlorotoluene	U		0.00105	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
4-Chlorotoluene	U		0.00130	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00585	0.0250	0.0287	1	02/02/2020 13:17	WG1421220
1,2-Dibromoethane	U		0.000602	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
Dibromomethane	U		0.00115	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
1,2-Dichlorobenzene	U		0.00166	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
1,3-Dichlorobenzene	U		0.00195	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
1,4-Dichlorobenzene	U		0.00226	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
Dichlorodifluoromethane	U		0.000938	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
1,1-Dichloroethane	U		0.000659	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
1,2-Dichloroethane	U		0.000545	0.00250	0.00287	1	02/02/2020 13:17	WG1421220

EXT SUMP E SIDEWALL

Collected date/time: 01/29/20 12:19

SAMPLE RESULTS - 01

L1184753

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000573	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
cis-1,2-Dichloroethene	U		0.000791	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
trans-1,2-Dichloroethene	U		0.00164	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
1,2-Dichloropropane	U		0.00146	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
1,1-Dichloropropene	U		0.000803	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
1,3-Dichloropropane	U		0.00201	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
cis-1,3-Dichloropropene	U		0.000777	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
trans-1,3-Dichloropropene	U		0.00175	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
2,2-Dichloropropane	U		0.000909	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
Di-isopropyl ether	U		0.000401	0.00100	0.00115	1	02/02/2020 13:17	WG1421220
Ethylbenzene	U		0.000608	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
Hexachloro-1,3-butadiene	U		0.0146	0.0250	0.0287	1	02/02/2020 13:17	WG1421220
Isopropylbenzene	U		0.000990	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
p-Isopropyltoluene	U		0.00267	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
2-Butanone (MEK)	U		0.0143	0.0250	0.0287	1	02/02/2020 13:17	WG1421220
Methylene Chloride	U		0.00761	0.0250	0.0287	1	02/02/2020 13:17	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0115	0.0250	0.0287	1	02/02/2020 13:17	WG1421220
Methyl tert-butyl ether	U		0.000338	0.00100	0.00115	1	02/02/2020 13:17	WG1421220
Naphthalene	U		0.00358	0.0125	0.0143	1	02/02/2020 13:17	WG1421220
n-Propylbenzene	U		0.00135	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
Styrene	U		0.00313	0.0125	0.0143	1	02/02/2020 13:17	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000573	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000447	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000774	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
Tetrachloroethene	U		0.000803	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
Toluene	0.00188	J	0.00143	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
1,2,3-Trichlorobenzene	U		0.000717	0.0125	0.0143	1	02/02/2020 13:17	WG1421220
1,2,4-Trichlorobenzene	U		0.00553	0.0125	0.0143	1	02/02/2020 13:17	WG1421220
1,1,1-Trichloroethane	U		0.000315	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
1,1,2-Trichloroethane	U		0.00101	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
Trichloroethene	U		0.000459	0.00100	0.00115	1	02/02/2020 13:17	WG1421220
Trichlorofluoromethane	U		0.000573	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
1,2,3-Trichloropropane	U		0.00585	0.0125	0.0143	1	02/02/2020 13:17	WG1421220
1,2,4-Trimethylbenzene	U		0.00133	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
1,2,3-Trimethylbenzene	U		0.00132	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
Vinyl chloride	U		0.000783	0.00250	0.00287	1	02/02/2020 13:17	WG1421220
1,3,5-Trimethylbenzene	U		0.00124	0.00500	0.00573	1	02/02/2020 13:17	WG1421220
Xylenes, Total	U		0.00548	0.00650	0.00745	1	02/02/2020 13:17	WG1421220
(S) Toluene-d8	*106*				*75.0-131*		*02/02/2020 13:17*	WG1421220
(S) 4-Bromofluorobenzene	*91.3*				*67.0-138*		*02/02/2020 13:17*	WG1421220
(S) 1,2-Dichloroethane-d4	*97.6*				*70.0-130*		*02/02/2020 13:17*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	3.53	J	1.53	4.00	4.59	1	02/04/2020 23:39	WG1422362
Residual Range Organics (RRO)	4.30	J	3.82	10.0	11.5	1	02/04/2020 23:39	WG1422362
(S) o-Terphenyl	*59.9*				*18.0-148*		*02/04/2020 23:39*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.5		1	02/04/2020 17:37	WG1422020

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0140	J	0.00324	0.0300	0.0347	1	02/03/2020 21:00	WG1421356

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.83		0.532	2.00	2.31	1	02/03/2020 20:49	WG1421187
Barium	48.8		0.197	0.500	0.578	1	02/03/2020 20:49	WG1421187
Cadmium	U		0.0809	0.500	0.578	1	02/03/2020 20:49	WG1421187
Chromium	26.0		0.162	1.00	1.16	1	02/03/2020 20:49	WG1421187
Lead	6.76		0.220	0.500	0.578	1	02/03/2020 20:49	WG1421187
Selenium	U		0.717	2.00	2.31	1	02/03/2020 20:49	WG1421187
Silver	U		0.139	1.00	1.16	1	02/03/2020 20:49	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.980	0.100	2.89	25	02/02/2020 03:50	WG1421058
(S) a,a,a-Trifluorotoluene(FID)	*92.1*				*77.0-120*		*02/02/2020 03:50*	WG1421058

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0158	0.0250	0.0289	1	02/02/2020 13:36	WG1421220
Acrylonitrile	U		0.00220	0.0125	0.0145	1	02/02/2020 13:36	WG1421220
Benzene	U		0.000462	0.00100	0.00116	1	02/02/2020 13:36	WG1421220
Bromobenzene	U		0.00121	0.0125	0.0145	1	02/02/2020 13:36	WG1421220
Bromodichloromethane	U		0.000911	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
Bromoform	U		0.00691	0.0250	0.0289	1	02/02/2020 13:36	WG1421220
Bromomethane	U		0.00428	0.0125	0.0145	1	02/02/2020 13:36	WG1421220
n-Butylbenzene	U		0.00444	0.0125	0.0145	1	02/02/2020 13:36	WG1421220
sec-Butylbenzene	U		0.00293	0.0125	0.0145	1	02/02/2020 13:36	WG1421220
tert-Butylbenzene	U		0.00179	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
Carbon tetrachloride	U		0.00125	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
Chlorobenzene	U		0.000662	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
Chlorodibromomethane	U		0.000520	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
Chloroethane	U		0.00125	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
Chloroform	U		0.000480	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
Chloromethane	U		0.00161	0.0125	0.0145	1	02/02/2020 13:36	WG1421220
2-Chlorotoluene	U		0.00106	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
4-Chlorotoluene	U		0.00131	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00590	0.0250	0.0289	1	02/02/2020 13:36	WG1421220
1,2-Dibromoethane	U		0.000607	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
Dibromomethane	U		0.00116	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
1,2-Dichlorobenzene	U		0.00168	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
1,3-Dichlorobenzene	U		0.00197	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
1,4-Dichlorobenzene	U		0.00228	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
Dichlorodifluoromethane	U		0.000946	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
1,1-Dichloroethane	U		0.000665	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
1,2-Dichloroethane	U		0.000549	0.00250	0.00289	1	02/02/2020 13:36	WG1421220

EXT SUMP W SIDEWALL

Collected date/time: 01/29/20 12:20

SAMPLE RESULTS - 02

L1184753

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000578	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
cis-1,2-Dichloroethene	U		0.000798	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
trans-1,2-Dichloroethene	U		0.00165	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
1,2-Dichloropropane	U		0.00147	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
1,1-Dichloropropene	U		0.000809	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
1,3-Dichloropropane	U		0.00202	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
cis-1,3-Dichloropropene	U		0.000784	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
trans-1,3-Dichloropropene	U		0.00177	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
2,2-Dichloropropane	U		0.000917	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
Di-isopropyl ether	U		0.000405	0.00100	0.00116	1	02/02/2020 13:36	WG1421220
Ethylbenzene	U		0.000613	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
Hexachloro-1,3-butadiene	U		0.0147	0.0250	0.0289	1	02/02/2020 13:36	WG1421220
Isopropylbenzene	U		0.000998	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
p-Isopropyltoluene	U		0.00269	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
2-Butanone (MEK)	U		0.0145	0.0250	0.0289	1	02/02/2020 13:36	WG1421220
Methylene Chloride	U		0.00768	0.0250	0.0289	1	02/02/2020 13:36	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0116	0.0250	0.0289	1	02/02/2020 13:36	WG1421220
Methyl tert-butyl ether	U		0.000341	0.00100	0.00116	1	02/02/2020 13:36	WG1421220
Naphthalene	U		0.00361	0.0125	0.0145	1	02/02/2020 13:36	WG1421220
n-Propylbenzene	U		0.00136	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
Styrene	U		0.00316	0.0125	0.0145	1	02/02/2020 13:36	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000578	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000451	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000780	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
Tetrachloroethene	U		0.000809	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
Toluene	U		0.00145	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
1,2,3-Trichlorobenzene	U		0.000723	0.0125	0.0145	1	02/02/2020 13:36	WG1421220
1,2,4-Trichlorobenzene	U		0.00557	0.0125	0.0145	1	02/02/2020 13:36	WG1421220
1,1,1-Trichloroethane	U		0.000318	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
1,1,2-Trichloroethane	U		0.00102	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
Trichloroethene	U		0.000462	0.00100	0.00116	1	02/02/2020 13:36	WG1421220
Trichlorofluoromethane	U		0.000578	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
1,2,3-Trichloropropane	U		0.00590	0.0125	0.0145	1	02/02/2020 13:36	WG1421220
1,2,4-Trimethylbenzene	U		0.00134	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
1,2,3-Trimethylbenzene	U		0.00133	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
Vinyl chloride	U		0.000790	0.00250	0.00289	1	02/02/2020 13:36	WG1421220
1,3,5-Trimethylbenzene	U		0.00125	0.00500	0.00578	1	02/02/2020 13:36	WG1421220
Xylenes, Total	U		0.00553	0.00650	0.00752	1	02/02/2020 13:36	WG1421220
(S) Toluene-d8	*104*				*75.0-131*		*02/02/2020 13:36*	WG1421220
(S) 4-Bromofluorobenzene	*89.8*				*67.0-138*		*02/02/2020 13:36*	WG1421220
(S) 1,2-Dichloroethane-d4	*99.3*				*70.0-130*		*02/02/2020 13:36*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	1.60	J	1.54	4.00	4.62	1	02/04/2020 23:52	WG1422362
Residual Range Organics (RRO)	U		3.85	10.0	11.6	1	02/04/2020 23:52	WG1422362
(S) o-Terphenyl	*48.8*				*18.0-148*		*02/04/2020 23:52*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	74.9		1	02/04/2020 17:37	WG1422020

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0301	J	0.00374	0.0300	0.0401	1	02/03/2020 21:03	WG1421356

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.66		0.614	2.00	2.67	1	02/03/2020 20:32	WG1421187
Barium	76.3		0.227	0.500	0.668	1	02/03/2020 20:32	WG1421187
Cadmium	U		0.0935	0.500	0.668	1	02/03/2020 20:32	WG1421187
Chromium	44.2		0.187	1.00	1.34	1	02/03/2020 20:32	WG1421187
Lead	101		0.254	0.500	0.668	1	02/03/2020 20:32	WG1421187
Selenium	U		0.828	2.00	2.67	1	02/03/2020 20:32	WG1421187
Silver	U	O1	0.160	1.00	1.34	1	02/03/2020 20:32	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	9.46		1.33	0.100	3.91	29.3	02/02/2020 04:11	WG1421058
(S) a,a,a-Trifluorotoluene(FID)	*90.6*				*77.0-120*		*02/02/2020 04:11*	WG1421058

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0183	0.0250	0.0334	1	02/02/2020 13:55	WG1421220
Acrylonitrile	U		0.00254	0.0125	0.0167	1	02/02/2020 13:55	WG1421220
Benzene	U		0.000534	0.00100	0.00134	1	02/02/2020 13:55	WG1421220
Bromobenzene	U		0.00140	0.0125	0.0167	1	02/02/2020 13:55	WG1421220
Bromodichloromethane	U		0.00105	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
Bromoform	U		0.00799	0.0250	0.0334	1	02/02/2020 13:55	WG1421220
Bromomethane	U		0.00494	0.0125	0.0167	1	02/02/2020 13:55	WG1421220
n-Butylbenzene	U		0.00513	0.0125	0.0167	1	02/02/2020 13:55	WG1421220
sec-Butylbenzene	U		0.00338	0.0125	0.0167	1	02/02/2020 13:55	WG1421220
tert-Butylbenzene	U		0.00207	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
Carbon tetrachloride	U		0.00144	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
Chlorobenzene	U		0.000765	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
Chlorodibromomethane	U		0.000601	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
Chloroethane	U		0.00144	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
Chloroform	U		0.000554	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
Chloromethane	U		0.00186	0.0125	0.0167	1	02/02/2020 13:55	WG1421220
2-Chlorotoluene	U		0.00123	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
4-Chlorotoluene	U		0.00151	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00681	0.0250	0.0334	1	02/02/2020 13:55	WG1421220
1,2-Dibromoethane	U		0.000701	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
Dibromomethane	U		0.00134	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
1,2-Dichlorobenzene	U		0.00194	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
1,3-Dichlorobenzene	U		0.00227	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
1,4-Dichlorobenzene	U		0.00263	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
Dichlorodifluoromethane	U		0.00109	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
1,1-Dichloroethane	U		0.000768	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
1,2-Dichloroethane	U		0.000635	0.00250	0.00334	1	02/02/2020 13:55	WG1421220

BAY 1 SUMP BASE

Collected date/time: 01/29/20 13:30

SAMPLE RESULTS - 03

L1184753

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
1,1-Dichloroethene	U		0.000668	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
cis-1,2-Dichloroethene	U		0.000922	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
trans-1,2-Dichloroethene	U		0.00191	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
1,2-Dichloropropane	U		0.00170	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
1,1-Dichloropropene	U		0.000935	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
1,3-Dichloropropane	U		0.00234	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
cis-1,3-Dichloropropene	U		0.000906	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
trans-1,3-Dichloropropene	U		0.00204	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
2,2-Dichloropropane	U		0.00106	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
Di-isopropyl ether	U		0.000468	0.00100	0.00134	1	02/02/2020 13:55	WG1421220
Ethylbenzene	U		0.000708	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
Hexachloro-1,3-butadiene	U		0.0170	0.0250	0.0334	1	02/02/2020 13:55	WG1421220
Isopropylbenzene	U		0.00115	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
p-Isopropyltoluene	U		0.00311	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
2-Butanone (MEK)	U		0.0167	0.0250	0.0334	1	02/02/2020 13:55	WG1421220
Methylene Chloride	U		0.00887	0.0250	0.0334	1	02/02/2020 13:55	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0134	0.0250	0.0334	1	02/02/2020 13:55	WG1421220
Methyl tert-butyl ether	U		0.000394	0.00100	0.00134	1	02/02/2020 13:55	WG1421220
Naphthalene	U		0.00417	0.0125	0.0167	1	02/02/2020 13:55	WG1421220
n-Propylbenzene	U		0.00158	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
Styrene	U		0.00365	0.0125	0.0167	1	02/02/2020 13:55	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000668	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000521	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000902	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
Tetrachloroethene	U		0.000935	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
Toluene	0.00393	J	0.00167	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
1,2,3-Trichlorobenzene	U		0.000835	0.0125	0.0167	1	02/02/2020 13:55	WG1421220
1,2,4-Trichlorobenzene	U		0.00644	0.0125	0.0167	1	02/02/2020 13:55	WG1421220
1,1,1-Trichloroethane	U		0.000367	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
1,1,2-Trichloroethane	U		0.00118	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
Trichloroethene	U		0.000534	0.00100	0.00134	1	02/02/2020 13:55	WG1421220
Trichlorofluoromethane	U		0.000668	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
1,2,3-Trichloropropane	U		0.00681	0.0125	0.0167	1	02/02/2020 13:55	WG1421220
1,2,4-Trimethylbenzene	0.00526	J	0.00155	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
1,2,3-Trimethylbenzene	0.00264	J	0.00154	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
Vinyl chloride	U		0.000912	0.00250	0.00334	1	02/02/2020 13:55	WG1421220
1,3,5-Trimethylbenzene	0.00224	J	0.00144	0.00500	0.00668	1	02/02/2020 13:55	WG1421220
Xylenes, Total	U		0.00639	0.00650	0.00868	1	02/02/2020 13:55	WG1421220
(S) Toluene-d8	*104*				*75.0-131*		*02/02/2020 13:55*	WG1421220
(S) 4-Bromofluorobenzene	*91.9*				*67.0-138*		*02/02/2020 13:55*	WG1421220
(S) 1,2-Dichloroethane-d4	*93.4*				*70.0-130*		*02/02/2020 13:55*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	39.9		1.78	4.00	5.34	1	02/05/2020 01:48	WG1422362
Residual Range Organics (RRO)	80.6		4.45	10.0	13.4	1	02/05/2020 01:48	WG1422362
(S) o-Terphenyl	*36.2*				*18.0-148*		*02/05/2020 01:48*	WG1422362

BAY 1 SUMP N SIDEWALL

Collected date/time: 01/29/20 13:32

SAMPLE RESULTS - 04

L1184753

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.4		1	02/04/2020 17:37	WG1422020

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0223	J	0.00332	0.0300	0.0355	1	02/03/2020 21:10	WG1421356

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	9.07		0.545	2.00	2.37	1	02/03/2020 20:57	WG1421187
Barium	82.9		0.201	0.500	0.592	1	02/03/2020 20:57	WG1421187
Cadmium	U		0.0829	0.500	0.592	1	02/03/2020 20:57	WG1421187
Chromium	41.9		0.166	1.00	1.18	1	02/03/2020 20:57	WG1421187
Lead	97.4		0.225	0.500	0.592	1	02/03/2020 20:57	WG1421187
Selenium	U		0.734	2.00	2.37	1	02/03/2020 20:57	WG1421187
Silver	U		0.142	1.00	1.18	1	02/03/2020 20:57	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.00	0.100	2.96	25	02/02/2020 04:32	WG1421058
(S) a,a,a-Trifluorotoluene(FID)	*92.4*				*77.0-120*		*02/02/2020 04:32*	WG1421058

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0162	0.0250	0.0296	1	02/02/2020 14:14	WG1421220
Acrylonitrile	U		0.00225	0.0125	0.0148	1	02/02/2020 14:14	WG1421220
Benzene	U		0.000474	0.00100	0.00118	1	02/02/2020 14:14	WG1421220
Bromobenzene	U		0.00124	0.0125	0.0148	1	02/02/2020 14:14	WG1421220
Bromodichloromethane	U		0.000933	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
Bromoform	U		0.00708	0.0250	0.0296	1	02/02/2020 14:14	WG1421220
Bromomethane	U		0.00438	0.0125	0.0148	1	02/02/2020 14:14	WG1421220
n-Butylbenzene	U		0.00455	0.0125	0.0148	1	02/02/2020 14:14	WG1421220
sec-Butylbenzene	U		0.00300	0.0125	0.0148	1	02/02/2020 14:14	WG1421220
tert-Butylbenzene	U		0.00184	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
Carbon tetrachloride	U		0.00128	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
Chlorobenzene	U		0.000679	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
Chlorodibromomethane	U		0.000533	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
Chloroethane	U		0.00128	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
Chloroform	U		0.000492	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
Chloromethane	U		0.00165	0.0125	0.0148	1	02/02/2020 14:14	WG1421220
2-Chlorotoluene	U		0.00109	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
4-Chlorotoluene	U		0.00134	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00604	0.0250	0.0296	1	02/02/2020 14:14	WG1421220
1,2-Dibromoethane	U		0.000622	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
Dibromomethane	U		0.00118	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
1,2-Dichlorobenzene	U		0.00172	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
1,3-Dichlorobenzene	U		0.00201	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
1,4-Dichlorobenzene	U		0.00233	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
Dichlorodifluoromethane	U		0.000969	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
1,1-Dichloroethane	U		0.000681	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
1,2-Dichloroethane	U		0.000563	0.00250	0.00296	1	02/02/2020 14:14	WG1421220

BAY 1 SUMP N SIDEWALL

Collected date/time: 01/29/20 13:32

SAMPLE RESULTS - 04

L1184753

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000592	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
cis-1,2-Dichloroethene	U		0.000817	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
trans-1,2-Dichloroethene	U		0.00169	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
1,2-Dichloropropane	U		0.00150	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
1,1-Dichloropropene	U		0.000829	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
1,3-Dichloropropane	U		0.00207	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
cis-1,3-Dichloropropene	U		0.000803	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
trans-1,3-Dichloropropene	U		0.00181	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
2,2-Dichloropropane	U		0.000939	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
Di-isopropyl ether	U		0.000415	0.00100	0.00118	1	02/02/2020 14:14	WG1421220
Ethylbenzene	U		0.000628	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
Hexachloro-1,3-butadiene	U		0.0150	0.0250	0.0296	1	02/02/2020 14:14	WG1421220
Isopropylbenzene	U		0.00102	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
p-Isopropyltoluene	U		0.00276	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
2-Butanone (MEK)	U		0.0148	0.0250	0.0296	1	02/02/2020 14:14	WG1421220
Methylene Chloride	U		0.00786	0.0250	0.0296	1	02/02/2020 14:14	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0118	0.0250	0.0296	1	02/02/2020 14:14	WG1421220
Methyl tert-butyl ether	U		0.000349	0.00100	0.00118	1	02/02/2020 14:14	WG1421220
Naphthalene	U		0.00370	0.0125	0.0148	1	02/02/2020 14:14	WG1421220
n-Propylbenzene	U		0.00140	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
Styrene	U		0.00323	0.0125	0.0148	1	02/02/2020 14:14	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000592	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000462	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000800	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
Tetrachloroethene	U		0.000829	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
Toluene	0.00210	J	0.00148	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
1,2,3-Trichlorobenzene	U		0.000740	0.0125	0.0148	1	02/02/2020 14:14	WG1421220
1,2,4-Trichlorobenzene	U		0.00571	0.0125	0.0148	1	02/02/2020 14:14	WG1421220
1,1,1-Trichloroethane	U		0.000326	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
1,1,2-Trichloroethane	U		0.00105	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
Trichloroethene	U		0.000474	0.00100	0.00118	1	02/02/2020 14:14	WG1421220
Trichlorofluoromethane	U		0.000592	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
1,2,3-Trichloropropane	U		0.00604	0.0125	0.0148	1	02/02/2020 14:14	WG1421220
1,2,4-Trimethylbenzene	0.00152	J	0.00137	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
1,2,3-Trimethylbenzene	U		0.00136	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
Vinyl chloride	U		0.000809	0.00250	0.00296	1	02/02/2020 14:14	WG1421220
1,3,5-Trimethylbenzene	U		0.00128	0.00500	0.00592	1	02/02/2020 14:14	WG1421220
Xylenes, Total	U		0.00566	0.00650	0.00770	1	02/02/2020 14:14	WG1421220
(S) Toluene-d8	*107*				*75.0-131*		*02/02/2020 14:14*	WG1421220
(S) 4-Bromofluorobenzene	*95.8*				*67.0-138*		*02/02/2020 14:14*	WG1421220
(S) 1,2-Dichloroethane-d4	*95.3*				*70.0-130*		*02/02/2020 14:14*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	85.4		1.58	4.00	4.74	1	02/05/2020 02:01	WG1422362
Residual Range Organics (RRO)	187		3.94	10.0	11.8	1	02/05/2020 02:01	WG1422362
(S) o-Terphenyl	*48.0*				*18.0-148*		*02/05/2020 02:01*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.0		1	02/04/2020 17:37	WG1422020

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0275	J	0.00311	0.0300	0.0333	1	02/03/2020 21:13	WG1421356

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.40		0.511	2.00	2.22	1	02/03/2020 21:00	WG1421187
Barium	77.0		0.189	0.500	0.555	1	02/03/2020 21:00	WG1421187
Cadmium	U		0.0778	0.500	0.555	1	02/03/2020 21:00	WG1421187
Chromium	73.9		0.156	1.00	1.11	1	02/03/2020 21:00	WG1421187
Lead	212		0.211	0.500	0.555	1	02/03/2020 21:00	WG1421187
Selenium	U		0.689	2.00	2.22	1	02/03/2020 21:00	WG1421187
Silver	U		0.133	1.00	1.11	1	02/03/2020 21:00	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	0.970	J	0.941	0.100	2.78	25	02/02/2020 04:53	WG1421058
(S) a,a,a-Trifluorotoluene(FID)	*91.6*				*77.0-120*		*02/02/2020 04:53*	WG1421058

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0152	0.0250	0.0278	1	02/02/2020 14:33	WG1421220
Acrylonitrile	U		0.00211	0.0125	0.0139	1	02/02/2020 14:33	WG1421220
Benzene	U		0.000444	0.00100	0.00111	1	02/02/2020 14:33	WG1421220
Bromobenzene	U		0.00117	0.0125	0.0139	1	02/02/2020 14:33	WG1421220
Bromodichloromethane	U		0.000875	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
Bromoform	U		0.00664	0.0250	0.0278	1	02/02/2020 14:33	WG1421220
Bromomethane	U		0.00411	0.0125	0.0139	1	02/02/2020 14:33	WG1421220
n-Butylbenzene	U		0.00427	0.0125	0.0139	1	02/02/2020 14:33	WG1421220
sec-Butylbenzene	U		0.00281	0.0125	0.0139	1	02/02/2020 14:33	WG1421220
tert-Butylbenzene	U		0.00172	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
Carbon tetrachloride	U		0.00120	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
Chlorobenzene	U		0.000637	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
Chlorodibromomethane	U		0.000500	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
Chloroethane	U		0.00120	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
Chloroform	U		0.000461	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
Chloromethane	U		0.00154	0.0125	0.0139	1	02/02/2020 14:33	WG1421220
2-Chlorotoluene	U		0.00102	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
4-Chlorotoluene	U		0.00126	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00567	0.0250	0.0278	1	02/02/2020 14:33	WG1421220
1,2-Dibromoethane	U		0.000583	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
Dibromomethane	U		0.00111	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
1,2-Dichlorobenzene	U		0.00161	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
1,3-Dichlorobenzene	U		0.00189	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
1,4-Dichlorobenzene	U		0.00219	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
Dichlorodifluoromethane	U		0.000909	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
1,1-Dichloroethane	U		0.000639	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
1,2-Dichloroethane	U		0.000528	0.00250	0.00278	1	02/02/2020 14:33	WG1421220

BAY 1 SUMP S SIDEWALL

Collected date/time: 01/29/20 13:33

SAMPLE RESULTS - 05

L1184753

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000555	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
cis-1,2-Dichloroethene	U		0.000767	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
trans-1,2-Dichloroethene	U		0.00159	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
1,2-Dichloropropane	U		0.00141	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
1,1-Dichloropropene	U		0.000778	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
1,3-Dichloropropane	U		0.00194	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
cis-1,3-Dichloropropene	U		0.000753	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
trans-1,3-Dichloropropene	U		0.00170	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
2,2-Dichloropropane	U		0.000881	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
Di-isopropyl ether	U		0.000389	0.00100	0.00111	1	02/02/2020 14:33	WG1421220
Ethylbenzene	U		0.000589	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
Hexachloro-1,3-butadiene	U		0.0141	0.0250	0.0278	1	02/02/2020 14:33	WG1421220
Isopropylbenzene	U		0.000959	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
p-Isopropyltoluene	U		0.00259	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
2-Butanone (MEK)	U		0.0139	0.0250	0.0278	1	02/02/2020 14:33	WG1421220
Methylene Chloride	U		0.00738	0.0250	0.0278	1	02/02/2020 14:33	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0250	0.0278	1	02/02/2020 14:33	WG1421220
Methyl tert-butyl ether	U		0.000328	0.00100	0.00111	1	02/02/2020 14:33	WG1421220
Naphthalene	U		0.00347	0.0125	0.0139	1	02/02/2020 14:33	WG1421220
n-Propylbenzene	U		0.00131	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
Styrene	U		0.00303	0.0125	0.0139	1	02/02/2020 14:33	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000555	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000433	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000750	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
Tetrachloroethene	U		0.000778	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
Toluene	0.00212	J	0.00139	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
1,2,3-Trichlorobenzene	U		0.000694	0.0125	0.0139	1	02/02/2020 14:33	WG1421220
1,2,4-Trichlorobenzene	U		0.00535	0.0125	0.0139	1	02/02/2020 14:33	WG1421220
1,1,1-Trichloroethane	U		0.000305	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
1,1,2-Trichloroethane	U		0.000981	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
Trichloroethene	U		0.000444	0.00100	0.00111	1	02/02/2020 14:33	WG1421220
Trichlorofluoromethane	U		0.000555	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
1,2,3-Trichloropropane	U		0.00567	0.0125	0.0139	1	02/02/2020 14:33	WG1421220
1,2,4-Trimethylbenzene	U		0.00129	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
1,2,3-Trimethylbenzene	U		0.00128	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
Vinyl chloride	U		0.000759	0.00250	0.00278	1	02/02/2020 14:33	WG1421220
1,3,5-Trimethylbenzene	U		0.00120	0.00500	0.00555	1	02/02/2020 14:33	WG1421220
Xylenes, Total	U		0.00531	0.00650	0.00722	1	02/02/2020 14:33	WG1421220
(S) Toluene-d8	*107*				*75.0-131*		*02/02/2020 14:33*	WG1421220
(S) 4-Bromofluorobenzene	*90.7*				*67.0-138*		*02/02/2020 14:33*	WG1421220
(S) 1,2-Dichloroethane-d4	*97.6*				*70.0-130*		*02/02/2020 14:33*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	14.3		1.48	4.00	4.44	1	02/05/2020 15:54	WG1422362
Residual Range Organics (RRO)	49.4		3.70	10.0	11.1	1	02/05/2020 15:54	WG1422362
(S) o-Terphenyl	*40.0*				*18.0-148*		*02/05/2020 15:54*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.7		1	02/04/2020 17:25	WG1422021

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0163	J	0.00316	0.0300	0.0338	1	02/03/2020 21:16	WG1421356

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.61		0.519	2.00	2.25	1	02/03/2020 21:02	WG1421187
Barium	58.5		0.192	0.500	0.564	1	02/03/2020 21:02	WG1421187
Cadmium	U		0.0789	0.500	0.564	1	02/03/2020 21:02	WG1421187
Chromium	27.6		0.158	1.00	1.13	1	02/03/2020 21:02	WG1421187
Lead	8.59		0.214	0.500	0.564	1	02/03/2020 21:02	WG1421187
Selenium	U		0.699	2.00	2.25	1	02/03/2020 21:02	WG1421187
Silver	U		0.135	1.00	1.13	1	02/03/2020 21:02	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.955	0.100	2.82	25	02/02/2020 05:13	WG1421058
(S) a,a,a-Trifluorotoluene(FID)	*91.6*				*77.0-120*		*02/02/2020 05:13*	WG1421058

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0154	0.0250	0.0282	1	02/02/2020 14:52	WG1421220
Acrylonitrile	U		0.00214	0.0125	0.0141	1	02/02/2020 14:52	WG1421220
Benzene	U		0.000451	0.00100	0.00113	1	02/02/2020 14:52	WG1421220
Bromobenzene	U		0.00118	0.0125	0.0141	1	02/02/2020 14:52	WG1421220
Bromodichloromethane	U		0.000888	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
Bromoform	U		0.00674	0.0250	0.0282	1	02/02/2020 14:52	WG1421220
Bromomethane	U		0.00417	0.0125	0.0141	1	02/02/2020 14:52	WG1421220
n-Butylbenzene	U		0.00433	0.0125	0.0141	1	02/02/2020 14:52	WG1421220
sec-Butylbenzene	U		0.00285	0.0125	0.0141	1	02/02/2020 14:52	WG1421220
tert-Butylbenzene	U		0.00175	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
Carbon tetrachloride	U		0.00122	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
Chlorobenzene	U		0.000646	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
Chlorodibromomethane	U		0.000507	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
Chloroethane	U		0.00122	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
Chloroform	U		0.000468	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
Chloromethane	U		0.00157	0.0125	0.0141	1	02/02/2020 14:52	WG1421220
2-Chlorotoluene	U		0.00104	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
4-Chlorotoluene	U		0.00127	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00575	0.0250	0.0282	1	02/02/2020 14:52	WG1421220
1,2-Dibromoethane	U		0.000592	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
Dibromomethane	U		0.00113	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
1,2-Dichlorobenzene	U		0.00163	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
1,3-Dichlorobenzene	U		0.00192	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
1,4-Dichlorobenzene	U		0.00222	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
Dichlorodifluoromethane	U		0.000922	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
1,1-Dichloroethane	U		0.000648	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
1,2-Dichloroethane	U		0.000535	0.00250	0.00282	1	02/02/2020 14:52	WG1421220

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000564	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
cis-1,2-Dichloroethene	U		0.000778	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
trans-1,2-Dichloroethene	U		0.00161	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
1,2-Dichloropropane	U		0.00143	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
1,1-Dichloropropene	U		0.000789	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
1,3-Dichloropropane	U		0.00197	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
cis-1,3-Dichloropropene	U		0.000764	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
trans-1,3-Dichloropropene	U		0.00172	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
2,2-Dichloropropane	U		0.000894	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
Di-isopropyl ether	U		0.000395	0.00100	0.00113	1	02/02/2020 14:52	WG1421220
Ethylbenzene	U		0.000597	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
Hexachloro-1,3-butadiene	U		0.0143	0.0250	0.0282	1	02/02/2020 14:52	WG1421220
Isopropylbenzene	U		0.000973	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
p-Isopropyltoluene	U		0.00263	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
2-Butanone (MEK)	U		0.0141	0.0250	0.0282	1	02/02/2020 14:52	WG1421220
Methylene Chloride	U		0.00749	0.0250	0.0282	1	02/02/2020 14:52	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0113	0.0250	0.0282	1	02/02/2020 14:52	WG1421220
Methyl tert-butyl ether	U		0.000333	0.00100	0.00113	1	02/02/2020 14:52	WG1421220
Naphthalene	U		0.00352	0.0125	0.0141	1	02/02/2020 14:52	WG1421220
n-Propylbenzene	U		0.00133	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
Styrene	U		0.00308	0.0125	0.0141	1	02/02/2020 14:52	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000564	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000440	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000761	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
Tetrachloroethene	U		0.000789	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
Toluene	0.00386	J	0.00141	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
1,2,3-Trichlorobenzene	U		0.000705	0.0125	0.0141	1	02/02/2020 14:52	WG1421220
1,2,4-Trichlorobenzene	U		0.00543	0.0125	0.0141	1	02/02/2020 14:52	WG1421220
1,1,1-Trichloroethane	U		0.000310	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
1,1,2-Trichloroethane	U		0.000995	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
Trichloroethene	U		0.000451	0.00100	0.00113	1	02/02/2020 14:52	WG1421220
Trichlorofluoromethane	U		0.000564	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
1,2,3-Trichloropropane	U		0.00575	0.0125	0.0141	1	02/02/2020 14:52	WG1421220
1,2,4-Trimethylbenzene	U		0.00131	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
1,2,3-Trimethylbenzene	U		0.00130	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
Vinyl chloride	U		0.000770	0.00250	0.00282	1	02/02/2020 14:52	WG1421220
1,3,5-Trimethylbenzene	U		0.00122	0.00500	0.00564	1	02/02/2020 14:52	WG1421220
Xylenes, Total	U		0.00539	0.00650	0.00733	1	02/02/2020 14:52	WG1421220
(S) Toluene-d8	*106*				*75.0-131*		*02/02/2020 14:52*	WG1421220
(S) 4-Bromofluorobenzene	*93.3*				*67.0-138*		*02/02/2020 14:52*	WG1421220
(S) 1,2-Dichloroethane-d4	*95.8*				*70.0-130*		*02/02/2020 14:52*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	4.93		1.50	4.00	4.51	1	02/05/2020 00:58	WG1422362
Residual Range Organics (RRO)	11.0	J	3.75	10.0	11.3	1	02/05/2020 00:58	WG1422362
(S) o-Terphenyl	*54.0*				*18.0-148*		*02/05/2020 00:58*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	85.7		1	02/04/2020 17:25	WG1422021

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0253	J	0.00327	0.0300	0.0350	1	02/03/2020 21:18	WG1421356

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	3.80		0.537	2.00	2.33	1	02/03/2020 21:05	WG1421187
Barium	86.2		0.198	0.500	0.584	1	02/03/2020 21:05	WG1421187
Cadmium	U		0.0817	0.500	0.584	1	02/03/2020 21:05	WG1421187
Chromium	76.9		0.163	1.00	1.17	1	02/03/2020 21:05	WG1421187
Lead	239		0.222	0.500	0.584	1	02/03/2020 21:05	WG1421187
Selenium	U		0.724	2.00	2.33	1	02/03/2020 21:05	WG1421187
Silver	U		0.140	1.00	1.17	1	02/03/2020 21:05	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	2.02	J	1.44	0.100	4.24	36.3	02/02/2020 05:34	WG1421058
(S) a,a,a-Trifluorotoluene(FID)	*92.1*				*77.0-120*		*02/02/2020 05:34*	WG1421058

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	0.174		0.0444	0.0250	0.0811	2.78	02/02/2020 15:12	WG1421220
Acrylonitrile	U		0.00616	0.0125	0.0406	2.78	02/02/2020 15:12	WG1421220
Benzene	U		0.00130	0.00100	0.00324	2.78	02/02/2020 15:12	WG1421220
Bromobenzene	U		0.00341	0.0125	0.0406	2.78	02/02/2020 15:12	WG1421220
Bromodichloromethane	U		0.00256	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
Bromoform	U		0.0194	0.0250	0.0811	2.78	02/02/2020 15:12	WG1421220
Bromomethane	U		0.0120	0.0125	0.0406	2.78	02/02/2020 15:12	WG1421220
n-Butylbenzene	U		0.0125	0.0125	0.0406	2.78	02/02/2020 15:12	WG1421220
sec-Butylbenzene	U		0.00821	0.0125	0.0406	2.78	02/02/2020 15:12	WG1421220
tert-Butylbenzene	U		0.00503	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
Carbon tetrachloride	U		0.00350	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
Chlorobenzene	U		0.00186	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
Chlorodibromomethane	U		0.00146	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
Chloroethane	U		0.00350	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
Chloroform	U		0.00135	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
Chloromethane	U		0.00451	0.0125	0.0406	2.78	02/02/2020 15:12	WG1421220
2-Chlorotoluene	U		0.00298	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
4-Chlorotoluene	U		0.00367	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.0165	0.0250	0.0811	2.78	02/02/2020 15:12	WG1421220
1,2-Dibromoethane	U		0.00170	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
Dibromomethane	U		0.00324	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
1,2-Dichlorobenzene	U		0.00470	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
1,3-Dichlorobenzene	U		0.00552	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
1,4-Dichlorobenzene	U		0.00639	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
Dichlorodifluoromethane	U		0.00265	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
1,1-Dichloroethane	U		0.00187	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
1,2-Dichloroethane	U		0.00154	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220

BAY 1 SUMP E SIDEWALL

Collected date/time: 01/29/20 13:35

SAMPLE RESULTS - 07

L1184753

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.00162	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
cis-1,2-Dichloroethene	U		0.00224	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
trans-1,2-Dichloroethene	U		0.00464	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
1,2-Dichloropropane	U		0.00412	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
1,1-Dichloropropene	U		0.00227	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
1,3-Dichloropropane	U		0.00568	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
cis-1,3-Dichloropropene	U		0.00220	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
trans-1,3-Dichloropropene	U		0.00496	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
2,2-Dichloropropane	U		0.00257	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
Di-isopropyl ether	U		0.00114	0.00100	0.00324	2.78	02/02/2020 15:12	WG1421220
Ethylbenzene	0.00405	J	0.00172	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
Hexachloro-1,3-butadiene	U		0.0412	0.0250	0.0811	2.78	02/02/2020 15:12	WG1421220
Isopropylbenzene	U		0.00280	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
p-Isopropyltoluene	U		0.00756	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
2-Butanone (MEK)	0.0408	B J	0.0406	0.0250	0.0811	2.78	02/02/2020 15:12	WG1421220
Methylene Chloride	U		0.0215	0.0250	0.0811	2.78	02/02/2020 15:12	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0324	0.0250	0.0811	2.78	02/02/2020 15:12	WG1421220
Methyl tert-butyl ether	U		0.000957	0.00100	0.00324	2.78	02/02/2020 15:12	WG1421220
Naphthalene	0.0144	J	0.0101	0.0125	0.0406	2.78	02/02/2020 15:12	WG1421220
n-Propylbenzene	U		0.00383	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
Styrene	U		0.00886	0.0125	0.0406	2.78	02/02/2020 15:12	WG1421220
1,1,1,2-Tetrachloroethane	U		0.00162	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
1,1,2,2-Tetrachloroethane	U		0.00127	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.00219	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
Tetrachloroethene	0.00941		0.00227	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
Toluene	0.0326		0.00406	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
1,2,3-Trichlorobenzene	U		0.00203	0.0125	0.0406	2.78	02/02/2020 15:12	WG1421220
1,2,4-Trichlorobenzene	U		0.0156	0.0125	0.0406	2.78	02/02/2020 15:12	WG1421220
1,1,1-Trichloroethane	U		0.000892	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
1,1,2-Trichloroethane	U		0.00286	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
Trichloroethene	U		0.00130	0.00100	0.00324	2.78	02/02/2020 15:12	WG1421220
Trichlorofluoromethane	U		0.00162	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
1,2,3-Trichloropropane	U		0.0165	0.0125	0.0406	2.78	02/02/2020 15:12	WG1421220
1,2,4-Trimethylbenzene	0.0146	J	0.00376	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
1,2,3-Trimethylbenzene	0.00682	J	0.00373	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
Vinyl chloride	U		0.00222	0.00250	0.00811	2.78	02/02/2020 15:12	WG1421220
1,3,5-Trimethylbenzene	0.00641	J	0.00350	0.00500	0.0162	2.78	02/02/2020 15:12	WG1421220
Xylenes, Total	0.0259		0.0155	0.00650	0.0211	2.78	02/02/2020 15:12	WG1421220
(S) Toluene-d8	*105*				*75.0-131*		*02/02/2020 15:12*	WG1421220
(S) 4-Bromofluorobenzene	*97.1*				*67.0-138*		*02/02/2020 15:12*	WG1421220
(S) 1,2-Dichloroethane-d4	*98.4*				*70.0-130*		*02/02/2020 15:12*	WG1421220

Sample Narrative:

L1184753-07 WG1421220: Lowest possible dilution due to limited sample volume.

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	14.1		1.55	4.00	4.67	1	02/05/2020 01:36	WG1422362
Residual Range Organics (RRO)	51.2		3.89	10.0	11.7	1	02/05/2020 01:36	WG1422362
(S) o-Terphenyl	*52.3*				*18.0-148*		*02/05/2020 01:36*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.3		1	02/04/2020 17:25	WG1422021

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0259	J	0.00307	0.0300	0.0328	1	02/03/2020 21:21	WG1421356

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.01		0.504	2.00	2.19	1	02/03/2020 21:08	WG1421187
Barium	121		0.186	0.500	0.547	1	02/03/2020 21:08	WG1421187
Cadmium	U		0.0766	0.500	0.547	1	02/03/2020 21:08	WG1421187
Chromium	31.9		0.153	1.00	1.09	1	02/03/2020 21:08	WG1421187
Lead	7.09		0.208	0.500	0.547	1	02/03/2020 21:08	WG1421187
Selenium	U		0.679	2.00	2.19	1	02/03/2020 21:08	WG1421187
Silver	U		0.131	1.00	1.09	1	02/03/2020 21:08	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.11	J	0.928	0.100	2.74	25	02/02/2020 05:55	WG1421058
(S) a,a,a-Trifluorotoluene(FID)	*92.1*				*77.0-120*		*02/02/2020 05:55*	WG1421058

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0150	0.0250	0.0274	1	02/02/2020 15:31	WG1421220
Acrylonitrile	U		0.00208	0.0125	0.0137	1	02/02/2020 15:31	WG1421220
Benzene	U		0.000438	0.00100	0.00109	1	02/02/2020 15:31	WG1421220
Bromobenzene	U		0.00115	0.0125	0.0137	1	02/02/2020 15:31	WG1421220
Bromodichloromethane	U		0.000863	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
Bromoform	U		0.00655	0.0250	0.0274	1	02/02/2020 15:31	WG1421220
Bromomethane	U		0.00405	0.0125	0.0137	1	02/02/2020 15:31	WG1421220
n-Butylbenzene	U		0.00420	0.0125	0.0137	1	02/02/2020 15:31	WG1421220
sec-Butylbenzene	U		0.00277	0.0125	0.0137	1	02/02/2020 15:31	WG1421220
tert-Butylbenzene	U		0.00170	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
Carbon tetrachloride	U		0.00118	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
Chlorobenzene	U		0.000627	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
Chlorodibromomethane	U		0.000493	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
Chloroethane	U		0.00118	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
Chloroform	U		0.000454	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
Chloromethane	U		0.00152	0.0125	0.0137	1	02/02/2020 15:31	WG1421220
2-Chlorotoluene	U		0.00101	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
4-Chlorotoluene	U		0.00124	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00558	0.0250	0.0274	1	02/02/2020 15:31	WG1421220
1,2-Dibromoethane	U		0.000575	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
Dibromomethane	U		0.00109	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
1,2-Dichlorobenzene	U		0.00159	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
1,3-Dichlorobenzene	U		0.00186	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
1,4-Dichlorobenzene	U		0.00216	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
Dichlorodifluoromethane	U		0.000896	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
1,1-Dichloroethane	U		0.000630	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
1,2-Dichloroethane	U		0.000520	0.00250	0.00274	1	02/02/2020 15:31	WG1421220

BAY 4 SUMP LINE END

Collected date/time: 01/30/20 10:30

SAMPLE RESULTS - 08

L1184753

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000547	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
cis-1,2-Dichloroethene	U		0.000755	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
trans-1,2-Dichloroethene	U		0.00157	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
1,2-Dichloropropane	U		0.00139	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
1,1-Dichloropropene	U		0.000766	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
1,3-Dichloropropane	U		0.00192	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
cis-1,3-Dichloropropene	U		0.000742	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
trans-1,3-Dichloropropene	U		0.00168	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
2,2-Dichloropropane	U		0.000868	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
Di-isopropyl ether	U		0.000383	0.00100	0.00109	1	02/02/2020 15:31	WG1421220
Ethylbenzene	0.00113	J	0.000580	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0274	1	02/02/2020 15:31	WG1421220
Isopropylbenzene	U		0.000945	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
p-Isopropyltoluene	U		0.00255	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
2-Butanone (MEK)	0.0258	B J	0.0137	0.0250	0.0274	1	02/02/2020 15:31	WG1421220
Methylene Chloride	U		0.00727	0.0250	0.0274	1	02/02/2020 15:31	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0250	0.0274	1	02/02/2020 15:31	WG1421220
Methyl tert-butyl ether	U		0.000323	0.00100	0.00109	1	02/02/2020 15:31	WG1421220
Naphthalene	U		0.00342	0.0125	0.0137	1	02/02/2020 15:31	WG1421220
n-Propylbenzene	U		0.00129	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
Styrene	0.00323	J	0.00299	0.0125	0.0137	1	02/02/2020 15:31	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000547	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000427	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000739	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
Tetrachloroethene	U		0.000766	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
Toluene	0.00303	J	0.00137	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
1,2,3-Trichlorobenzene	U		0.000684	0.0125	0.0137	1	02/02/2020 15:31	WG1421220
1,2,4-Trichlorobenzene	U		0.00528	0.0125	0.0137	1	02/02/2020 15:31	WG1421220
1,1,1-Trichloroethane	U		0.000301	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
1,1,2-Trichloroethane	U		0.000967	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
Trichloroethene	U		0.000438	0.00100	0.00109	1	02/02/2020 15:31	WG1421220
Trichlorofluoromethane	U		0.000547	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
1,2,3-Trichloropropane	U		0.00558	0.0125	0.0137	1	02/02/2020 15:31	WG1421220
1,2,4-Trimethylbenzene	0.00164	J	0.00127	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
1,2,3-Trimethylbenzene	U		0.00126	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
Vinyl chloride	U		0.000748	0.00250	0.00274	1	02/02/2020 15:31	WG1421220
1,3,5-Trimethylbenzene	U		0.00118	0.00500	0.00547	1	02/02/2020 15:31	WG1421220
Xylenes, Total	U		0.00523	0.00650	0.00712	1	02/02/2020 15:31	WG1421220
(S) Toluene-d8	*104*				*75.0-131*		*02/02/2020 15:31*	WG1421220
(S) 4-Bromofluorobenzene	*90.3*				*67.0-138*		*02/02/2020 15:31*	WG1421220
(S) 1,2-Dichloroethane-d4	*95.4*				*70.0-130*		*02/02/2020 15:31*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	50.6		7.28	4.00	21.9	5	02/05/2020 16:19	WG1422362
Residual Range Organics (RRO)	151		18.2	10.0	54.7	5	02/05/2020 16:19	WG1422362
(S) o-Terphenyl	*42.4*				*18.0-148*		*02/05/2020 16:19*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.9		1	02/04/2020 17:25	WG1422021

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0638		0.00315	0.0300	0.0337	1	02/03/2020 21:23	WG1421356

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	11.5		0.517	2.00	2.25	1	02/03/2020 21:10	WG1421187
Barium	150		0.191	0.500	0.562	1	02/03/2020 21:10	WG1421187
Cadmium	0.293	J	0.0787	0.500	0.562	1	02/03/2020 21:10	WG1421187
Chromium	40.4		0.157	1.00	1.12	1	02/03/2020 21:10	WG1421187
Lead	61.7		0.214	0.500	0.562	1	02/03/2020 21:10	WG1421187
Selenium	U		0.697	2.00	2.25	1	02/03/2020 21:10	WG1421187
Silver	U		0.135	1.00	1.12	1	02/03/2020 21:10	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	3.85		1.01	0.100	2.98	26.5	02/02/2020 06:15	WG1421058
(S) a,a,a-Trifluorotoluene(FID)	*93.2*				*77.0-120*		*02/02/2020 06:15*	WG1421058

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0154	0.0250	0.0281	1	02/02/2020 15:50	WG1421220
Acrylonitrile	U		0.00214	0.0125	0.0141	1	02/02/2020 15:50	WG1421220
Benzene	U		0.000450	0.00100	0.00112	1	02/02/2020 15:50	WG1421220
Bromobenzene	U		0.00118	0.0125	0.0141	1	02/02/2020 15:50	WG1421220
Bromodichloromethane	U		0.000886	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
Bromoform	U		0.00673	0.0250	0.0281	1	02/02/2020 15:50	WG1421220
Bromomethane	U		0.00416	0.0125	0.0141	1	02/02/2020 15:50	WG1421220
n-Butylbenzene	0.00775	J	0.00432	0.0125	0.0141	1	02/02/2020 15:50	WG1421220
sec-Butylbenzene	0.00629	J	0.00285	0.0125	0.0141	1	02/02/2020 15:50	WG1421220
tert-Butylbenzene	U		0.00174	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
Carbon tetrachloride	U		0.00121	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
Chlorobenzene	U		0.000645	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
Chlorodibromomethane	U		0.000506	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
Chloroethane	U		0.00121	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
Chloroform	U		0.000467	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
Chloromethane	U		0.00156	0.0125	0.0141	1	02/02/2020 15:50	WG1421220
2-Chlorotoluene	U		0.00103	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
4-Chlorotoluene	U		0.00127	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00574	0.0250	0.0281	1	02/02/2020 15:50	WG1421220
1,2-Dibromoethane	U		0.000591	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
Dibromomethane	U		0.00112	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
1,2-Dichlorobenzene	U		0.00163	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
1,3-Dichlorobenzene	U		0.00191	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
1,4-Dichlorobenzene	U		0.00222	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
Dichlorodifluoromethane	U		0.000920	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
1,1-Dichloroethane	U		0.000647	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
1,2-Dichloroethane	U		0.000534	0.00250	0.00281	1	02/02/2020 15:50	WG1421220

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000562	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
cis-1,2-Dichloroethene	U		0.000776	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
trans-1,2-Dichloroethene	U		0.00161	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
1,2-Dichloropropane	U		0.00143	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
1,1-Dichloropropene	U		0.000787	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
1,3-Dichloropropane	U		0.00197	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
cis-1,3-Dichloropropene	U		0.000763	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
trans-1,3-Dichloropropene	U		0.00172	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
2,2-Dichloropropane	U		0.000892	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
Di-isopropyl ether	U		0.000394	0.00100	0.00112	1	02/02/2020 15:50	WG1421220
Ethylbenzene	0.0133		0.000596	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
Hexachloro-1,3-butadiene	U		0.0143	0.0250	0.0281	1	02/02/2020 15:50	WG1421220
Isopropylbenzene	0.00333		0.000971	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
p-Isopropyltoluene	0.00624		0.00262	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
2-Butanone (MEK)	0.0315	B	0.0141	0.0250	0.0281	1	02/02/2020 15:50	WG1421220
Methylene Chloride	U		0.00747	0.0250	0.0281	1	02/02/2020 15:50	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0112	0.0250	0.0281	1	02/02/2020 15:50	WG1421220
Methyl tert-butyl ether	0.000688	J	0.000332	0.00100	0.00112	1	02/02/2020 15:50	WG1421220
Naphthalene	0.0254		0.00351	0.0125	0.0141	1	02/02/2020 15:50	WG1421220
n-Propylbenzene	0.0155		0.00133	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
Styrene	U		0.00307	0.0125	0.0141	1	02/02/2020 15:50	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000562	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000439	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000759	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
Tetrachloroethene	0.00166	J	0.000787	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
Toluene	0.0439		0.00141	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
1,2,3-Trichlorobenzene	U		0.000703	0.0125	0.0141	1	02/02/2020 15:50	WG1421220
1,2,4-Trichlorobenzene	U		0.00542	0.0125	0.0141	1	02/02/2020 15:50	WG1421220
1,1,1-Trichloroethane	U		0.000309	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
1,1,2-Trichloroethane	U		0.000993	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
Trichloroethene	U		0.000450	0.00100	0.00112	1	02/02/2020 15:50	WG1421220
Trichlorofluoromethane	U		0.000562	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
1,2,3-Trichloropropane	U		0.00574	0.0125	0.0141	1	02/02/2020 15:50	WG1421220
1,2,4-Trimethylbenzene	0.150		0.00130	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
1,2,3-Trimethylbenzene	0.0550		0.00129	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
Vinyl chloride	U		0.000768	0.00250	0.00281	1	02/02/2020 15:50	WG1421220
1,3,5-Trimethylbenzene	0.0478		0.00121	0.00500	0.00562	1	02/02/2020 15:50	WG1421220
Xylenes, Total	0.0958		0.00538	0.00650	0.00731	1	02/02/2020 15:50	WG1421220
(S) Toluene-d8	*105*				*75.0-131*		*02/02/2020 15:50*	WG1421220
(S) 4-Bromofluorobenzene	*89.9*				*67.0-138*		*02/02/2020 15:50*	WG1421220
(S) 1,2-Dichloroethane-d4	*93.2*				*70.0-130*		*02/02/2020 15:50*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	2470		15.0	4.00	45.0	10	02/05/2020 03:42	WG1422362
Residual Range Organics (RRO)	5350		187	10.0	562	50	02/05/2020 17:35	WG1422362
(S) o-Terphenyl	*59.8*				*18.0-148*		*02/05/2020 03:42*	WG1422362
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*02/05/2020 17:35*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	83.7		1	02/04/2020 17:25	WG1422021

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0631		0.00334	0.0300	0.0358	1	02/03/2020 21:26	WG1421356

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	16.4		0.549	2.00	2.39	1	02/03/2020 21:13	WG1421187
Barium	99.5		0.203	0.500	0.597	1	02/03/2020 21:13	WG1421187
Cadmium	0.343	J	0.0836	0.500	0.597	1	02/03/2020 21:13	WG1421187
Chromium	34.1		0.167	1.00	1.19	1	02/03/2020 21:13	WG1421187
Lead	57.5		0.227	0.500	0.597	1	02/03/2020 21:13	WG1421187
Selenium	U		0.741	2.00	2.39	1	02/03/2020 21:13	WG1421187
Silver	U		0.143	1.00	1.19	1	02/03/2020 21:13	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	2.02	J	1.19	0.100	3.52	29.5	02/02/2020 06:36	WG1421058
(S) a,a,a-Trifluorotoluene(FID)	*92.8*				*77.0-120*		*02/02/2020 06:36*	WG1421058

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0164	0.0250	0.0299	1	02/02/2020 16:08	WG1421220
Acrylonitrile	U		0.00227	0.0125	0.0149	1	02/02/2020 16:08	WG1421220
Benzene	U		0.000478	0.00100	0.00119	1	02/02/2020 16:08	WG1421220
Bromobenzene	U		0.00125	0.0125	0.0149	1	02/02/2020 16:08	WG1421220
Bromodichloromethane	U		0.000941	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
Bromoform	U		0.00714	0.0250	0.0299	1	02/02/2020 16:08	WG1421220
Bromomethane	U		0.00442	0.0125	0.0149	1	02/02/2020 16:08	WG1421220
n-Butylbenzene	U		0.00459	0.0125	0.0149	1	02/02/2020 16:08	WG1421220
sec-Butylbenzene	U		0.00302	0.0125	0.0149	1	02/02/2020 16:08	WG1421220
tert-Butylbenzene	U		0.00185	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
Carbon tetrachloride	U		0.00129	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
Chlorobenzene	U		0.000684	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
Chlorodibromomethane	U		0.000537	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
Chloroethane	U		0.00129	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
Chloroform	U		0.000496	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
Chloromethane	U		0.00166	0.0125	0.0149	1	02/02/2020 16:08	WG1421220
2-Chlorotoluene	U		0.00110	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
4-Chlorotoluene	U		0.00135	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00609	0.0250	0.0299	1	02/02/2020 16:08	WG1421220
1,2-Dibromoethane	U		0.000627	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
Dibromomethane	U		0.00119	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
1,2-Dichlorobenzene	U		0.00173	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
1,3-Dichlorobenzene	U		0.00203	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
1,4-Dichlorobenzene	U		0.00235	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
Dichlorodifluoromethane	U		0.000977	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
1,1-Dichloroethane	U		0.000687	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
1,2-Dichloroethane	U		0.000567	0.00250	0.00299	1	02/02/2020 16:08	WG1421220

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000597	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
cis-1,2-Dichloroethene	U		0.000824	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
trans-1,2-Dichloroethene	U		0.00171	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
1,2-Dichloropropane	U		0.00152	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
1,1-Dichloropropene	U		0.000836	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
1,3-Dichloropropane	U		0.00209	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
cis-1,3-Dichloropropene	U		0.000810	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
trans-1,3-Dichloropropene	U		0.00183	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
2,2-Dichloropropane	U		0.000947	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
Di-isopropyl ether	U		0.000418	0.00100	0.00119	1	02/02/2020 16:08	WG1421220
Ethylbenzene	U		0.000633	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
Hexachloro-1,3-butadiene	U		0.0152	0.0250	0.0299	1	02/02/2020 16:08	WG1421220
Isopropylbenzene	U		0.00103	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
p-Isopropyltoluene	U		0.00278	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
2-Butanone (MEK)	0.0183	B J	0.0149	0.0250	0.0299	1	02/02/2020 16:08	WG1421220
Methylene Chloride	U		0.00793	0.0250	0.0299	1	02/02/2020 16:08	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0119	0.0250	0.0299	1	02/02/2020 16:08	WG1421220
Methyl tert-butyl ether	U		0.000352	0.00100	0.00119	1	02/02/2020 16:08	WG1421220
Naphthalene	U		0.00373	0.0125	0.0149	1	02/02/2020 16:08	WG1421220
n-Propylbenzene	U		0.00141	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
Styrene	U		0.00326	0.0125	0.0149	1	02/02/2020 16:08	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000597	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000466	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000806	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
Tetrachloroethene	0.00119	J	0.000836	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
Toluene	0.00296	J	0.00149	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
1,2,3-Trichlorobenzene	U		0.000747	0.0125	0.0149	1	02/02/2020 16:08	WG1421220
1,2,4-Trichlorobenzene	U		0.00576	0.0125	0.0149	1	02/02/2020 16:08	WG1421220
1,1,1-Trichloroethane	U		0.000328	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
1,1,2-Trichloroethane	U		0.00105	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
Trichloroethene	U		0.000478	0.00100	0.00119	1	02/02/2020 16:08	WG1421220
Trichlorofluoromethane	U		0.000597	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
1,2,3-Trichloropropane	U		0.00609	0.0125	0.0149	1	02/02/2020 16:08	WG1421220
1,2,4-Trimethylbenzene	0.00294	J	0.00139	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
1,2,3-Trimethylbenzene	U		0.00137	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
Vinyl chloride	U		0.000816	0.00250	0.00299	1	02/02/2020 16:08	WG1421220
1,3,5-Trimethylbenzene	U		0.00129	0.00500	0.00597	1	02/02/2020 16:08	WG1421220
Xylenes, Total	U		0.00571	0.00650	0.00776	1	02/02/2020 16:08	WG1421220
(S) Toluene-d8	*106*				*75.0-131*		*02/02/2020 16:08*	WG1421220
(S) 4-Bromofluorobenzene	*92.1*				*67.0-138*		*02/02/2020 16:08*	WG1421220
(S) 1,2-Dichloroethane-d4	*94.7*				*70.0-130*		*02/02/2020 16:08*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	295		1.59	4.00	4.78	1	02/05/2020 02:39	WG1422362
Residual Range Organics (RRO)	546		19.9	10.0	59.7	5	02/05/2020 16:57	WG1422362
(S) o-Terphenyl	*32.1*				*18.0-148*		*02/05/2020 16:57*	WG1422362
(S) o-Terphenyl	*58.2*				*18.0-148*		*02/05/2020 02:39*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.2		1	02/04/2020 17:25	WG1422021

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0830		0.00318	0.0300	0.0340	1	02/03/2020 21:29	WG1421356

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.45		0.522	2.00	2.27	1	02/03/2020 21:15	WG1421187
Barium	84.3		0.193	0.500	0.567	1	02/03/2020 21:15	WG1421187
Cadmium	0.525	J	0.0794	0.500	0.567	1	02/03/2020 21:15	WG1421187
Chromium	24.8		0.159	1.00	1.13	1	02/03/2020 21:15	WG1421187
Lead	46.3		0.215	0.500	0.567	1	02/03/2020 21:15	WG1421187
Selenium	U		0.703	2.00	2.27	1	02/03/2020 21:15	WG1421187
Silver	U		0.136	1.00	1.13	1	02/03/2020 21:15	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.10	J	0.961	0.100	2.83	25	02/02/2020 06:57	WG1421058
(S) a,a,a-Trifluorotoluene(FID)	*92.5*				*77.0-120*		*02/02/2020 06:57*	WG1421058

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0155	0.0250	0.0283	1	02/02/2020 16:27	WG1421220
Acrylonitrile	U		0.00215	0.0125	0.0142	1	02/02/2020 16:27	WG1421220
Benzene	U		0.000454	0.00100	0.00113	1	02/02/2020 16:27	WG1421220
Bromobenzene	U		0.00119	0.0125	0.0142	1	02/02/2020 16:27	WG1421220
Bromodichloromethane	U		0.000894	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
Bromoform	U		0.00678	0.0250	0.0283	1	02/02/2020 16:27	WG1421220
Bromomethane	U		0.00420	0.0125	0.0142	1	02/02/2020 16:27	WG1421220
n-Butylbenzene	U		0.00435	0.0125	0.0142	1	02/02/2020 16:27	WG1421220
sec-Butylbenzene	U		0.00287	0.0125	0.0142	1	02/02/2020 16:27	WG1421220
tert-Butylbenzene	U		0.00176	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
Carbon tetrachloride	U		0.00122	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
Chlorobenzene	U		0.000650	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
Chlorodibromomethane	U		0.000510	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
Chloroethane	U		0.00122	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
Chloroform	U		0.000471	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
Chloromethane	U		0.00158	0.0125	0.0142	1	02/02/2020 16:27	WG1421220
2-Chlorotoluene	U		0.00104	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
4-Chlorotoluene	U		0.00128	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00578	0.0250	0.0283	1	02/02/2020 16:27	WG1421220
1,2-Dibromoethane	U		0.000595	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
Dibromomethane	U		0.00113	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
1,2-Dichlorobenzene	U		0.00164	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
1,3-Dichlorobenzene	U		0.00193	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
1,4-Dichlorobenzene	U		0.00223	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
Dichlorodifluoromethane	U		0.000928	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
1,1-Dichloroethane	U		0.000652	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
1,2-Dichloroethane	U		0.000539	0.00250	0.00283	1	02/02/2020 16:27	WG1421220

BAY 3 S SIDEWALL

Collected date/time: 01/29/20 11:03

SAMPLE RESULTS - 11

L1184753

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000567	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
cis-1,2-Dichloroethene	U		0.000782	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
trans-1,2-Dichloroethene	U		0.00162	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
1,2-Dichloropropane	U		0.00144	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
1,1-Dichloropropene	U		0.000794	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
1,3-Dichloropropane	U		0.00198	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
cis-1,3-Dichloropropene	U		0.000769	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
trans-1,3-Dichloropropene	U		0.00173	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
2,2-Dichloropropane	U		0.000899	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
Di-isopropyl ether	U		0.000397	0.00100	0.00113	1	02/02/2020 16:27	WG1421220
Ethylbenzene	0.00125	J	0.000601	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
Hexachloro-1,3-butadiene	U		0.0144	0.0250	0.0283	1	02/02/2020 16:27	WG1421220
Isopropylbenzene	U		0.000979	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
p-Isopropyltoluene	U		0.00264	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
2-Butanone (MEK)	0.0208	B J	0.0142	0.0250	0.0283	1	02/02/2020 16:27	WG1421220
Methylene Chloride	U		0.00753	0.0250	0.0283	1	02/02/2020 16:27	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0113	0.0250	0.0283	1	02/02/2020 16:27	WG1421220
Methyl tert-butyl ether	U		0.000335	0.00100	0.00113	1	02/02/2020 16:27	WG1421220
Naphthalene	U		0.00354	0.0125	0.0142	1	02/02/2020 16:27	WG1421220
n-Propylbenzene	U		0.00134	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
Styrene	U		0.00310	0.0125	0.0142	1	02/02/2020 16:27	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000567	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000442	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000765	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
Tetrachloroethene	0.00287		0.000794	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
Toluene	0.00888		0.00142	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
1,2,3-Trichlorobenzene	U		0.000709	0.0125	0.0142	1	02/02/2020 16:27	WG1421220
1,2,4-Trichlorobenzene	U		0.00547	0.0125	0.0142	1	02/02/2020 16:27	WG1421220
1,1,1-Trichloroethane	U		0.000312	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
1,1,2-Trichloroethane	U		0.00100	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
Trichloroethene	U		0.000454	0.00100	0.00113	1	02/02/2020 16:27	WG1421220
Trichlorofluoromethane	U		0.000567	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
1,2,3-Trichloropropane	U		0.00578	0.0125	0.0142	1	02/02/2020 16:27	WG1421220
1,2,4-Trimethylbenzene	0.00366	J	0.00132	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
1,2,3-Trimethylbenzene	0.00225	J	0.00130	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
Vinyl chloride	U		0.000774	0.00250	0.00283	1	02/02/2020 16:27	WG1421220
1,3,5-Trimethylbenzene	0.00183	J	0.00122	0.00500	0.00567	1	02/02/2020 16:27	WG1421220
Xylenes, Total	0.0100		0.00542	0.00650	0.00737	1	02/02/2020 16:27	WG1421220
(S) Toluene-d8	*105*				*75.0-131*		*02/02/2020 16:27*	WG1421220
(S) 4-Bromofluorobenzene	*89.4*				*67.0-138*		*02/02/2020 16:27*	WG1421220
(S) 1,2-Dichloroethane-d4	*95.2*				*70.0-130*		*02/02/2020 16:27*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	134		7.54	4.00	22.7	5	02/05/2020 16:06	WG1422362
Residual Range Organics (RRO)	325		18.9	10.0	56.7	5	02/05/2020 16:06	WG1422362
(S) o-Terphenyl	*19.5*				*18.0-148*		*02/05/2020 16:06*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.9		1	02/04/2020 17:25	WG1422021

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0690		0.00308	0.0300	0.0330	1	02/03/2020 21:31	WG1421356

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.54		0.506	2.00	2.20	1	02/03/2020 21:18	WG1421187
Barium	83.2		0.187	0.500	0.550	1	02/03/2020 21:18	WG1421187
Cadmium	0.357	J	0.0770	0.500	0.550	1	02/03/2020 21:18	WG1421187
Chromium	27.1		0.154	1.00	1.10	1	02/03/2020 21:18	WG1421187
Lead	47.3		0.209	0.500	0.550	1	02/03/2020 21:18	WG1421187
Selenium	U		0.682	2.00	2.20	1	02/03/2020 21:18	WG1421187
Silver	U		0.132	1.00	1.10	1	02/03/2020 21:18	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	0.996	J	0.933	0.100	2.75	25	02/02/2020 07:17	WG1421058
(S) a,a,a-Trifluorotoluene(FID)	*92.4*				*77.0-120*		*02/02/2020 07:17*	WG1421058

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0151	0.0250	0.0275	1	02/02/2020 16:46	WG1421220
Acrylonitrile	U		0.00209	0.0125	0.0138	1	02/02/2020 16:46	WG1421220
Benzene	U		0.000440	0.00100	0.00110	1	02/02/2020 16:46	WG1421220
Bromobenzene	U		0.00116	0.0125	0.0138	1	02/02/2020 16:46	WG1421220
Bromodichloromethane	U		0.000867	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
Bromoform	U		0.00658	0.0250	0.0275	1	02/02/2020 16:46	WG1421220
Bromomethane	U		0.00407	0.0125	0.0138	1	02/02/2020 16:46	WG1421220
n-Butylbenzene	U		0.00423	0.0125	0.0138	1	02/02/2020 16:46	WG1421220
sec-Butylbenzene	U		0.00278	0.0125	0.0138	1	02/02/2020 16:46	WG1421220
tert-Butylbenzene	U		0.00171	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
Carbon tetrachloride	U		0.00119	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
Chlorobenzene	U		0.000631	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
Chlorodibromomethane	U		0.000495	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
Chloroethane	U		0.00119	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
Chloroform	U		0.000457	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
Chloromethane	U		0.00153	0.0125	0.0138	1	02/02/2020 16:46	WG1421220
2-Chlorotoluene	U		0.00101	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
4-Chlorotoluene	U		0.00124	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00561	0.0250	0.0275	1	02/02/2020 16:46	WG1421220
1,2-Dibromoethane	U		0.000578	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
Dibromomethane	U		0.00110	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
1,2-Dichlorobenzene	U		0.00160	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
1,3-Dichlorobenzene	U		0.00187	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
1,4-Dichlorobenzene	U		0.00217	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
Dichlorodifluoromethane	U		0.000900	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
1,1-Dichloroethane	U		0.000633	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
1,2-Dichloroethane	U		0.000523	0.00250	0.00275	1	02/02/2020 16:46	WG1421220

BAY 3 E SIDEWALL

Collected date/time: 01/29/20 11:04

SAMPLE RESULTS - 12

L1184753

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000550	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
cis-1,2-Dichloroethene	U		0.000759	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
trans-1,2-Dichloroethene	U		0.00157	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
1,2-Dichloropropane	U		0.00140	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
1,1-Dichloropropene	U		0.000770	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
1,3-Dichloropropane	U		0.00193	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
cis-1,3-Dichloropropene	U		0.000746	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
trans-1,3-Dichloropropene	U		0.00168	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
2,2-Dichloropropane	U		0.000873	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
Di-isopropyl ether	U		0.000385	0.00100	0.00110	1	02/02/2020 16:46	WG1421220
Ethylbenzene	0.00109	J	0.000583	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
Hexachloro-1,3-butadiene	U		0.0140	0.0250	0.0275	1	02/02/2020 16:46	WG1421220
Isopropylbenzene	U		0.000950	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
p-Isopropyltoluene	U		0.00256	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
2-Butanone (MEK)	0.0212	B J	0.0138	0.0250	0.0275	1	02/02/2020 16:46	WG1421220
Methylene Chloride	U		0.00731	0.0250	0.0275	1	02/02/2020 16:46	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0250	0.0275	1	02/02/2020 16:46	WG1421220
Methyl tert-butyl ether	U		0.000325	0.00100	0.00110	1	02/02/2020 16:46	WG1421220
Naphthalene	U		0.00343	0.0125	0.0138	1	02/02/2020 16:46	WG1421220
n-Propylbenzene	U		0.00130	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
Styrene	U		0.00300	0.0125	0.0138	1	02/02/2020 16:46	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000550	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000429	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000743	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
Tetrachloroethene	U		0.000770	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
Toluene	0.00616		0.00138	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
1,2,3-Trichlorobenzene	U		0.000688	0.0125	0.0138	1	02/02/2020 16:46	WG1421220
1,2,4-Trichlorobenzene	U		0.00531	0.0125	0.0138	1	02/02/2020 16:46	WG1421220
1,1,1-Trichloroethane	U		0.000303	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
1,1,2-Trichloroethane	U		0.000972	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
Trichloroethene	U		0.000440	0.00100	0.00110	1	02/02/2020 16:46	WG1421220
Trichlorofluoromethane	U		0.000550	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
1,2,3-Trichloropropane	U		0.00561	0.0125	0.0138	1	02/02/2020 16:46	WG1421220
1,2,4-Trimethylbenzene	0.00603		0.00128	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
1,2,3-Trimethylbenzene	0.00322	J	0.00127	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
Vinyl chloride	U		0.000752	0.00250	0.00275	1	02/02/2020 16:46	WG1421220
1,3,5-Trimethylbenzene	0.00275	J	0.00119	0.00500	0.00550	1	02/02/2020 16:46	WG1421220
Xylenes, Total	0.0101		0.00526	0.00650	0.00715	1	02/02/2020 16:46	WG1421220
(S) Toluene-d8	*106*				*75.0-131*		*02/02/2020 16:46*	WG1421220
(S) 4-Bromofluorobenzene	*92.8*				*67.0-138*		*02/02/2020 16:46*	WG1421220
(S) 1,2-Dichloroethane-d4	*90.9*				*70.0-130*		*02/02/2020 16:46*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	281		14.6	4.00	44.0	10	02/05/2020 02:51	WG1422362
Residual Range Organics (RRO)	630		36.7	10.0	110	10	02/05/2020 02:51	WG1422362
(S) o-Terphenyl	*55.3*				*18.0-148*		*02/05/2020 02:51*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.7		1	02/04/2020 17:25	WG1422021

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0283	J	0.00316	0.0300	0.0338	1	02/03/2020 21:34	WG1421356

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.91		0.519	2.00	2.26	1	02/03/2020 21:20	WG1421187
Barium	71.9		0.192	0.500	0.564	1	02/03/2020 21:20	WG1421187
Cadmium	0.0863	J	0.0790	0.500	0.564	1	02/03/2020 21:20	WG1421187
Chromium	25.7		0.158	1.00	1.13	1	02/03/2020 21:20	WG1421187
Lead	30.2		0.214	0.500	0.564	1	02/03/2020 21:20	WG1421187
Selenium	U		0.699	2.00	2.26	1	02/03/2020 21:20	WG1421187
Silver	U		0.135	1.00	1.13	1	02/03/2020 21:20	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.44	J	0.956	0.100	2.82	25	02/02/2020 06:42	WG1420951
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*02/02/2020 06:42*	WG1420951

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0181	0.0250	0.0330	1.17	02/02/2020 17:05	WG1421220
Acrylonitrile	U		0.00251	0.0125	0.0165	1.17	02/02/2020 17:05	WG1421220
Benzene	U		0.000528	0.00100	0.00132	1.17	02/02/2020 17:05	WG1421220
Bromobenzene	U		0.00139	0.0125	0.0165	1.17	02/02/2020 17:05	WG1421220
Bromodichloromethane	U		0.00104	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
Bromoform	U		0.00789	0.0250	0.0330	1.17	02/02/2020 17:05	WG1421220
Bromomethane	U		0.00488	0.0125	0.0165	1.17	02/02/2020 17:05	WG1421220
n-Butylbenzene	U		0.00507	0.0125	0.0165	1.17	02/02/2020 17:05	WG1421220
sec-Butylbenzene	U		0.00334	0.0125	0.0165	1.17	02/02/2020 17:05	WG1421220
tert-Butylbenzene	U		0.00205	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
Carbon tetrachloride	U		0.00143	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
Chlorobenzene	U		0.000756	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
Chlorodibromomethane	U		0.000594	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
Chloroethane	U		0.00143	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
Chloroform	U		0.000548	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
Chloromethane	U		0.00183	0.0125	0.0165	1.17	02/02/2020 17:05	WG1421220
2-Chlorotoluene	U		0.00121	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
4-Chlorotoluene	U		0.00149	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00673	0.0250	0.0330	1.17	02/02/2020 17:05	WG1421220
1,2-Dibromoethane	U		0.000693	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
Dibromomethane	U		0.00132	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
1,2-Dichlorobenzene	U		0.00191	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
1,3-Dichlorobenzene	U		0.00224	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
1,4-Dichlorobenzene	U		0.00260	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
Dichlorodifluoromethane	U		0.00108	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
1,1-Dichloroethane	U		0.000759	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
1,2-Dichloroethane	U		0.000627	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220

BAY 3 W SIDEWALL

Collected date/time: 01/29/20 11:05

SAMPLE RESULTS - 13

L1184753

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000660	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
cis-1,2-Dichloroethene	U		0.000911	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
trans-1,2-Dichloroethene	U		0.00189	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
1,2-Dichloropropane	U		0.00168	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
1,1-Dichloropropene	U		0.000924	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
1,3-Dichloropropane	U		0.00231	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
cis-1,3-Dichloropropene	U		0.000895	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
trans-1,3-Dichloropropene	U		0.00202	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
2,2-Dichloropropane	U		0.00105	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
Di-isopropyl ether	U		0.000462	0.00100	0.00132	1.17	02/02/2020 17:05	WG1421220
Ethylbenzene	0.00135	J	0.000699	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
Hexachloro-1,3-butadiene	U		0.0168	0.0250	0.0330	1.17	02/02/2020 17:05	WG1421220
Isopropylbenzene	U		0.00114	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
p-Isopropyltoluene	U		0.00307	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
2-Butanone (MEK)	U		0.0165	0.0250	0.0330	1.17	02/02/2020 17:05	WG1421220
Methylene Chloride	U		0.00876	0.0250	0.0330	1.17	02/02/2020 17:05	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0132	0.0250	0.0330	1.17	02/02/2020 17:05	WG1421220
Methyl tert-butyl ether	U		0.000389	0.00100	0.00132	1.17	02/02/2020 17:05	WG1421220
Naphthalene	0.00524	J	0.00412	0.0125	0.0165	1.17	02/02/2020 17:05	WG1421220
n-Propylbenzene	0.00182	J	0.00156	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
Styrene	U		0.00360	0.0125	0.0165	1.17	02/02/2020 17:05	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000660	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000515	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000891	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
Tetrachloroethene	0.00307	J	0.000924	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
Toluene	0.0114		0.00165	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
1,2,3-Trichlorobenzene	U		0.000825	0.0125	0.0165	1.17	02/02/2020 17:05	WG1421220
1,2,4-Trichlorobenzene	U		0.00636	0.0125	0.0165	1.17	02/02/2020 17:05	WG1421220
1,1,1-Trichloroethane	U		0.000363	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
1,1,2-Trichloroethane	U		0.00117	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
Trichloroethene	U		0.000528	0.00100	0.00132	1.17	02/02/2020 17:05	WG1421220
Trichlorofluoromethane	U		0.000660	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
1,2,3-Trichloropropane	U		0.00673	0.0125	0.0165	1.17	02/02/2020 17:05	WG1421220
1,2,4-Trimethylbenzene	0.0267		0.00153	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
1,2,3-Trimethylbenzene	0.00881		0.00152	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
Vinyl chloride	U		0.000901	0.00250	0.00330	1.17	02/02/2020 17:05	WG1421220
1,3,5-Trimethylbenzene	0.0102		0.00143	0.00500	0.00660	1.17	02/02/2020 17:05	WG1421220
Xylenes, Total	0.0136		0.00631	0.00650	0.00857	1.17	02/02/2020 17:05	WG1421220
(S) Toluene-d8	*104*				*75.0-131*		*02/02/2020 17:05*	WG1421220
(S) 4-Bromofluorobenzene	*89.9*				*67.0-138*		*02/02/2020 17:05*	WG1421220
(S) 1,2-Dichloroethane-d4	*94.0*				*70.0-130*		*02/02/2020 17:05*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	134		1.50	4.00	4.51	1	02/05/2020 02:13	WG1422362
Residual Range Organics (RRO)	267		18.8	10.0	56.4	5	02/05/2020 16:44	WG1422362
(S) o-Terphenyl	*35.1*				*18.0-148*		*02/05/2020 02:13*	WG1422362
(S) o-Terphenyl	*30.2*				*18.0-148*		*02/05/2020 16:44*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	85.2		1	02/04/2020 17:25	WG1422021

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0141	J	0.00329	0.0300	0.0352	1	02/03/2020 21:41	WG1421356

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	9.22		0.540	2.00	2.35	1	02/03/2020 21:28	WG1421187
Barium	48.5		0.200	0.500	0.587	1	02/03/2020 21:28	WG1421187
Cadmium	U		0.0822	0.500	0.587	1	02/03/2020 21:28	WG1421187
Chromium	20.9		0.164	1.00	1.17	1	02/03/2020 21:28	WG1421187
Lead	4.11		0.223	0.500	0.587	1	02/03/2020 21:28	WG1421187
Selenium	U		0.728	2.00	2.35	1	02/03/2020 21:28	WG1421187
Silver	U		0.141	1.00	1.17	1	02/03/2020 21:28	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.995	0.100	2.94	25	02/02/2020 07:06	WG1420951
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*02/02/2020 07:06*	WG1420951

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0161	0.0250	0.0294	1	02/02/2020 17:24	WG1421220
Acrylonitrile	U		0.00223	0.0125	0.0147	1	02/02/2020 17:24	WG1421220
Benzene	U		0.000470	0.00100	0.00117	1	02/02/2020 17:24	WG1421220
Bromobenzene	U		0.00123	0.0125	0.0147	1	02/02/2020 17:24	WG1421220
Bromodichloromethane	U		0.000925	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
Bromoform	U		0.00702	0.0250	0.0294	1	02/02/2020 17:24	WG1421220
Bromomethane	U		0.00434	0.0125	0.0147	1	02/02/2020 17:24	WG1421220
n-Butylbenzene	U		0.00451	0.0125	0.0147	1	02/02/2020 17:24	WG1421220
sec-Butylbenzene	U		0.00297	0.0125	0.0147	1	02/02/2020 17:24	WG1421220
tert-Butylbenzene	U		0.00182	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
Carbon tetrachloride	U		0.00127	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
Chlorobenzene	U		0.000673	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
Chlorodibromomethane	U		0.000528	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
Chloroethane	U		0.00127	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
Chloroform	U		0.000487	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
Chloromethane	U		0.00163	0.0125	0.0147	1	02/02/2020 17:24	WG1421220
2-Chlorotoluene	U		0.00108	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
4-Chlorotoluene	U		0.00133	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00599	0.0250	0.0294	1	02/02/2020 17:24	WG1421220
1,2-Dibromoethane	U		0.000616	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
Dibromomethane	U		0.00117	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
1,2-Dichlorobenzene	U		0.00170	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
1,3-Dichlorobenzene	U		0.00200	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
1,4-Dichlorobenzene	U		0.00231	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
Dichlorodifluoromethane	U		0.000960	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
1,1-Dichloroethane	U		0.000675	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
1,2-Dichloroethane	U		0.000558	0.00250	0.00294	1	02/02/2020 17:24	WG1421220

EXTERIOR SUMP BASE

Collected date/time: 01/29/20 12:15

SAMPLE RESULTS - 14

L1184753

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000587	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
cis-1,2-Dichloroethene	U		0.000810	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
trans-1,2-Dichloroethene	U		0.00168	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
1,2-Dichloropropane	U		0.00149	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
1,1-Dichloropropene	U		0.000822	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
1,3-Dichloropropane	U		0.00205	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
cis-1,3-Dichloropropene	U		0.000796	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
trans-1,3-Dichloropropene	U		0.00180	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
2,2-Dichloropropane	U		0.000931	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
Di-isopropyl ether	U		0.000411	0.00100	0.00117	1	02/02/2020 17:24	WG1421220
Ethylbenzene	0.000676	J	0.000622	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
Hexachloro-1,3-butadiene	U		0.0149	0.0250	0.0294	1	02/02/2020 17:24	WG1421220
Isopropylbenzene	U		0.00101	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
p-Isopropyltoluene	U		0.00274	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
2-Butanone (MEK)	U		0.0147	0.0250	0.0294	1	02/02/2020 17:24	WG1421220
Methylene Chloride	U		0.00780	0.0250	0.0294	1	02/02/2020 17:24	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0250	0.0294	1	02/02/2020 17:24	WG1421220
Methyl tert-butyl ether	U		0.000346	0.00100	0.00117	1	02/02/2020 17:24	WG1421220
Naphthalene	U		0.00366	0.0125	0.0147	1	02/02/2020 17:24	WG1421220
n-Propylbenzene	U		0.00139	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
Styrene	U		0.00321	0.0125	0.0147	1	02/02/2020 17:24	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000587	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000458	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000793	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
Tetrachloroethene	U		0.000822	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
Toluene	0.00209	J	0.00147	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
1,2,3-Trichlorobenzene	U		0.000734	0.0125	0.0147	1	02/02/2020 17:24	WG1421220
1,2,4-Trichlorobenzene	U		0.00566	0.0125	0.0147	1	02/02/2020 17:24	WG1421220
1,1,1-Trichloroethane	U		0.000323	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
1,1,2-Trichloroethane	U		0.00104	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
Trichloroethene	U		0.000470	0.00100	0.00117	1	02/02/2020 17:24	WG1421220
Trichlorofluoromethane	U		0.000587	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
1,2,3-Trichloropropane	U		0.00599	0.0125	0.0147	1	02/02/2020 17:24	WG1421220
1,2,4-Trimethylbenzene	U		0.00136	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
1,2,3-Trimethylbenzene	U		0.00135	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
Vinyl chloride	U		0.000802	0.00250	0.00294	1	02/02/2020 17:24	WG1421220
1,3,5-Trimethylbenzene	U		0.00127	0.00500	0.00587	1	02/02/2020 17:24	WG1421220
Xylenes, Total	U		0.00561	0.00650	0.00763	1	02/02/2020 17:24	WG1421220
(S) Toluene-d8	*107*				*75.0-131*		*02/02/2020 17:24*	WG1421220
(S) 4-Bromofluorobenzene	*93.4*				*67.0-138*		*02/02/2020 17:24*	WG1421220
(S) 1,2-Dichloroethane-d4	*93.7*				*70.0-130*		*02/02/2020 17:24*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.56	4.00	4.70	1	02/05/2020 00:04	WG1422362
Residual Range Organics (RRO)	U		3.91	10.0	11.7	1	02/05/2020 00:04	WG1422362
(S) o-Terphenyl	*52.0*				*18.0-148*		*02/05/2020 00:04*	WG1422362

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.1		1	02/04/2020 17:25	WG1422021

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0123	J	0.00325	0.0300	0.0348	1	02/03/2020 21:44	WG1421356

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.28		0.534	2.00	2.32	1	02/03/2020 21:31	WG1421187
Barium	53.2		0.197	0.500	0.581	1	02/03/2020 21:31	WG1421187
Cadmium	U		0.0813	0.500	0.581	1	02/03/2020 21:31	WG1421187
Chromium	21.5		0.163	1.00	1.16	1	02/03/2020 21:31	WG1421187
Lead	4.31		0.221	0.500	0.581	1	02/03/2020 21:31	WG1421187
Selenium	U		0.720	2.00	2.32	1	02/03/2020 21:31	WG1421187
Silver	U		0.139	1.00	1.16	1	02/03/2020 21:31	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.984	0.100	2.90	25	02/02/2020 07:30	WG1420951
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*02/02/2020 07:30*	WG1420951

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0159	0.0250	0.0290	1	02/05/2020 00:45	WG1422596
Acrylonitrile	U		0.00221	0.0125	0.0145	1	02/05/2020 00:45	WG1422596
Benzene	U		0.000465	0.00100	0.00116	1	02/05/2020 00:45	WG1422596
Bromobenzene	U		0.00122	0.0125	0.0145	1	02/05/2020 00:45	WG1422596
Bromodichloromethane	U		0.000915	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
Bromoform	U		0.00695	0.0250	0.0290	1	02/05/2020 00:45	WG1422596
Bromomethane	U		0.00430	0.0125	0.0145	1	02/05/2020 00:45	WG1422596
n-Butylbenzene	U		0.00446	0.0125	0.0145	1	02/05/2020 00:45	WG1422596
sec-Butylbenzene	U		0.00294	0.0125	0.0145	1	02/05/2020 00:45	WG1422596
tert-Butylbenzene	U		0.00180	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
Carbon tetrachloride	U		0.00125	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
Chlorobenzene	U		0.000666	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
Chlorodibromomethane	U		0.000523	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
Chloroethane	U		0.00125	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
Chloroform	U		0.000482	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
Chloromethane	U		0.00161	0.0125	0.0145	1	02/05/2020 00:45	WG1422596
2-Chlorotoluene	U		0.00107	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
4-Chlorotoluene	U		0.00131	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
1,2-Dibromo-3-Chloropropane	U		0.00592	0.0250	0.0290	1	02/05/2020 00:45	WG1422596
1,2-Dibromoethane	U		0.000610	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
Dibromomethane	U		0.00116	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
1,2-Dichlorobenzene	U		0.00168	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
1,3-Dichlorobenzene	U		0.00197	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
1,4-Dichlorobenzene	U		0.00229	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
Dichlorodifluoromethane	U		0.000950	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
1,1-Dichloroethane	U		0.000668	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
1,2-Dichloroethane	U		0.000552	0.00250	0.00290	1	02/05/2020 00:45	WG1422596

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000581	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
cis-1,2-Dichloroethene	U		0.000801	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
trans-1,2-Dichloroethene	U		0.00166	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
1,2-Dichloropropane	U		0.00148	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
1,1-Dichloropropene	U		0.000813	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
1,3-Dichloropropane	U		0.00203	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
cis-1,3-Dichloropropene	U		0.000788	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
trans-1,3-Dichloropropene	U		0.00178	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
2,2-Dichloropropane	U		0.000921	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
Di-isopropyl ether	U		0.000407	0.00100	0.00116	1	02/05/2020 00:45	WG1422596
Ethylbenzene	U		0.000616	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
Hexachloro-1,3-butadiene	U		0.0148	0.0250	0.0290	1	02/05/2020 00:45	WG1422596
Isopropylbenzene	U		0.00100	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
p-Isopropyltoluene	U		0.00271	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
2-Butanone (MEK)	U		0.0145	0.0250	0.0290	1	02/05/2020 00:45	WG1422596
Methylene Chloride	U		0.00771	0.0250	0.0290	1	02/05/2020 00:45	WG1422596
4-Methyl-2-pentanone (MIBK)	U		0.0116	0.0250	0.0290	1	02/05/2020 00:45	WG1422596
Methyl tert-butyl ether	U		0.000343	0.00100	0.00116	1	02/05/2020 00:45	WG1422596
Naphthalene	U		0.00362	0.0125	0.0145	1	02/05/2020 00:45	WG1422596
n-Propylbenzene	U		0.00137	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
Styrene	U		0.00317	0.0125	0.0145	1	02/05/2020 00:45	WG1422596
1,1,1,2-Tetrachloroethane	U		0.000581	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
1,1,2,2-Tetrachloroethane	U		0.000453	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
1,1,2-Trichlorotrifluoroethane	U		0.000784	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
Tetrachloroethene	U		0.000813	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
Toluene	U		0.00145	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
1,2,3-Trichlorobenzene	U		0.000726	0.0125	0.0145	1	02/05/2020 00:45	WG1422596
1,2,4-Trichlorobenzene	U		0.00560	0.0125	0.0145	1	02/05/2020 00:45	WG1422596
1,1,1-Trichloroethane	U		0.000319	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
1,1,2-Trichloroethane	U		0.00103	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
Trichloroethene	U		0.000465	0.00100	0.00116	1	02/05/2020 00:45	WG1422596
Trichlorofluoromethane	U		0.000581	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
1,2,3-Trichloropropane	U		0.00592	0.0125	0.0145	1	02/05/2020 00:45	WG1422596
1,2,4-Trimethylbenzene	U		0.00135	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
1,2,3-Trimethylbenzene	U		0.00134	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
Vinyl chloride	U		0.000793	0.00250	0.00290	1	02/05/2020 00:45	WG1422596
1,3,5-Trimethylbenzene	U		0.00125	0.00500	0.00581	1	02/05/2020 00:45	WG1422596
Xylenes, Total	U		0.00555	0.00650	0.00755	1	02/05/2020 00:45	WG1422596
(S) Toluene-d8	*100*				*75.0-131*		*02/05/2020 00:45*	WG1422596
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*02/05/2020 00:45*	WG1422596
(S) 1,2-Dichloroethane-d4	*89.9*				*70.0-130*		*02/05/2020 00:45*	WG1422596

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	1.88	J	1.54	4.00	4.65	1	02/05/2020 15:28	WG1422362
Residual Range Organics (RRO)	U		3.87	10.0	11.6	1	02/05/2020 15:28	WG1422362
(S) o-Terphenyl	*57.5*				*18.0-148*		*02/05/2020 15:28*	WG1422362

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	86.0		1	02/04/2020 23:45	WG1422022

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0240	J	0.00326	0.0300	0.0349	1	02/03/2020 20:50	WG1421356

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	54.8		0.535	2.00	2.33	1	02/03/2020 21:33	WG1421187
Barium	132		0.198	0.500	0.582	1	02/03/2020 21:33	WG1421187
Cadmium	U		0.0814	0.500	0.582	1	02/03/2020 21:33	WG1421187
Chromium	28.1		0.163	1.00	1.16	1	02/03/2020 21:33	WG1421187
Lead	50.7		0.221	0.500	0.582	1	02/03/2020 21:33	WG1421187
Selenium	U		0.721	2.00	2.33	1	02/03/2020 21:33	WG1421187
Silver	U		0.140	1.00	1.16	1	02/03/2020 21:33	WG1421187

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.986	0.100	2.91	25	02/03/2020 16:57	WG1421659
(S) a,a,a-Trifluorotoluene(FID)	*107*				*77.0-120*		*02/03/2020 16:57*	WG1421659

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0159	0.0250	0.0291	1	02/02/2020 18:02	WG1421220
Acrylonitrile	U		0.00221	0.0125	0.0145	1	02/02/2020 18:02	WG1421220
Benzene	U		0.000465	0.00100	0.00116	1	02/02/2020 18:02	WG1421220
Bromobenzene	U		0.00122	0.0125	0.0145	1	02/02/2020 18:02	WG1421220
Bromodichloromethane	U		0.000917	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
Bromoform	U		0.00696	0.0250	0.0291	1	02/02/2020 18:02	WG1421220
Bromomethane	U		0.00430	0.0125	0.0145	1	02/02/2020 18:02	WG1421220
n-Butylbenzene	U		0.00447	0.0125	0.0145	1	02/02/2020 18:02	WG1421220
sec-Butylbenzene	U		0.00294	0.0125	0.0145	1	02/02/2020 18:02	WG1421220
tert-Butylbenzene	U		0.00180	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
Carbon tetrachloride	U		0.00126	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
Chlorobenzene	U		0.000667	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
Chlorodibromomethane	U		0.000524	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
Chloroethane	U		0.00126	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
Chloroform	U		0.000483	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
Chloromethane	U		0.00162	0.0125	0.0145	1	02/02/2020 18:02	WG1421220
2-Chlorotoluene	U		0.00107	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
4-Chlorotoluene	U		0.00131	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
1,2-Dibromo-3-Chloropropane	U		0.00593	0.0250	0.0291	1	02/02/2020 18:02	WG1421220
1,2-Dibromoethane	U		0.000611	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
Dibromomethane	U		0.00116	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
1,2-Dichlorobenzene	U		0.00169	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
1,3-Dichlorobenzene	U		0.00198	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
1,4-Dichlorobenzene	U		0.00229	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
Dichlorodifluoromethane	U		0.000952	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
1,1-Dichloroethane	U		0.000669	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
1,2-Dichloroethane	U		0.000553	0.00250	0.00291	1	02/02/2020 18:02	WG1421220

EXT SUMP S SIDEWALL

Collected date/time: 01/29/20 12:18

SAMPLE RESULTS - 16

L1184753

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000582	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
cis-1,2-Dichloroethene	U		0.000803	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
trans-1,2-Dichloroethene	U		0.00166	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
1,2-Dichloropropane	U		0.00148	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
1,1-Dichloropropene	U		0.000814	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
1,3-Dichloropropane	U		0.00204	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
cis-1,3-Dichloropropene	U		0.000789	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
trans-1,3-Dichloropropene	U		0.00178	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
2,2-Dichloropropane	U		0.000923	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
Di-isopropyl ether	U		0.000407	0.00100	0.00116	1	02/02/2020 18:02	WG1421220
Ethylbenzene	U		0.000617	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
Hexachloro-1,3-butadiene	U		0.0148	0.0250	0.0291	1	02/02/2020 18:02	WG1421220
Isopropylbenzene	U		0.00100	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
p-Isopropyltoluene	U		0.00271	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
2-Butanone (MEK)	U		0.0145	0.0250	0.0291	1	02/02/2020 18:02	WG1421220
Methylene Chloride	U		0.00773	0.0250	0.0291	1	02/02/2020 18:02	WG1421220
4-Methyl-2-pentanone (MIBK)	U		0.0116	0.0250	0.0291	1	02/02/2020 18:02	WG1421220
Methyl tert-butyl ether	U		0.000343	0.00100	0.00116	1	02/02/2020 18:02	WG1421220
Naphthalene	U		0.00363	0.0125	0.0145	1	02/02/2020 18:02	WG1421220
n-Propylbenzene	U		0.00137	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
Styrene	U		0.00318	0.0125	0.0145	1	02/02/2020 18:02	WG1421220
1,1,1,2-Tetrachloroethane	U		0.000582	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
1,1,2,2-Tetrachloroethane	U		0.000454	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
1,1,2-Trichlorotrifluoroethane	U		0.000785	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
Tetrachloroethene	U		0.000814	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
Toluene	0.00168	J	0.00145	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
1,2,3-Trichlorobenzene	U		0.000727	0.0125	0.0145	1	02/02/2020 18:02	WG1421220
1,2,4-Trichlorobenzene	U		0.00561	0.0125	0.0145	1	02/02/2020 18:02	WG1421220
1,1,1-Trichloroethane	U		0.000320	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
1,1,2-Trichloroethane	U		0.00103	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
Trichloroethene	U		0.000465	0.00100	0.00116	1	02/02/2020 18:02	WG1421220
Trichlorofluoromethane	U		0.000582	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
1,2,3-Trichloropropane	U		0.00593	0.0125	0.0145	1	02/02/2020 18:02	WG1421220
1,2,4-Trimethylbenzene	U		0.00135	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
1,2,3-Trimethylbenzene	U		0.00134	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
Vinyl chloride	U		0.000795	0.00250	0.00291	1	02/02/2020 18:02	WG1421220
1,3,5-Trimethylbenzene	U		0.00126	0.00500	0.00582	1	02/02/2020 18:02	WG1421220
Xylenes, Total	U		0.00556	0.00650	0.00756	1	02/02/2020 18:02	WG1421220
(S) Toluene-d8	*105*				*75.0-131*		*02/02/2020 18:02*	WG1421220
(S) 4-Bromofluorobenzene	*91.6*				*67.0-138*		*02/02/2020 18:02*	WG1421220
(S) 1,2-Dichloroethane-d4	*92.4*				*70.0-130*		*02/02/2020 18:02*	WG1421220

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	4.47	J	1.55	4.00	4.65	1	02/05/2020 01:10	WG1422362
Residual Range Organics (RRO)	12.3		3.87	10.0	11.6	1	02/05/2020 01:10	WG1422362
(S) o-Terphenyl	*36.3*				*18.0-148*		*02/05/2020 01:10*	WG1422362

Method Blank (MB)

(MB) R3497176-1 02/04/20 17:37

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1184753-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1184753-01 02/04/20 17:37 • (DUP) R3497176-3 02/04/20 17:37

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	87.2	88.2	1	1.09		10

Laboratory Control Sample (LCS)

(LCS) R3497176-2 02/04/20 17:37

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3497172-1 02/04/20 17:25

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1184753-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1184753-11 02/04/20 17:25 • (DUP) R3497172-3 02/04/20 17:25

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.2	89.5	1	1.42		10

Laboratory Control Sample (LCS)

(LCS) R3497172-2 02/04/20 17:25

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3497186-1 02/04/20 23:45

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1184753-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1184753-16 02/04/20 23:45 • (DUP) R3497186-3 02/04/20 23:45

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	86.0	86.9	1	1.14		10

Laboratory Control Sample (LCS)

(LCS) R3497186-2 02/04/20 23:45

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) R3496572-1 02/03/20 20:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.00280	0.0300

Laboratory Control Sample (LCS)

(LCS) R3496572-2 02/03/20 20:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.500	0.499	99.8	80.0-120	

L1184753-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184753-16 02/03/20 20:50 • (MS) R3496572-3 02/03/20 20:53 • (MSD) R3496572-4 02/03/20 20:55

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 %
Mercury	0.582	0.0240	0.632	0.582	104	95.9	1	75.0-125			8.21	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3496582-1 02/03/20 20:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	U		0.120	1.00

Laboratory Control Sample (LCS)

(LCS) R3496582-2 02/03/20 20:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	97.3	97.3	80.0-120	
Barium	100	103	103	80.0-120	
Cadmium	100	97.4	97.4	80.0-120	
Chromium	100	98.8	98.8	80.0-120	
Lead	100	99.0	99.0	80.0-120	
Selenium	100	98.3	98.3	80.0-120	
Silver	20.0	17.4	86.9	80.0-120	

L1184753-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184753-03 02/03/20 20:32 • (MS) R3496582-5 02/03/20 20:39 • (MSD) R3496582-6 02/03/20 20:42

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 %
Arsenic	134	8.66	129	130	89.8	90.8	1	75.0-125			1.04	20
Barium	134	76.3	213	197	103	90.6	1	75.0-125			7.79	20
Cadmium	134	U	121	120	90.6	90.1	1	75.0-125			0.468	20
Chromium	134	44.2	177	161	99.8	87.6	1	75.0-125			9.59	20
Lead	134	101	265	230	123	97.1	1	75.0-125			13.9	20
Selenium	134	U	120	119	89.6	89.3	1	75.0-125			0.395	20
Silver	26.7	U	21.5	21.2	80.4	79.2	1	75.0-125			1.52	20

Method Blank (MB)

(MB) R3496482-1 02/01/20 22:13

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) R3496482-2 02/01/20 22:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	4.63	84.2	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*107*	*77.0-120*	

L1184300-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184300-05 02/02/20 01:27 • (MS) R3496482-3 02/02/20 07:54 • (MSD) R3496482-4 02/02/20 08:18

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	171	3.82	160	197	91.2	113	25	10.0-149			20.8	27
(S) a,a,a-Trifluorotoluene(FID)					*109*	*110*		*77.0-120*				

Method Blank (MB)

(MB) R3496424-2 02/01/20 23:00

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)	*92.8*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3496424-1 02/01/20 21:57

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)			*107*	*77.0-120*	

L1184753-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184753-12 02/02/20 07:17 • (MS) R3496424-3 02/02/20 07:38 • (MSD) R3496424-4 02/02/20 07:59

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	0.996	93.9	97.4	81.9	85.0	25	10.0-149			3.68	27
(S) a,a,a-Trifluorotoluene(FID)					*108*	*108*		*77.0-120*				

Method Blank (MB)

(MB) R3496561-2 02/03/20 14:17

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)	*107*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3496561-1 02/03/20 11:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.56	101	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*92.4*	*77.0-120*	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3496923-2 02/02/20 09:49

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3496923-2 02/02/20 09:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0401		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 chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*107*			*75.0-131*
(S) 4-Bromofluorobenzene	*91.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*89.4*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3496923-1 02/02/20 08:52

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.652	104	10.0-160	
Acrylonitrile	0.625	0.617	98.7	45.0-153	
Benzene	0.125	0.111	88.8	70.0-123	
Bromobenzene	0.125	0.138	110	73.0-121	
Bromodichloromethane	0.125	0.124	99.2	73.0-121	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS)

(LCS) R3496923-1 02/02/20 08:52

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.137	110	64.0-132	
Bromomethane	0.125	0.123	98.4	56.0-147	
n-Butylbenzene	0.125	0.131	105	68.0-135	
sec-Butylbenzene	0.125	0.130	104	74.0-130	
tert-Butylbenzene	0.125	0.134	107	75.0-127	
Carbon tetrachloride	0.125	0.137	110	66.0-128	
Chlorobenzene	0.125	0.144	115	76.0-128	
Chlorodibromomethane	0.125	0.129	103	74.0-127	
Chloroethane	0.125	0.105	84.0	61.0-134	
Chloroform	0.125	0.0950	76.0	72.0-123	
Chloromethane	0.125	0.113	90.4	51.0-138	
2-Chlorotoluene	0.125	0.136	109	75.0-124	
4-Chlorotoluene	0.125	0.143	114	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.103	82.4	59.0-130	
1,2-Dibromoethane	0.125	0.121	96.8	74.0-128	
Dibromomethane	0.125	0.122	97.6	75.0-122	
1,2-Dichlorobenzene	0.125	0.114	91.2	76.0-124	
1,3-Dichlorobenzene	0.125	0.142	114	76.0-125	
1,4-Dichlorobenzene	0.125	0.127	102	77.0-121	
Dichlorodifluoromethane	0.125	0.104	83.2	43.0-156	
1,1-Dichloroethane	0.125	0.110	88.0	70.0-127	
1,2-Dichloroethane	0.125	0.129	103	65.0-131	
1,1-Dichloroethene	0.125	0.111	88.8	65.0-131	
cis-1,2-Dichloroethene	0.125	0.0977	78.2	73.0-125	
trans-1,2-Dichloroethene	0.125	0.0959	76.7	71.0-125	
1,2-Dichloropropane	0.125	0.139	111	74.0-125	
1,1-Dichloropropene	0.125	0.113	90.4	73.0-125	
1,3-Dichloropropane	0.125	0.125	100	80.0-125	
cis-1,3-Dichloropropene	0.125	0.132	106	76.0-127	
trans-1,3-Dichloropropene	0.125	0.136	109	73.0-127	
2,2-Dichloropropane	0.125	0.112	89.6	59.0-135	
Di-isopropyl ether	0.125	0.0973	77.8	60.0-136	
Ethylbenzene	0.125	0.124	99.2	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.102	81.6	57.0-150	
Isopropylbenzene	0.125	0.114	91.2	72.0-127	
p-Isopropyltoluene	0.125	0.132	106	72.0-133	
2-Butanone (MEK)	0.625	0.699	112	30.0-160	
Methylene Chloride	0.125	0.108	86.4	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.657	105	56.0-143	
Methyl tert-butyl ether	0.125	0.0877	70.2	66.0-132	

Laboratory Control Sample (LCS)

(LCS) R3496923-1 02/02/20 08:52

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.0867	69.4	59.0-130	
n-Propylbenzene	0.125	0.132	106	74.0-126	
Styrene	0.125	0.127	102	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.104	83.2	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.110	88.0	68.0-128	
Tetrachloroethene	0.125	0.133	106	70.0-136	
Toluene	0.125	0.129	103	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.119	95.2	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.0857	68.6	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.111	88.8	62.0-137	
1,1,1-Trichloroethane	0.125	0.111	88.8	69.0-126	
1,1,2-Trichloroethane	0.125	0.108	86.4	78.0-123	
Trichloroethene	0.125	0.130	104	76.0-126	
Trichlorofluoromethane	0.125	0.106	84.8	61.0-142	
1,2,3-Trichloropropane	0.125	0.140	112	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.0963	77.0	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.123	98.4	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.124	99.2	73.0-127	
Vinyl chloride	0.125	0.0983	78.6	63.0-134	
Xylenes, Total	0.375	0.356	94.9	72.0-127	
(S) Toluene-d8			*105*	*75.0-131*	
(S) 4-Bromofluorobenzene			*94.3*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*101*	*70.0-130*	

Method Blank (MB)

(MB) R3497284-2 02/04/20 16:41

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3497284-2 02/04/20 16:41

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0333		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 chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*86.4*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3497284-1 02/04/20 15:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.950	152	10.0-160	
Acrylonitrile	0.625	0.801	128	45.0-153	
Benzene	0.125	0.121	96.8	70.0-123	
Bromobenzene	0.125	0.117	93.6	73.0-121	
Bromodichloromethane	0.125	0.117	93.6	73.0-121	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS)

(LCS) R3497284-1 02/04/20 15:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.116	92.8	64.0-132	
Bromomethane	0.125	0.0983	78.6	56.0-147	
n-Butylbenzene	0.125	0.130	104	68.0-135	
sec-Butylbenzene	0.125	0.120	96.0	74.0-130	
tert-Butylbenzene	0.125	0.118	94.4	75.0-127	
Carbon tetrachloride	0.125	0.114	91.2	66.0-128	
Chlorobenzene	0.125	0.121	96.8	76.0-128	
Chlorodibromomethane	0.125	0.112	89.6	74.0-127	
Chloroethane	0.125	0.0858	68.6	61.0-134	
Chloroform	0.125	0.118	94.4	72.0-123	
Chloromethane	0.125	0.106	84.8	51.0-138	
2-Chlorotoluene	0.125	0.118	94.4	75.0-124	
4-Chlorotoluene	0.125	0.121	96.8	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.107	85.6	59.0-130	
1,2-Dibromoethane	0.125	0.122	97.6	74.0-128	
Dibromomethane	0.125	0.123	98.4	75.0-122	
1,2-Dichlorobenzene	0.125	0.123	98.4	76.0-124	
1,3-Dichlorobenzene	0.125	0.129	103	76.0-125	
1,4-Dichlorobenzene	0.125	0.120	96.0	77.0-121	
Dichlorodifluoromethane	0.125	0.100	80.0	43.0-156	
1,1-Dichloroethane	0.125	0.109	87.2	70.0-127	
1,2-Dichloroethane	0.125	0.119	95.2	65.0-131	
1,1-Dichloroethene	0.125	0.0976	78.1	65.0-131	
cis-1,2-Dichloroethene	0.125	0.0976	78.1	73.0-125	
trans-1,2-Dichloroethene	0.125	0.108	86.4	71.0-125	
1,2-Dichloropropane	0.125	0.115	92.0	74.0-125	
1,1-Dichloropropene	0.125	0.104	83.2	73.0-125	
1,3-Dichloropropane	0.125	0.106	84.8	80.0-125	
cis-1,3-Dichloropropene	0.125	0.107	85.6	76.0-127	
trans-1,3-Dichloropropene	0.125	0.119	95.2	73.0-127	
2,2-Dichloropropane	0.125	0.114	91.2	59.0-135	
Di-isopropyl ether	0.125	0.116	92.8	60.0-136	
Ethylbenzene	0.125	0.114	91.2	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.135	108	57.0-150	
Isopropylbenzene	0.125	0.120	96.0	72.0-127	
p-Isopropyltoluene	0.125	0.133	106	72.0-133	
2-Butanone (MEK)	0.625	0.613	98.1	30.0-160	
Methylene Chloride	0.125	0.111	88.8	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.689	110	56.0-143	
Methyl tert-butyl ether	0.125	0.140	112	66.0-132	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS)

(LCS) R3497284-1 02/04/20 15:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.112	89.6	59.0-130	
n-Propylbenzene	0.125	0.115	92.0	74.0-126	
Styrene	0.125	0.117	93.6	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.122	97.6	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.114	91.2	68.0-128	
Tetrachloroethene	0.125	0.109	87.2	70.0-136	
Toluene	0.125	0.0987	79.0	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.108	86.4	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.103	82.4	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.121	96.8	62.0-137	
1,1,1-Trichloroethane	0.125	0.119	95.2	69.0-126	
1,1,2-Trichloroethane	0.125	0.115	92.0	78.0-123	
Trichloroethene	0.125	0.113	90.4	76.0-126	
Trichlorofluoromethane	0.125	0.102	81.6	61.0-142	
1,2,3-Trichloropropane	0.125	0.113	90.4	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.104	83.2	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.120	96.0	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.114	91.2	73.0-127	
Vinyl chloride	0.125	0.105	84.0	63.0-134	
Xylenes, Total	0.375	0.360	96.0	72.0-127	
(S) Toluene-d8			*96.9*	*75.0-131*	
(S) 4-Bromofluorobenzene			*106*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*102*	*70.0-130*	

WG1422362

QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT L1184753-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3496960-1 02/04/20 23:03

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) R3496960-2 02/04/20 23:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	34.4	68.8	50.0-150	
(S) o-Terphenyl			*70.4*	*18.0-148*	

L1184753-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184753-12 02/05/20 02:51 • (MS) R3496960-3 02/05/20 03:04 • (MSD) R3496960-4 02/05/20 03:17

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)	55.0	281	325	311	80.0	56.0	10	50.0-150			4.15	20
(S) o-Terphenyl					*63.9*	*63.9*		*18.0-148*				

GLOSSARY OF TERMS

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1,6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T104704245-18-15
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

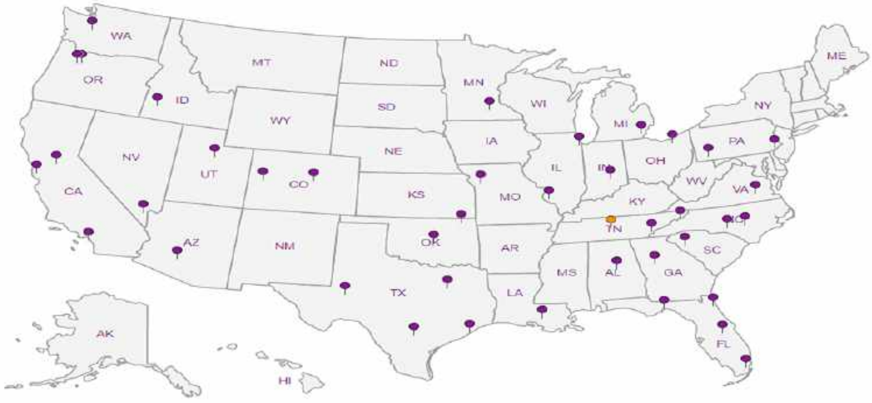
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected: Federal Way WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # R13411.07

Lab Project # **TGERESHTX-FEDERALWAY**

Collected by (print): K. Barnette

Site/Facility ID #

P.O. # **8859**

Collected by (signature): KBarnette

Immediately Packed on Ice N___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

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

SDG # L1184753

Table # F063

Acctnum: **TGERESHTX**
Template: **T162172**
Prelogin: **P752605**
PM: **134 - Mark W. Beasley**
PB: LC 1/27
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8270 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Hold				Remarks	Sample # (lab only)
Ext Sump E. Sidewall	Grab	SS	3	1/29/20	1219	3	X	X	X		X						01
Ext Sump W. Sidewall	Grab	SS	3	1/29/20	1220	3	X	X	X		X						02
Bay 1 Sump Base	Grab	SS	4	1/29/20	1330	3	X	X	X		X						03
Bay 1 Sump N. Sidewall	Grab	SS	4	1/29/20	1332	3	X	X	X		X						04
Bay 1 Sump S. Sidewall	Grab	SS	4	1/29/20	1333	3	X	X	X		X						05
Bay 1 Sump W. Sidewall	Grab	SS	4	1/29/20	1334	3	X	X	X		X						06
Bay 1 Sump E. Sidewall	Grab	SS	4	1/29/20	1335	3	X	X	X		X						07
Bay 1 Sump (2' blw base)	Grab	SS	4	1/29/20	1331	3						X					
Bay 4 Sump Line End	Grab	SS	1	1/30/20	1030	3	X	X	X		X						A
Bay 4 Sump Line End (2' blw)	Grab	SS	3	1/31/20	1035	3						X					

* 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 # 131248193235

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) KBarnette
Date: 1/30/20
Time: 1200
Received by: (Signature)
Trip Blank Received: Yes [✓ No] 0
[✓ HCl] / MeoH
TBR

Relinquished by: (Signature)
Date:
Time:
Received by: (Signature)
Temp: 1.5+.1=1.6 °C ~16
Bottles Received: 30

If preservation required by Login: Date/Time

Relinquished by: (Signature)
Date:
Time:
Received for lab by: (Signature)
Date: 1/31/20
Time: F&N
Hold: 01-204
Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page ___ of ___

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Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected: Federal Way WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # R13411.07

Lab Project # **TGERESHTX-FEDERALWAY**

Collected by (print): K. Barnette

Site/Facility ID #

P.O. # **8859**

Collected by (signature): KBarnette

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

SDG # 1184753

Table #

Acctnum: **TGERESHTX**

Template: **T162172**

Prelogin: **P752605**

PM: **134 - Mark W. Beasley**

PB: LC 1/27

Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8270 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Hold					Remarks	Sample # (lab only)
Bay 3 Sump Base	Grab	SS	5	1/29/20	1100	3	X	X	X		X							09
Bay 3 Sump (2' blw base)	Grab	SS	5	1/29/20	1101	3						X						
Bay 3 N. Sidewall	Grab	SS	5	1/29/20	1102	3	X	X	X		X							10
Bay 3 S. Sidewall	Grab	SS	5	1/29/20	1103	3	X	X	X		X							11
Bay 3 E. Sidewall	Grab	SS	5	1/29/20	1104	3	X	X	X		X							12
Bay 3 W. Sidewall	Grab	SS	5	1/29/20	1105	3	X	X	X		X							13
Exterior Sump Bse	Grab	SS	3	1/29/20	1215	3	X	X	X		X							14
Ext. Sump (2' blw base)	Grab	SS	3	1/29/20	1216	3						X						
Ext Sump N. Sidewall	Grab	SS	3	1/29/20	1217	3	X	X	X		X							15
Ext Sump S. Sidewall	Grab	SS	3	1/29/20	1218	3	X	X	X		X							16

* 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 # 1382 4419 3235

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) KBarnette	Date: 1/30/20	Time: 1200	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.5+.1=1.6 °C	Bottles Received: 60	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Clark	Date: 1/31/20	Time: 840	Hold:	Condition: NCF / OK

ANALYTICAL REPORT

March 11, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1187323
Samples Received:	01/31/2020
Project Number:	R13411.07
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SAMPLE SUMMARY

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SUMP LINE MIDPOINT L1187323-01 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/30/20 10:40	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1421886	1	02/04/20 23:50	02/04/20 23:59	JWW	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1425522	5	02/10/20 17:26	02/10/20 20:04	LD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1426219	5	02/11/20 22:16	02/12/20 18:37	AO	Mt. Juliet, TN

BAY 1 SUMP BASE L1187323-02 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 13:30	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422020	1	02/04/20 17:27	02/04/20 17:37	JWW	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1425522	5	02/10/20 17:26	02/10/20 20:07	LD	Mt. Juliet, TN

BAY 1 SUMP N SIDEWALL L1187323-03 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 13:32	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422020	1	02/04/20 17:27	02/04/20 17:37	JWW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1426219	1	02/11/20 22:16	02/12/20 15:42	AO	Mt. Juliet, TN

BAY 1 SUMP E SIDEWALL L1187323-04 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 13:35	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1421187	1	02/03/20 06:18	02/12/20 13:40	JDG	Mt. Juliet, TN
Total Solids by Method 2540 G-2011	WG1422021	1	02/04/20 17:16	02/04/20 17:25	JWW	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1425679	1	02/11/20 14:00	02/12/20 13:40	MSP	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 21:05	TRB	Mt. Juliet, TN

BAY 3 SUMP BASE L1187323-05 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 11:00	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422021	1	02/04/20 17:16	02/04/20 17:25	JWW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1426219	2	02/11/20 22:16	02/12/20 17:58	AO	Mt. Juliet, TN

EXT SUMP S SIDEWALL L1187323-06 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 12:18	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1422022	1	02/04/20 23:33	02/04/20 23:45	JWW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1426219	1	02/11/20 22:16	02/12/20 15:22	AO	Mt. Juliet, TN

SUMP LINE MIDPOINT 2' BLW L1187323-07 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	01/30/20 10:45	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1425751	1	02/11/20 16:14	02/11/20 16:26	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1424916	1	02/10/20 08:54	02/11/20 12:37	EL	Mt. Juliet, TN

	Collected by	Collected date/time	Received date/time
	K. Barnette	01/29/20 11:01	01/31/20 08:40

BAY 3 SUMP (2' BLW BASE) L1187323-08 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1425751	1	02/11/20 16:14	02/11/20 16:26	KBC	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1425992	10	02/12/20 07:06	02/13/20 03:33	CLG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1425992	100	02/12/20 07:06	02/14/20 15:55	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1426219	10	02/11/20 22:16	02/12/20 18:56	AO	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.

Mark W. Beasley
Project Manager

Report Revision History

Level II Report - Version 1: 02/15/20 12:59

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1187323-01, 02, 03, 04, 05, 06, 07 and 08
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1421187, WG1422021, WG1422020, WG1422022, WG1421886, WG1425522, WG1424916, WG1425751, WG1425679, WG1425992 and WG1426219

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1187323-01, 02, 03, 04, 05, 06, 07 and 08
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1421187, WG1422021, WG1422020, WG1422022, WG1421886, WG1425522, WG1424916, WG1425751, WG1425679, WG1425992 and WG1426219

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			3
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/11/2020 15:54
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1187323-01, 02, 03, 04, 05, 06, 07 and 08
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1421187, WG1422021, WG1422020, WG1422022, WG1421886, WG1425522, WG1424916, WG1425751, WG1425679, WG1425992 and WG1426219

ER #[1]	Description
1	NWTPHDX-NO SGT WG1425992 o-Terphenyl L1187323-08: Percent Recovery is outside of established control limits.
2	6010D WG1424916 Chromium: Percent Recovery is outside of established control limits.
3	6010D WG1424916 Chromium: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	65.1		1	02/04/2020 23:59	WG1421886

Metals (ICPMS) by Method 6020B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.521	J	0.292	0.100	0.768	5	02/10/2020 20:04	WG1425522

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0493	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Acenaphthylene	U		0.0515	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Anthracene	U		0.0485	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Benzidine	U		0.489	0.333	2.56	5	02/12/2020 18:37	WG1426219
Benzo(a)anthracene	0.0381	J	0.0329	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Benzo(b)fluoranthene	0.0825	J	0.0534	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Benzo(k)fluoranthene	U		0.0447	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Benzo(g,h,i)perylene	U		0.0554	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Benzo(a)pyrene	0.0456	J	0.0421	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Bis(2-chlorethoxy)methane	U		0.0591	0.333	2.56	5	02/12/2020 18:37	WG1426219
Bis(2-chloroethyl)ether	U		0.0688	0.333	2.56	5	02/12/2020 18:37	WG1426219
2,2-Oxybis(1-Chloropropane)	U		0.0584	0.333	2.56	5	02/12/2020 18:37	WG1426219
4-Bromophenyl-phenylether	U		0.0875	0.333	2.56	5	02/12/2020 18:37	WG1426219
2-Chloronaphthalene	U		0.0491	0.0333	0.256	5	02/12/2020 18:37	WG1426219
4-Chlorophenyl-phenylether	U		0.0481	0.333	2.56	5	02/12/2020 18:37	WG1426219
Chrysene	0.0576	J	0.0426	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Dibenz(a,h)anthracene	U		0.0630	0.0333	0.256	5	02/12/2020 18:37	WG1426219
1,2-Dichlorobenzene	U		0.0707	0.333	2.56	5	02/12/2020 18:37	WG1426219
1,3-Dichlorobenzene	U		0.0768	0.333	2.56	5	02/12/2020 18:37	WG1426219
1,4-Dichlorobenzene	U		0.0768	0.333	2.56	5	02/12/2020 18:37	WG1426219
3,3-Dichlorobenzidine	U		0.610	0.333	2.56	5	02/12/2020 18:37	WG1426219
2,4-Dinitrotoluene	U		0.0466	0.333	2.56	5	02/12/2020 18:37	WG1426219
2,6-Dinitrotoluene	U		0.0566	0.333	2.56	5	02/12/2020 18:37	WG1426219
Fluoranthene	0.0865	J	0.0381	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Fluorene	U		0.0524	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Hexachlorobenzene	U		0.0657	0.333	2.56	5	02/12/2020 18:37	WG1426219
Hexachloro-1,3-butadiene	U		0.0768	0.333	2.56	5	02/12/2020 18:37	WG1426219
Hexachlorocyclopentadiene	U		0.451	0.333	2.56	5	02/12/2020 18:37	WG1426219
Hexachloroethane	U		0.103	0.333	2.56	5	02/12/2020 18:37	WG1426219
Indeno(1,2,3-cd)pyrene	U		0.0593	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Isophorone	U		0.0401	0.333	2.56	5	02/12/2020 18:37	WG1426219
Naphthalene	U		0.0683	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Nitrobenzene	U		0.0534	0.333	2.56	5	02/12/2020 18:37	WG1426219
n-Nitrosodimethylamine	U		0.497	0.333	2.56	5	02/12/2020 18:37	WG1426219
n-Nitrosodiphenylamine	U		0.691	0.333	2.56	5	02/12/2020 18:37	WG1426219
n-Nitrosodi-n-propylamine	U		0.0696	0.333	2.56	5	02/12/2020 18:37	WG1426219
Phenanthrene	0.0666	J	0.0405	0.0333	0.256	5	02/12/2020 18:37	WG1426219
Pyridine	U		0.482	0.333	2.56	5	02/12/2020 18:37	WG1426219
Benzylbutyl phthalate	U		0.0791	0.333	2.56	5	02/12/2020 18:37	WG1426219
Bis(2-ethylhexyl)phthalate	0.537	J	0.0921	0.333	2.56	5	02/12/2020 18:37	WG1426219
Di-n-butyl phthalate	U		0.0837	0.333	2.56	5	02/12/2020 18:37	WG1426219
Diethyl phthalate	U		0.0531	0.333	2.56	5	02/12/2020 18:37	WG1426219
Dimethyl phthalate	U		0.0415	0.333	2.56	5	02/12/2020 18:37	WG1426219
Di-n-octyl phthalate	U		0.0696	0.333	2.56	5	02/12/2020 18:37	WG1426219
Pyrene	U		0.0944	0.0333	0.256	5	02/12/2020 18:37	WG1426219

SUMP LINE MIDPOINT

Collected date/time: 01/30/20 10:40

SAMPLE RESULTS - 01

L1187323

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.0673	0.333	2.56	5	02/12/2020 18:37	WG1426219
4-Chloro-3-methylphenol	U		0.0366	0.333	2.56	5	02/12/2020 18:37	WG1426219
2-Chlorophenol	U		0.0638	0.333	2.56	5	02/12/2020 18:37	WG1426219
2,4-Dichlorophenol	U		0.0573	0.333	2.56	5	02/12/2020 18:37	WG1426219
2,4-Dimethylphenol	U		0.362	0.333	2.56	5	02/12/2020 18:37	WG1426219
4,6-Dinitro-2-methylphenol	U		0.952	0.333	2.56	5	02/12/2020 18:37	WG1426219
2,4-Dinitrophenol	U		0.752	0.333	2.56	5	02/12/2020 18:37	WG1426219
2-Methylphenol	U		0.0757	0.333	2.56	5	02/12/2020 18:37	WG1426219
3&4-Methyl Phenol	U		0.0601	0.333	2.56	5	02/12/2020 18:37	WG1426219
2-Nitrophenol	U		0.0998	0.333	2.56	5	02/12/2020 18:37	WG1426219
4-Nitrophenol	U		0.403	0.333	2.56	5	02/12/2020 18:37	WG1426219
Pentachlorophenol	U		0.369	0.333	2.56	5	02/12/2020 18:37	WG1426219
Phenol	0.103	J	0.0534	0.333	2.56	5	02/12/2020 18:37	WG1426219
2,4,5-Trichlorophenol	U		0.0798	0.333	2.56	5	02/12/2020 18:37	WG1426219
2,4,6-Trichlorophenol	U		0.0598	0.333	2.56	5	02/12/2020 18:37	WG1426219
(S) 2-Fluorophenol	*66.1*				*12.0-120*		*02/12/2020 18:37*	WG1426219
(S) Phenol-d5	*57.7*				*10.0-120*		*02/12/2020 18:37*	WG1426219
(S) Nitrobenzene-d5	*58.2*				*10.0-122*		*02/12/2020 18:37*	WG1426219
(S) 2-Fluorobiphenyl	*57.0*				*15.0-120*		*02/12/2020 18:37*	WG1426219
(S) 2,4,6-Tribromophenol	*76.5*				*10.0-127*		*02/12/2020 18:37*	WG1426219
(S) p-Terphenyl-d14	*63.3*				*10.0-120*		*02/12/2020 18:37*	WG1426219

Sample Narrative:

L1187323-01 WG1426219: Dilution due to matrix.

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	74.9		1	02/04/2020 17:37	WG1422020

Metals (ICPMS) by Method 6020B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Selenium	U		0.254	0.100	0.668	5	02/10/2020 20:07	WG1425522

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.4		1	02/04/2020 17:37	WG1422020

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00760	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Acenaphthylene	U		0.00795	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Anthracene	U		0.00749	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Benzidine	U		0.0755	0.333	0.394	1	02/12/2020 15:42	WG1426219
Benzo(a)anthracene	U		0.00507	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Benzo(b)fluoranthene	U		0.00823	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Benzo(k)fluoranthene	U		0.00689	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Benzo(g,h,i)perylene	U		0.00854	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Benzo(a)pyrene	U		0.00649	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Bis(2-chlorethoxy)methane	U		0.00912	0.333	0.394	1	02/12/2020 15:42	WG1426219
Bis(2-chloroethyl)ether	U		0.0106	0.333	0.394	1	02/12/2020 15:42	WG1426219
2,2-Oxybis(1-Chloropropane)	U		0.00900	0.333	0.394	1	02/12/2020 15:42	WG1426219
4-Bromophenyl-phenylether	U		0.0135	0.333	0.394	1	02/12/2020 15:42	WG1426219
2-Chloronaphthalene	U		0.00757	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
4-Chlorophenyl-phenylether	U		0.00743	0.333	0.394	1	02/12/2020 15:42	WG1426219
Chrysene	U		0.00657	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Dibenz(a,h)anthracene	U		0.00972	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
1,2-Dichlorobenzene	U		0.0109	0.333	0.394	1	02/12/2020 15:42	WG1426219
1,3-Dichlorobenzene	U		0.0118	0.333	0.394	1	02/12/2020 15:42	WG1426219
1,4-Dichlorobenzene	U		0.0118	0.333	0.394	1	02/12/2020 15:42	WG1426219
3,3-Dichlorobenzidine	U		0.0940	0.333	0.394	1	02/12/2020 15:42	WG1426219
2,4-Dinitrotoluene	U		0.00719	0.333	0.394	1	02/12/2020 15:42	WG1426219
2,6-Dinitrotoluene	U		0.00873	0.333	0.394	1	02/12/2020 15:42	WG1426219
Fluoranthene	0.00642	J	0.00587	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Fluorene	U		0.00808	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Hexachlorobenzene	U		0.0101	0.333	0.394	1	02/12/2020 15:42	WG1426219
Hexachloro-1,3-butadiene	U		0.0118	0.333	0.394	1	02/12/2020 15:42	WG1426219
Hexachlorocyclopentadiene	U		0.0695	0.333	0.394	1	02/12/2020 15:42	WG1426219
Hexachloroethane	U		0.0159	0.333	0.394	1	02/12/2020 15:42	WG1426219
Indeno(1,2,3-cd)pyrene	U		0.00914	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Isophorone	U		0.00618	0.333	0.394	1	02/12/2020 15:42	WG1426219
Naphthalene	U		0.0105	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Nitrobenzene	U		0.00823	0.333	0.394	1	02/12/2020 15:42	WG1426219
n-Nitrosodimethylamine	U		0.0766	0.333	0.394	1	02/12/2020 15:42	WG1426219
n-Nitrosodiphenylamine	U		0.107	0.333	0.394	1	02/12/2020 15:42	WG1426219
n-Nitrosodi-n-propylamine	U		0.0107	0.333	0.394	1	02/12/2020 15:42	WG1426219
Phenanthrene	0.0184	J	0.00625	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
Pyridine	U		0.0744	0.333	0.394	1	02/12/2020 15:42	WG1426219
Benzylbutyl phthalate	U		0.0122	0.333	0.394	1	02/12/2020 15:42	WG1426219
Bis(2-ethylhexyl)phthalate	0.118	J	0.0142	0.333	0.394	1	02/12/2020 15:42	WG1426219
Di-n-butyl phthalate	U		0.0129	0.333	0.394	1	02/12/2020 15:42	WG1426219
Diethyl phthalate	U		0.00818	0.333	0.394	1	02/12/2020 15:42	WG1426219
Dimethyl phthalate	U		0.00640	0.333	0.394	1	02/12/2020 15:42	WG1426219
Di-n-octyl phthalate	U		0.0107	0.333	0.394	1	02/12/2020 15:42	WG1426219
Pyrene	U		0.0146	0.0333	0.0394	1	02/12/2020 15:42	WG1426219
1,2,4-Trichlorobenzene	U		0.0104	0.333	0.394	1	02/12/2020 15:42	WG1426219
4-Chloro-3-methylphenol	U		0.00565	0.333	0.394	1	02/12/2020 15:42	WG1426219
2-Chlorophenol	U		0.00984	0.333	0.394	1	02/12/2020 15:42	WG1426219
2,4-Dichlorophenol	U		0.00884	0.333	0.394	1	02/12/2020 15:42	WG1426219
2,4-Dimethylphenol	U		0.0558	0.333	0.394	1	02/12/2020 15:42	WG1426219

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
4,6-Dinitro-2-methylphenol	U		0.147	0.333	0.394	1	02/12/2020 15:42	WG1426219
2,4-Dinitrophenol	U		0.116	0.333	0.394	1	02/12/2020 15:42	WG1426219
2-Methylphenol	U		0.0117	0.333	0.394	1	02/12/2020 15:42	WG1426219
3&4-Methyl Phenol	U		0.00927	0.333	0.394	1	02/12/2020 15:42	WG1426219
2-Nitrophenol	U		0.0154	0.333	0.394	1	02/12/2020 15:42	WG1426219
4-Nitrophenol	U		0.0622	0.333	0.394	1	02/12/2020 15:42	WG1426219
Pentachlorophenol	U		0.0569	0.333	0.394	1	02/12/2020 15:42	WG1426219
Phenol	U		0.00823	0.333	0.394	1	02/12/2020 15:42	WG1426219
2,4,5-Trichlorophenol	U		0.0123	0.333	0.394	1	02/12/2020 15:42	WG1426219
2,4,6-Trichlorophenol	U		0.00923	0.333	0.394	1	02/12/2020 15:42	WG1426219
(S) 2-Fluorophenol	*81.2*				*12.0-120*		*02/12/2020 15:42*	WG1426219
(S) Phenol-d5	*74.3*				*10.0-120*		*02/12/2020 15:42*	WG1426219
(S) Nitrobenzene-d5	*73.7*				*10.0-122*		*02/12/2020 15:42*	WG1426219
(S) 2-Fluorobiphenyl	*75.2*				*15.0-120*		*02/12/2020 15:42*	WG1426219
(S) 2,4,6-Tribromophenol	*91.4*				*10.0-127*		*02/12/2020 15:42*	WG1426219
(S) p-Terphenyl-d14	*84.1*				*10.0-120*		*02/12/2020 15:42*	WG1426219

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Calculated Results

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	58.0		0.163	1.00	1.17	1	02/12/2020 13:40	WG1421187

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.7		1	02/04/2020 17:25	WG1422021

Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	18.9		0.747	2.00	2.33	1	02/12/2020 13:40	WG1425679

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium	76.9		0.163	1.00	1.17	1	02/03/2020 21:05	WG1421187

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.9		1	02/04/2020 17:25	WG1422021

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.0144	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Acenaphthylene	U		0.0151	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Anthracene	U		0.0142	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Benzidine	U		0.143	0.333	0.749	2	02/12/2020 17:58	WG1426219
Benzo(a)anthracene	U		0.00963	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Benzo(b)fluoranthene	U		0.0156	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Benzo(k)fluoranthene	U		0.0131	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Benzo(g,h,i)perylene	U		0.0162	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Benzo(a)pyrene	U		0.0123	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Bis(2-chlorethoxy)methane	U		0.0173	0.333	0.749	2	02/12/2020 17:58	WG1426219
Bis(2-chloroethyl)ether	U		0.0202	0.333	0.749	2	02/12/2020 17:58	WG1426219
2,2-Oxybis(1-Chloropropane)	U		0.0171	0.333	0.749	2	02/12/2020 17:58	WG1426219
4-Bromophenyl-phenylether	U		0.0256	0.333	0.749	2	02/12/2020 17:58	WG1426219
2-Chloronaphthalene	U		0.0144	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
4-Chlorophenyl-phenylether	U		0.0141	0.333	0.749	2	02/12/2020 17:58	WG1426219
Chrysene	U		0.0125	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Dibenz(a,h)anthracene	U		0.0185	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
1,2-Dichlorobenzene	U		0.0207	0.333	0.749	2	02/12/2020 17:58	WG1426219
1,3-Dichlorobenzene	U		0.0225	0.333	0.749	2	02/12/2020 17:58	WG1426219
1,4-Dichlorobenzene	U		0.0225	0.333	0.749	2	02/12/2020 17:58	WG1426219
3,3-Dichlorobenzidine	U		0.179	0.333	0.749	2	02/12/2020 17:58	WG1426219
2,4-Dinitrotoluene	U		0.0137	0.333	0.749	2	02/12/2020 17:58	WG1426219
2,6-Dinitrotoluene	U		0.0166	0.333	0.749	2	02/12/2020 17:58	WG1426219
Fluoranthene	0.0272	J	0.0112	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Fluorene	U		0.0153	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Hexachlorobenzene	U		0.0193	0.333	0.749	2	02/12/2020 17:58	WG1426219
Hexachloro-1,3-butadiene	U		0.0225	0.333	0.749	2	02/12/2020 17:58	WG1426219
Hexachlorocyclopentadiene	U		0.132	0.333	0.749	2	02/12/2020 17:58	WG1426219
Hexachloroethane	U		0.0301	0.333	0.749	2	02/12/2020 17:58	WG1426219
Indeno(1,2,3-cd)pyrene	U		0.0174	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Isophorone	U		0.0117	0.333	0.749	2	02/12/2020 17:58	WG1426219
Naphthalene	U		0.0200	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Nitrobenzene	U		0.0156	0.333	0.749	2	02/12/2020 17:58	WG1426219
n-Nitrosodimethylamine	U		0.146	0.333	0.749	2	02/12/2020 17:58	WG1426219
n-Nitrosodiphenylamine	U		0.202	0.333	0.749	2	02/12/2020 17:58	WG1426219
n-Nitrosodi-n-propylamine	U		0.0204	0.333	0.749	2	02/12/2020 17:58	WG1426219
Phenanthrene	0.0458	J	0.0119	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
Pyridine	U		0.141	0.333	0.749	2	02/12/2020 17:58	WG1426219
Benzylbutyl phthalate	U		0.0232	0.333	0.749	2	02/12/2020 17:58	WG1426219
Bis(2-ethylhexyl)phthalate	1.90		0.0270	0.333	0.749	2	02/12/2020 17:58	WG1426219
Di-n-butyl phthalate	0.0703	J	0.0245	0.333	0.749	2	02/12/2020 17:58	WG1426219
Diethyl phthalate	U		0.0155	0.333	0.749	2	02/12/2020 17:58	WG1426219
Dimethyl phthalate	U		0.0121	0.333	0.749	2	02/12/2020 17:58	WG1426219
Di-n-octyl phthalate	U		0.0204	0.333	0.749	2	02/12/2020 17:58	WG1426219
Pyrene	0.0493	J	0.0277	0.0333	0.0749	2	02/12/2020 17:58	WG1426219
1,2,4-Trichlorobenzene	U		0.0197	0.333	0.749	2	02/12/2020 17:58	WG1426219
4-Chloro-3-methylphenol	U		0.0107	0.333	0.749	2	02/12/2020 17:58	WG1426219
2-Chlorophenol	U		0.0187	0.333	0.749	2	02/12/2020 17:58	WG1426219
2,4-Dichlorophenol	U		0.0168	0.333	0.749	2	02/12/2020 17:58	WG1426219
2,4-Dimethylphenol	U		0.106	0.333	0.749	2	02/12/2020 17:58	WG1426219

BAY 3 SUMP BASE

Collected date/time: 01/29/20 11:00

SAMPLE RESULTS - 05

L1187323

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
4,6-Dinitro-2-methylphenol	U		0.279	0.333	0.749	2	02/12/2020 17:58	WG1426219
2,4-Dinitrophenol	U		0.220	0.333	0.749	2	02/12/2020 17:58	WG1426219
2-Methylphenol	U		0.0222	0.333	0.749	2	02/12/2020 17:58	WG1426219
3&4-Methyl Phenol	U		0.0176	0.333	0.749	2	02/12/2020 17:58	WG1426219
2-Nitrophenol	U		0.0292	0.333	0.749	2	02/12/2020 17:58	WG1426219
4-Nitrophenol	U		0.118	0.333	0.749	2	02/12/2020 17:58	WG1426219
Pentachlorophenol	U		0.108	0.333	0.749	2	02/12/2020 17:58	WG1426219
Phenol	0.0332	J	0.0156	0.333	0.749	2	02/12/2020 17:58	WG1426219
2,4,5-Trichlorophenol	U		0.0234	0.333	0.749	2	02/12/2020 17:58	WG1426219
2,4,6-Trichlorophenol	U		0.0175	0.333	0.749	2	02/12/2020 17:58	WG1426219
(S) 2-Fluorophenol	*65.2*				*12.0-120*		*02/12/2020 17:58*	WG1426219
(S) Phenol-d5	*59.3*				*10.0-120*		*02/12/2020 17:58*	WG1426219
(S) Nitrobenzene-d5	*62.7*				*10.0-122*		*02/12/2020 17:58*	WG1426219
(S) 2-Fluorobiphenyl	*57.3*				*15.0-120*		*02/12/2020 17:58*	WG1426219
(S) 2,4,6-Tribromophenol	*73.4*				*10.0-127*		*02/12/2020 17:58*	WG1426219
(S) p-Terphenyl-d14	*59.5*				*10.0-120*		*02/12/2020 17:58*	WG1426219

Sample Narrative:

L1187323-05 WG1426219: Dilution due to matrix impact during extract concentration procedure

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.0		1	02/04/2020 23:45	WG1422022

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00747	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Acenaphthylene	U		0.00781	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Anthracene	U		0.00735	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Benzidine	U		0.0741	0.333	0.387	1	02/12/2020 15:22	WG1426219
Benzo(a)anthracene	U		0.00498	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Benzo(b)fluoranthene	U		0.00809	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Benzo(k)fluoranthene	U		0.00677	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Benzo(g,h,i)perylene	U		0.00839	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Benzo(a)pyrene	U		0.00638	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Bis(2-chlorethoxy)methane	U		0.00896	0.333	0.387	1	02/12/2020 15:22	WG1426219
Bis(2-chloroethyl)ether	U		0.0104	0.333	0.387	1	02/12/2020 15:22	WG1426219
2,2-Oxybis(1-Chloropropane)	U		0.00884	0.333	0.387	1	02/12/2020 15:22	WG1426219
4-Bromophenyl-phenylether	U		0.0133	0.333	0.387	1	02/12/2020 15:22	WG1426219
2-Chloronaphthalene	U		0.00743	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
4-Chlorophenyl-phenylether	U		0.00729	0.333	0.387	1	02/12/2020 15:22	WG1426219
Chrysene	U		0.00646	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Dibenz(a,h)anthracene	U		0.00955	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
1,2-Dichlorobenzene	U		0.0107	0.333	0.387	1	02/12/2020 15:22	WG1426219
1,3-Dichlorobenzene	U		0.0116	0.333	0.387	1	02/12/2020 15:22	WG1426219
1,4-Dichlorobenzene	U		0.0116	0.333	0.387	1	02/12/2020 15:22	WG1426219
3,3-Dichlorobenzidine	U		0.0924	0.333	0.387	1	02/12/2020 15:22	WG1426219
2,4-Dinitrotoluene	U		0.00706	0.333	0.387	1	02/12/2020 15:22	WG1426219
2,6-Dinitrotoluene	U		0.00857	0.333	0.387	1	02/12/2020 15:22	WG1426219
Fluoranthene	U		0.00577	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Fluorene	U		0.00793	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Hexachlorobenzene	U		0.00996	0.333	0.387	1	02/12/2020 15:22	WG1426219
Hexachloro-1,3-butadiene	U		0.0116	0.333	0.387	1	02/12/2020 15:22	WG1426219
Hexachlorocyclopentadiene	U		0.0683	0.333	0.387	1	02/12/2020 15:22	WG1426219
Hexachloroethane	U		0.0156	0.333	0.387	1	02/12/2020 15:22	WG1426219
Indeno(1,2,3-cd)pyrene	U		0.00898	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Isophorone	U		0.00607	0.333	0.387	1	02/12/2020 15:22	WG1426219
Naphthalene	U		0.0103	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Nitrobenzene	U		0.00809	0.333	0.387	1	02/12/2020 15:22	WG1426219
n-Nitrosodimethylamine	U		0.0753	0.333	0.387	1	02/12/2020 15:22	WG1426219
n-Nitrosodiphenylamine	U		0.105	0.333	0.387	1	02/12/2020 15:22	WG1426219
n-Nitrosodi-n-propylamine	U		0.0105	0.333	0.387	1	02/12/2020 15:22	WG1426219
Phenanthrene	U		0.00614	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
Pyridine	U		0.0731	0.333	0.387	1	02/12/2020 15:22	WG1426219
Benzylbutyl phthalate	U		0.0120	0.333	0.387	1	02/12/2020 15:22	WG1426219
Bis(2-ethylhexyl)phthalate	0.0283	J	0.0140	0.333	0.387	1	02/12/2020 15:22	WG1426219
Di-n-butyl phthalate	U		0.0127	0.333	0.387	1	02/12/2020 15:22	WG1426219
Diethyl phthalate	U		0.00804	0.333	0.387	1	02/12/2020 15:22	WG1426219
Dimethyl phthalate	U		0.00628	0.333	0.387	1	02/12/2020 15:22	WG1426219
Di-n-octyl phthalate	U		0.0106	0.333	0.387	1	02/12/2020 15:22	WG1426219
Pyrene	U		0.0143	0.0333	0.0387	1	02/12/2020 15:22	WG1426219
1,2,4-Trichlorobenzene	U		0.0102	0.333	0.387	1	02/12/2020 15:22	WG1426219
4-Chloro-3-methylphenol	U		0.00555	0.333	0.387	1	02/12/2020 15:22	WG1426219
2-Chlorophenol	U		0.00967	0.333	0.387	1	02/12/2020 15:22	WG1426219
2,4-Dichlorophenol	U		0.00868	0.333	0.387	1	02/12/2020 15:22	WG1426219
2,4-Dimethylphenol	U		0.0548	0.333	0.387	1	02/12/2020 15:22	WG1426219

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
4,6-Dinitro-2-methylphenol	U		0.144	0.333	0.387	1	02/12/2020 15:22	WG1426219
2,4-Dinitrophenol	U		0.114	0.333	0.387	1	02/12/2020 15:22	WG1426219
2-Methylphenol	U		0.0115	0.333	0.387	1	02/12/2020 15:22	WG1426219
3&4-Methyl Phenol	U		0.00911	0.333	0.387	1	02/12/2020 15:22	WG1426219
2-Nitrophenol	U		0.0151	0.333	0.387	1	02/12/2020 15:22	WG1426219
4-Nitrophenol	U		0.0611	0.333	0.387	1	02/12/2020 15:22	WG1426219
Pentachlorophenol	U		0.0558	0.333	0.387	1	02/12/2020 15:22	WG1426219
Phenol	U		0.00809	0.333	0.387	1	02/12/2020 15:22	WG1426219
2,4,5-Trichlorophenol	U		0.0121	0.333	0.387	1	02/12/2020 15:22	WG1426219
2,4,6-Trichlorophenol	U		0.00906	0.333	0.387	1	02/12/2020 15:22	WG1426219
(S) 2-Fluorophenol	*80.7*				*12.0-120*		*02/12/2020 15:22*	WG1426219
(S) Phenol-d5	*73.5*				*10.0-120*		*02/12/2020 15:22*	WG1426219
(S) Nitrobenzene-d5	*70.9*				*10.0-122*		*02/12/2020 15:22*	WG1426219
(S) 2-Fluorobiphenyl	*71.8*				*15.0-120*		*02/12/2020 15:22*	WG1426219
(S) 2,4,6-Tribromophenol	*90.6*				*10.0-127*		*02/12/2020 15:22*	WG1426219
(S) p-Terphenyl-d14	*80.1*				*10.0-120*		*02/12/2020 15:22*	WG1426219

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.3		1	02/11/2020 16:26	WG1425751

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.299	J	0.0742	0.500	0.530	1	02/11/2020 12:37	WG1424916
Chromium	13.0		0.148	1.00	1.06	1	02/11/2020 12:37	WG1424916

BAY 3 SUMP (2' BLW BASE)
Collected date/time: 01/29/20 11:01

SAMPLE RESULTS - 08

L1187323

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	91.0		1	02/11/2020 16:26	WG1425751

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	1600		14.6	4.00	43.9	10	02/13/2020 03:33	WG1425992
Residual Range Organics (RRO)	1750		366	10.0	1100	100	02/14/2020 15:55	WG1425992
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*02/14/2020 15:55*	WG1425992
(S) o-Terphenyl	*86.1*				*18.0-148*		*02/13/2020 03:33*	WG1425992

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acenaphthene	U		0.0705	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Acenaphthylene	U		0.0737	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Anthracene	U		0.0694	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Benzidine	U		0.700	0.333	3.66	10	02/12/2020 18:56	WG1426219
Benzo(a)anthracene	U		0.0470	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Benzo(b)fluoranthene	U		0.0763	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Benzo(k)fluoranthene	U		0.0639	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Benzo(g,h,i)perylene	U		0.0792	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Benzo(a)pyrene	U		0.0602	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Bis(2-chlorethoxy)methane	U		0.0846	0.333	3.66	10	02/12/2020 18:56	WG1426219
Bis(2-chloroethyl)ether	U		0.0984	0.333	3.66	10	02/12/2020 18:56	WG1426219
2,2-Oxybis(1-Chloropropane)	U		0.0835	0.333	3.66	10	02/12/2020 18:56	WG1426219
4-Bromophenyl-phenylether	U		0.125	0.333	3.66	10	02/12/2020 18:56	WG1426219
2-Chloronaphthalene	U		0.0702	0.0333	0.366	10	02/12/2020 18:56	WG1426219
4-Chlorophenyl-phenylether	U		0.0689	0.333	3.66	10	02/12/2020 18:56	WG1426219
Chrysene	U		0.0610	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Dibenz(a,h)anthracene	U		0.0902	0.0333	0.366	10	02/12/2020 18:56	WG1426219
1,2-Dichlorobenzene	U		0.101	0.333	3.66	10	02/12/2020 18:56	WG1426219
1,3-Dichlorobenzene	U		0.110	0.333	3.66	10	02/12/2020 18:56	WG1426219
1,4-Dichlorobenzene	U		0.110	0.333	3.66	10	02/12/2020 18:56	WG1426219
3,3-Dichlorobenzidine	U		0.872	0.333	3.66	10	02/12/2020 18:56	WG1426219
2,4-Dinitrotoluene	U		0.0667	0.333	3.66	10	02/12/2020 18:56	WG1426219
2,6-Dinitrotoluene	U		0.0809	0.333	3.66	10	02/12/2020 18:56	WG1426219
Fluoranthene	U		0.0545	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Fluorene	U		0.0749	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Hexachlorobenzene	U		0.0940	0.333	3.66	10	02/12/2020 18:56	WG1426219
Hexachloro-1,3-butadiene	U		0.110	0.333	3.66	10	02/12/2020 18:56	WG1426219
Hexachlorocyclopentadiene	U		0.645	0.333	3.66	10	02/12/2020 18:56	WG1426219
Hexachloroethane	U		0.147	0.333	3.66	10	02/12/2020 18:56	WG1426219
Indeno(1,2,3-cd)pyrene	U		0.0848	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Isophorone	U		0.0573	0.333	3.66	10	02/12/2020 18:56	WG1426219
Naphthalene	U		0.0976	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Nitrobenzene	U		0.0763	0.333	3.66	10	02/12/2020 18:56	WG1426219
n-Nitrosodimethylamine	U		0.711	0.333	3.66	10	02/12/2020 18:56	WG1426219
n-Nitrosodiphenylamine	U		0.988	0.333	3.66	10	02/12/2020 18:56	WG1426219
n-Nitrosodi-n-propylamine	U		0.0995	0.333	3.66	10	02/12/2020 18:56	WG1426219
Phenanthrene	U		0.0580	0.0333	0.366	10	02/12/2020 18:56	WG1426219
Pyridine	U		0.690	0.333	3.66	10	02/12/2020 18:56	WG1426219
Benzylbutyl phthalate	U		0.113	0.333	3.66	10	02/12/2020 18:56	WG1426219
Bis(2-ethylhexyl)phthalate	0.361	J	0.132	0.333	3.66	10	02/12/2020 18:56	WG1426219
Di-n-butyl phthalate	U		0.120	0.333	3.66	10	02/12/2020 18:56	WG1426219
Diethyl phthalate	U		0.0759	0.333	3.66	10	02/12/2020 18:56	WG1426219

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Dimethyl phthalate	U		0.0593	0.333	3.66	10	02/12/2020 18:56	WG1426219
Di-n-octyl phthalate	U		0.0996	0.333	3.66	10	02/12/2020 18:56	WG1426219
Pyrene	U		0.135	0.0333	0.366	10	02/12/2020 18:56	WG1426219
1,2,4-Trichlorobenzene	U		0.0962	0.333	3.66	10	02/12/2020 18:56	WG1426219
4-Chloro-3-methylphenol	U		0.0524	0.333	3.66	10	02/12/2020 18:56	WG1426219
2-Chlorophenol	U		0.0913	0.333	3.66	10	02/12/2020 18:56	WG1426219
2,4-Dichlorophenol	U		0.0819	0.333	3.66	10	02/12/2020 18:56	WG1426219
2,4-Dimethylphenol	U		0.517	0.333	3.66	10	02/12/2020 18:56	WG1426219
4,6-Dinitro-2-methylphenol	U		1.36	0.333	3.66	10	02/12/2020 18:56	WG1426219
2,4-Dinitrophenol	U		1.08	0.333	3.66	10	02/12/2020 18:56	WG1426219
2-Methylphenol	U		0.108	0.333	3.66	10	02/12/2020 18:56	WG1426219
3&4-Methyl Phenol	U		0.0860	0.333	3.66	10	02/12/2020 18:56	WG1426219
2-Nitrophenol	U		0.143	0.333	3.66	10	02/12/2020 18:56	WG1426219
4-Nitrophenol	U		0.577	0.333	3.66	10	02/12/2020 18:56	WG1426219
Pentachlorophenol	U		0.527	0.333	3.66	10	02/12/2020 18:56	WG1426219
Phenol	U		0.0763	0.333	3.66	10	02/12/2020 18:56	WG1426219
2,4,5-Trichlorophenol	U		0.114	0.333	3.66	10	02/12/2020 18:56	WG1426219
2,4,6-Trichlorophenol	U		0.0856	0.333	3.66	10	02/12/2020 18:56	WG1426219
(S) 2-Fluorophenol	*80.0*				*12.0-120*		*02/12/2020 18:56*	WG1426219
(S) Phenol-d5	*72.1*				*10.0-120*		*02/12/2020 18:56*	WG1426219
(S) Nitrobenzene-d5	*83.9*				*10.0-122*		*02/12/2020 18:56*	WG1426219
(S) 2-Fluorobiphenyl	*72.1*				*15.0-120*		*02/12/2020 18:56*	WG1426219
(S) 2,4,6-Tribromophenol	*96.1*				*10.0-127*		*02/12/2020 18:56*	WG1426219
(S) p-Terphenyl-d14	*75.5*				*10.0-120*		*02/12/2020 18:56*	WG1426219

Sample Narrative:

L1187323-08 WG1426219: Dilution due to matrix.

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3497187-1 02/04/20 23:59

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1184740-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1184740-01 02/04/20 23:59 • (DUP) R3497187-3 02/04/20 23:59

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	85.0	85.4	1	0.383		10

Laboratory Control Sample (LCS)

(LCS) R3497187-2 02/04/20 23:59

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3497176-1 02/04/20 17:37

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1184753-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1184753-01 02/04/20 17:37 • (DUP) R3497176-3 02/04/20 17:37

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	87.2	88.2	1	1.09		10

Laboratory Control Sample (LCS)

(LCS) R3497176-2 02/04/20 17:37

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) R3497172-1 02/04/20 17:25

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1184753-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1184753-11 02/04/20 17:25 • (DUP) R3497172-3 02/04/20 17:25

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.2	89.5	1	1.42		10

Laboratory Control Sample (LCS)

(LCS) R3497172-2 02/04/20 17:25

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) R3497186-1 02/04/20 23:45

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1184753-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1184753-16 02/04/20 23:45 • (DUP) R3497186-3 02/04/20 23:45

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	86.0	86.9	1	1.14		10

Laboratory Control Sample (LCS)

(LCS) R3497186-2 02/04/20 23:45

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) R3499068-1 02/11/20 16:26

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1187459-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1187459-01 02/11/20 16:26 • (DUP) R3499068-3 02/11/20 16:26

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	95.8	95.5	1	0.292		10

Laboratory Control Sample (LCS)

(LCS) R3499068-2 02/11/20 16:26

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) R3499187-1 02/12/20 13:16

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chromium,Hexavalent	U		0.640	2.00

L1187229-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1187229-01 02/12/20 13:35 • (DUP) R3499187-3 02/12/20 13:36

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chromium,Hexavalent	ND	0.000	1	0.000		20

L1187236-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1187236-01 02/12/20 13:39 • (DUP) R3499187-8 02/12/20 13:40

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chromium,Hexavalent	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3499187-2 02/12/20 13:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chromium,Hexavalent	24.0	24.5	102	80.0-120	

L1187229-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1187229-02 02/12/20 13:36 • (MS) R3499187-4 02/12/20 13:37 • (MSD) R3499187-5 02/12/20 13:37

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chromium,Hexavalent	20.0	ND	19.7	18.4	98.6	92.1	1	75.0-125			6.88	20

L1187229-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1187229-02 02/12/20 13:36 • (MS) R3499187-6 02/12/20 13:38

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chromium,Hexavalent	670	ND	689	103	50	75.0-125	

Method Blank (MB)

(MB) R3496582-1 02/03/20 20:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chromium	U		0.140	1.00

Laboratory Control Sample (LCS)

(LCS) R3496582-2 02/03/20 20:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chromium	100	98.8	98.8	80.0-120	

L1184753-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184753-03 02/03/20 20:32 • (MS) R3496582-5 02/03/20 20:39 • (MSD) R3496582-6 02/03/20 20:42

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 %
Chromium	134	44.2	177	161	99.8	87.6	1	75.0-125			9.59	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3498953-1 02/11/20 12:18

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Cadmium	U		0.0700	0.500
Chromium	0.153	J	0.140	1.00

Laboratory Control Sample (LCS)

(LCS) R3498953-2 02/11/20 12:21

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Cadmium	100	90.9	90.9	80.0-120	
Chromium	100	88.8	88.8	80.0-120	

L1187512-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1187512-02 02/11/20 12:24 • (MS) R3498953-5 02/11/20 12:32 • (MSD) R3498953-6 02/11/20 12:35

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Cadmium	111	0.372	105	105	94.0	94.1	1	75.0-125			0.0333	20
Chromium	111	71.7	153	178	72.9	95.3	1	75.0-125	J6		15.1	20

Method Blank (MB)

(MB) R3498575-1 02/10/20 19:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Selenium	U		0.190	0.500

Laboratory Control Sample (LCS)

(LCS) R3498575-2 02/10/20 19:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Selenium	100	102	102	80.0-120	

L1186878-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1186878-01 02/10/20 19:20 • (MS) R3498575-5 02/10/20 19:31 • (MSD) R3498575-6 02/10/20 19:34

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Selenium	20.0	1.02	107	103	106	102	5	75.0-125			4.08	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3499343-1 02/12/20 13:31

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	*74.3*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3499343-2 02/12/20 13:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	44.1	88.2	50.0-150	
(S) o-Terphenyl			*95.8*	*18.0-148*	

L1187264-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1187264-06 02/12/20 16:12 • (MS) R3499343-3 02/12/20 16:26 • (MSD) R3499343-4 02/12/20 16:39

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	50.0	ND	39.3	37.5	78.6	75.0	1	50.0-150			4.69	20
(S) o-Terphenyl					*80.8*	*77.0*		*18.0-148*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3499556-2 02/12/20 10:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00642	0.0333
Acenaphthylene	U		0.00671	0.0333
Anthracene	U		0.00632	0.0333
Benzidine	U		0.0637	0.333
Benzo(a)anthracene	U		0.00428	0.0333
Benzo(b)fluoranthene	U		0.00695	0.0333
Benzo(k)fluoranthene	U		0.00582	0.0333
Benzo(g,h,i)perylene	U		0.00721	0.0333
Benzo(a)pyrene	U		0.00548	0.0333
Bis(2-chlorethoxy)methane	U		0.00770	0.333
Bis(2-chloroethyl)ether	U		0.00896	0.333
2,2-oxybis(1-chloropropane)	U		0.00760	0.333
4-Bromophenyl-phenylether	U		0.0114	0.333
2-Chloronaphthalene	U		0.00639	0.0333
4-Chlorophenyl-phenylether	U		0.00627	0.333
Chrysene	U		0.00555	0.0333
Dibenz(a,h)anthracene	U		0.00821	0.0333
1,2-Dichlorobenzene	U		0.00921	0.333
1,3-Dichlorobenzene	U		0.0100	0.333
1,4-Dichlorobenzene	U		0.0100	0.333
3,3-Dichlorobenzidine	U		0.0794	0.333
2,4-Dinitrotoluene	U		0.00607	0.333
2,6-Dinitrotoluene	U		0.00737	0.333
Fluoranthene	U		0.00496	0.0333
Fluorene	U		0.00682	0.0333
Hexachlorobenzene	U		0.00856	0.333
Hexachloro-1,3-butadiene	U		0.0100	0.333
Hexachlorocyclopentadiene	U		0.0587	0.333
Hexachloroethane	U		0.0134	0.333
Indeno(1,2,3-cd)pyrene	U		0.00772	0.0333
Isophorone	U		0.00522	0.333
Naphthalene	U		0.00889	0.0333
Nitrobenzene	U		0.00695	0.333
n-Nitrosodimethylamine	U		0.0647	0.333
n-Nitrosodiphenylamine	U		0.0900	0.333
n-Nitrosodi-n-propylamine	U		0.00906	0.333
Phenanthrene	U		0.00528	0.0333
Benzylbutyl phthalate	U		0.0103	0.333
Bis(2-ethylhexyl)phthalate	U		0.0120	0.333
Di-n-butyl phthalate	U		0.0109	0.333

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3499556-2 02/12/20 10:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Diethyl phthalate	U		0.00691	0.333
Dimethyl phthalate	U		0.00540	0.333
Di-n-octyl phthalate	U		0.00907	0.333
Pyrene	U		0.0123	0.0333
Pyridine	U		0.0628	0.333
1,2,4-Trichlorobenzene	U		0.00876	0.333
4-Chloro-3-methylphenol	U		0.00477	0.333
2-Chlorophenol	U		0.00831	0.333
2-Methylphenol	U		0.00986	0.333
3&4-Methyl Phenol	U		0.00783	0.333
2,4-Dichlorophenol	U		0.00746	0.333
2,4-Dimethylphenol	U		0.0471	0.333
4,6-Dinitro-2-methylphenol	U		0.124	0.333
2,4-Dinitrophenol	U		0.0980	0.333
2-Nitrophenol	U		0.0130	0.333
4-Nitrophenol	U		0.0525	0.333
Pentachlorophenol	U		0.0480	0.333
Phenol	U		0.00695	0.333
2,4,5-Trichlorophenol	U		0.0104	0.333
2,4,6-Trichlorophenol	U		0.00779	0.333
(S) Nitrobenzene-d5	*77.8*			*10.0-122*
(S) 2-Fluorobiphenyl	*80.5*			*15.0-120*
(S) p-Terphenyl-d14	*90.1*			*10.0-120*
(S) Phenol-d5	*77.5*			*10.0-120*
(S) 2-Fluorophenol	*88.4*			*12.0-120*
(S) 2,4,6-Tribromophenol	*96.7*			*10.0-127*

Laboratory Control Sample (LCS)

(LCS) R3499556-1 02/12/20 10:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.666	0.519	77.9	38.0-120	
Acenaphthylene	0.666	0.557	83.6	40.0-120	
Anthracene	0.666	0.541	81.2	42.0-120	
Benzidine	1.33	0.306	23.0	10.0-120	
Benzo(a)anthracene	0.666	0.603	90.5	44.0-120	
Benzo(b)fluoranthene	0.666	0.575	86.3	43.0-120	
Benzo(k)fluoranthene	0.666	0.574	86.2	44.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS)

(LCS) R3499556-1 02/12/20 10:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzo(g,h,i)perylene	0.666	0.575	86.3	43.0-120	
Benzo(a)pyrene	0.666	0.608	91.3	45.0-120	
Bis(2-chlorethoxy)methane	0.666	0.370	55.6	20.0-120	
Bis(2-chloroethyl)ether	0.666	0.477	71.6	16.0-120	
2,2-Oxybis(1-Chloropropane)	0.666	0.439	65.9	23.0-120	
4-Bromophenyl-phenylether	0.666	0.559	83.9	40.0-120	
2-Chloronaphthalene	0.666	0.521	78.2	35.0-120	
4-Chlorophenyl-phenylether	0.666	0.555	83.3	40.0-120	
Chrysene	0.666	0.555	83.3	43.0-120	
Dibenz(a,h)anthracene	0.666	0.580	87.1	44.0-120	
1,2-Dichlorobenzene	0.666	0.447	67.1	32.0-120	
1,3-Dichlorobenzene	0.666	0.447	67.1	30.0-120	
1,4-Dichlorobenzene	0.666	0.448	67.3	31.0-120	
3,3-Dichlorobenzidine	1.33	1.08	81.2	28.0-120	
2,4-Dinitrotoluene	0.666	0.609	91.4	45.0-120	
2,6-Dinitrotoluene	0.666	0.587	88.1	42.0-120	
Fluoranthene	0.666	0.557	83.6	44.0-120	
Fluorene	0.666	0.541	81.2	41.0-120	
Hexachlorobenzene	0.666	0.544	81.7	39.0-120	
Hexachloro-1,3-butadiene	0.666	0.406	61.0	15.0-120	
Hexachlorocyclopentadiene	0.666	0.514	77.2	15.0-120	
Hexachloroethane	0.666	0.448	67.3	17.0-120	
Indeno(1,2,3-cd)pyrene	0.666	0.588	88.3	45.0-120	
Isophorone	0.666	0.369	55.4	23.0-120	
Naphthalene	0.666	0.381	57.2	18.0-120	
Nitrobenzene	0.666	0.389	58.4	17.0-120	
n-Nitrosodimethylamine	0.666	0.436	65.5	10.0-125	
n-Nitrosodiphenylamine	0.666	0.563	84.5	40.0-120	
n-Nitrosodi-n-propylamine	0.666	0.445	66.8	26.0-120	
Phenanthrene	0.666	0.551	82.7	42.0-120	
Benzylbutyl phthalate	0.666	0.609	91.4	40.0-120	
Bis(2-ethylhexyl)phthalate	0.666	0.581	87.2	41.0-120	
Di-n-butyl phthalate	0.666	0.566	85.0	43.0-120	
Diethyl phthalate	0.666	0.555	83.3	43.0-120	
Dimethyl phthalate	0.666	0.548	82.3	43.0-120	
Di-n-octyl phthalate	0.666	0.612	91.9	40.0-120	
Pyrene	0.666	0.574	86.2	41.0-120	
Pyridine	0.666	0.265	39.8	10.0-120	
1,2,4-Trichlorobenzene	0.666	0.389	58.4	17.0-120	
4-Chloro-3-methylphenol	0.666	0.443	66.5	28.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS)

(LCS) R3499556-1 02/12/20 10:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Chlorophenol	0.666	0.510	76.6	28.0-120	
2-Methylphenol	0.666	0.528	79.3	35.0-120	
3&4-Methyl Phenol	0.666	0.570	85.6	42.0-120	
2,4-Dichlorophenol	0.666	0.451	67.7	25.0-120	
2,4-Dimethylphenol	0.666	0.382	57.4	15.0-120	
4,6-Dinitro-2-methylphenol	0.666	0.569	85.4	16.0-120	
2,4-Dinitrophenol	0.666	0.565	84.8	10.0-120	
2-Nitrophenol	0.666	0.475	71.3	20.0-120	
4-Nitrophenol	0.666	0.581	87.2	27.0-120	
Pentachlorophenol	0.666	0.501	75.2	29.0-120	
Phenol	0.666	0.497	74.6	28.0-120	
2,4,5-Trichlorophenol	0.666	0.655	98.3	38.0-120	
2,4,6-Trichlorophenol	0.666	0.607	91.1	37.0-120	
(S) Nitrobenzene-d5			*70.0*	*10.0-122*	
(S) 2-Fluorobiphenyl			*78.4*	*15.0-120*	
(S) p-Terphenyl-d14			*83.8*	*10.0-120*	
(S) Phenol-d5			*74.9*	*10.0-120*	
(S) 2-Fluorophenol			*83.0*	*12.0-120*	
(S) 2,4,6-Tribromophenol			*95.9*	*10.0-127*	

L1187459-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1187459-01 02/12/20 12:47 • (MS) R3499556-3 02/12/20 13:06 • (MSD) R3499556-4 02/12/20 13:26

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.666	ND	0.449	0.473	67.4	71.0	1	18.0-120			5.21	32
Acenaphthylene	0.666	ND	0.475	0.504	71.3	75.7	1	25.0-120			5.92	32
Anthracene	0.666	ND	0.515	0.488	77.3	73.3	1	22.0-120			5.38	29
Benzidine	1.33	ND	0.513	0.563	38.6	42.3	1	10.0-120			9.29	40
Benzo(a)anthracene	0.666	ND	0.573	0.536	86.0	80.5	1	25.0-120			6.67	29
Benzo(b)fluoranthene	0.666	ND	0.545	0.506	81.8	76.0	1	19.0-122			7.42	31
Benzo(k)fluoranthene	0.666	ND	0.537	0.504	80.6	75.7	1	23.0-120			6.34	30
Benzo(g,h,i)perylene	0.666	ND	0.523	0.495	78.5	74.3	1	10.0-120			5.50	33
Benzo(a)pyrene	0.666	ND	0.574	0.535	86.2	80.3	1	24.0-120			7.03	30
Bis(2-chlorethoxy)methane	0.666	ND	0.320	0.343	48.0	51.5	1	10.0-120			6.94	34
Bis(2-chloroethyl)ether	0.666	ND	0.395	0.436	59.3	65.5	1	10.0-120			9.87	40
2,2-Oxybis(1-Chloropropane)	0.666	ND	0.364	0.412	54.7	61.9	1	10.0-120			12.4	40
4-Bromophenyl-phenylether	0.666	ND	0.509	0.508	76.4	76.3	1	27.0-120			0.197	30
2-Chloronaphthalene	0.666	ND	0.435	0.470	65.3	70.6	1	20.0-120			7.73	32

L1187459-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1187459-01 02/12/20 12:47 • (MS) R3499556-3 02/12/20 13:06 • (MSD) R3499556-4 02/12/20 13:26

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
4-Chlorophenyl-phenylether	0.666	ND	0.488	0.495	73.3	74.3	1	24.0-120			1.42	29
Chrysene	0.666	ND	0.526	0.505	79.0	75.8	1	21.0-120			4.07	29
Dibenz(a,h)anthracene	0.666	ND	0.532	0.489	79.9	73.4	1	10.0-120			8.42	32
1,2-Dichlorobenzene	0.666	ND	0.364	0.411	54.7	61.7	1	10.0-120			12.1	38
1,3-Dichlorobenzene	0.666	ND	0.349	0.404	52.4	60.7	1	10.0-120			14.6	40
1,4-Dichlorobenzene	0.666	ND	0.353	0.399	53.0	59.9	1	10.0-120			12.2	39
3,3-Dichlorobenzidine	1.33	ND	1.10	1.03	82.7	77.4	1	10.0-120			6.57	34
2,4-Dinitrotoluene	0.666	ND	0.561	0.564	84.2	84.7	1	30.0-120			0.533	31
2,6-Dinitrotoluene	0.666	ND	0.531	0.543	79.7	81.5	1	25.0-120			2.23	31
Fluoranthene	0.666	ND	0.538	0.497	80.8	74.6	1	18.0-126			7.92	32
Fluorene	0.666	ND	0.487	0.500	73.1	75.1	1	25.0-120			2.63	30
Hexachlorobenzene	0.666	ND	0.493	0.491	74.0	73.7	1	27.0-120			0.407	28
Hexachloro-1,3-butadiene	0.666	ND	0.319	0.362	47.9	54.4	1	10.0-120			12.6	38
Hexachlorocyclopentadiene	0.666	ND	0.252	0.374	37.8	56.2	1	10.0-120			39.0	40
Hexachloroethane	0.666	ND	0.338	0.397	50.8	59.6	1	10.0-120			16.1	40
Indeno(1,2,3-cd)pyrene	0.666	ND	0.532	0.501	79.9	75.2	1	10.0-120			6.00	32
Isophorone	0.666	ND	0.317	0.342	47.6	51.4	1	13.0-120			7.59	34
Naphthalene	0.666	ND	0.317	0.347	47.6	52.1	1	10.0-120			9.04	35
Nitrobenzene	0.666	ND	0.322	0.357	48.3	53.6	1	10.0-120			10.3	36
n-Nitrosodimethylamine	0.666	ND	0.367	0.400	55.1	60.1	1	10.0-127			8.60	40
n-Nitrosodiphenylamine	0.666	ND	0.510	0.502	76.6	75.4	1	17.0-120			1.58	29
n-Nitrosodi-n-propylamine	0.666	ND	0.362	0.401	54.4	60.2	1	10.0-120			10.2	37
Phenanthrene	0.666	ND	0.517	0.491	77.6	73.7	1	17.0-120			5.16	31
Benzylbutyl phthalate	0.666	ND	0.613	0.573	92.0	86.0	1	23.0-120			6.75	30
Bis(2-ethylhexyl)phthalate	0.666	ND	0.566	0.533	85.0	80.0	1	17.0-126			6.01	30
Di-n-butyl phthalate	0.666	ND	0.540	0.503	81.1	75.5	1	30.0-120			7.09	29
Diethyl phthalate	0.666	ND	0.503	0.510	75.5	76.6	1	26.0-120			1.38	28
Dimethyl phthalate	0.666	ND	0.481	0.500	72.2	75.1	1	25.0-120			3.87	29
Di-n-octyl phthalate	0.666	ND	0.595	0.559	89.3	83.9	1	21.0-123			6.24	29
Pyrene	0.666	ND	0.557	0.529	83.6	79.4	1	16.0-121			5.16	32
1,2,4-Trichlorobenzene	0.666	ND	0.319	0.358	47.9	53.8	1	12.0-120			11.5	37
4-Chloro-3-methylphenol	0.666	ND	0.421	0.412	63.2	61.9	1	15.0-120			2.16	30
2-Chlorophenol	0.666	ND	0.439	0.473	65.9	71.0	1	15.0-120			7.46	37
2,4-Dichlorophenol	0.666	ND	0.404	0.411	60.7	61.7	1	20.0-120			1.72	31
2,4-Dimethylphenol	0.666	ND	0.351	0.377	52.7	56.6	1	10.0-120			7.14	33
4,6-Dinitro-2-methylphenol	0.666	ND	0.602	0.573	90.4	86.0	1	10.0-120			4.94	39
2,4-Dinitrophenol	0.666	ND	0.750	0.733	113	110	1	10.0-121			2.29	40
2-Nitrophenol	0.666	ND	0.404	0.451	60.7	67.7	1	12.0-120			11.0	39
4-Nitrophenol	0.666	ND	0.565	0.549	84.8	82.4	1	10.0-137			2.87	32
Pentachlorophenol	0.666	ND	0.636	0.648	95.5	97.3	1	10.0-160			1.87	31

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

L1187459-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1187459-01 02/12/20 12:47 • (MS) R3499556-3 02/12/20 13:06 • (MSD) R3499556-4 02/12/20 13:26

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Phenol	0.666	ND	0.428	0.455	64.3	68.3	1	12.0-120			6.12	38
2,4,6-Trichlorophenol	0.666	ND	0.543	0.567	81.5	85.1	1	19.0-120			4.32	32
(S) Nitrobenzene-d5					*59.8*	*65.5*		*10.0-122*				
(S) 2-Fluorobiphenyl					*67.0*	*72.7*		*15.0-120*				
(S) p-Terphenyl-d14					*85.3*	*77.8*		*10.0-120*				
(S) Phenol-d5					*68.9*	*70.1*		*10.0-120*				
(S) 2-Fluorophenol					*74.5*	*79.0*		*12.0-120*				
(S) 2,4,6-Tribromophenol					*101*	*96.1*		*10.0-127*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

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

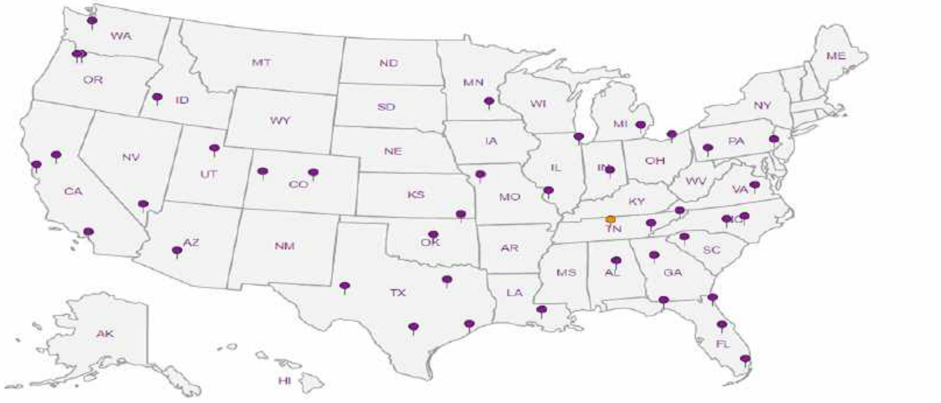
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Report to:
[illegible]

Project Description: Future Federal Way Emergency

Phone: 713-744-5800
Fax: 713-744-5888

Collected by (print): K Barnette

Collected by (signature): KBarnette

Immediately Packed on Ice N ___ Y X

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Email To: krbarnette@tgeresources.com

City/State Collected: Fed Way WA

Please Circle: [✓ PT] MT CT ET

Client Project # R13411.07

Site/Facility ID #

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Lab Project # **TGERESHTX-FEDERALWAY**

P.O. # **8859**

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

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

SDG # ~~L1184775~~ TD

F062 L1187323

Acctnum: TGERESHTX

Template: **T162172**

Prelogin: **P752605**

PM: **134 - Mark W. Beasley**

PB: LC 1/27

Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8270 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold					Remarks	Sample # (lab only)	
SumpLine Midpont	Grab	SS	1	1/30/20	1040	3	X	X	X		X							~~-01~~	-01
SumpLine Midpont 2' blw	Grab	SS	3	1/30/20	1045	3						X							-07
		SS																	
		SS																	

* 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 # 1382 4819 3235

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) KBarnette	Date: 1/30/20	Time: 1200	Received by: (Signature)	Trip Blank Received: Yes / [✓ No] 0 [✓ HCl] / MeoH TBR
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C 1.5+.1=1.6 Bottles Received: 6
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) Clark	Date: 1/31/20 Time: 840

If preservation required by Login: Date/Time

01-203

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected: Federal Way WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # R13411.07

Lab Project # **TGERESHTX-FEDERALWAY**

Collected by (print): K. Barnette

Site/Facility ID #

P.O. # **8859**

Collected by (signature): KBarnett

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N___ Y X

Analysis / Container / Preservative

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

SDG # H04759 TD

Table F063 L1187323

Acctnum: **TGERESHTX**
Template: **T162172**
Prelogin: **P752605**
PM: **134 - Mark W. Beasley**
PB: LC 1/27
Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8270 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Hold	Remarks	Sample # (lab only)
Ext Sump E. Sidewall	Grab	SS	3	1/29/20	1219	3	X	X	X		X			~~01~~
Ext Sump W. Sidewall	Grab	SS	3	1/29/20	1220	3	X	X	X		X			~~02~~
Bay1 Sump Base	Grab	SS	4	1/29/20	1330	3	X	X	X		X			~~03~~ -02
Bay1 Sump N. Sidewall	Grab	SS	4	1/29/20	1332	3	X	X	X		X			~~04~~ -03
Bay1 Sump S. Sidewall	Grab	SS	4	1/29/20	1333	3	X	X	X		X			~~05~~
Bay1 Sump W. Sidewall	Grab	SS	4	1/29/20	1334	3	X	X	X		X			~~06~~
Bay1 Sump E. Sidewall	Grab	SS	4	1/29/20	1335	3	X	X	X		X			~~A~~ -04
Bay1 Sump (2' blw base)	Grab	SS	4	1/29/20	1331	3						X		
Bay4 Sump Line End	Grab	SS	1	1/30/20	1030	3	X	X	X		X			~~A~~
Bay4 Sump Line End (2' blw)	Grab	SS	3	1/31/20	1035	3						X		

* 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 # 1312 4819 3235

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) K Barnette	Date: 1/30/20	Time: 1200	Received by: (Signature)	Trip Blank Received: Yes [✓ No] HCL / MeoH TBR	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.5+.1=1.6 °C	Bottles Received: 60
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/31/20	Time: 840

If preservation required by Login: Date/Time

Hold # 01-204

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: Kristi Barnette

Email To: krbarnette@tgeresources.com

Project Description: Future Federal Way Emergency

City/State Collected: Federal Way WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # TGERESHTX-FEDERALWAY

Collected by (print): K. Barnette

Site/Facility ID #

P.O. # 8859

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
__ Same Day X Five Day
__ Next Day __ 5 Day (Rad Only)
__ Two Day __ 10 Day (Rad Only)
__ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N __ Y X

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

SDG # ~~H6475~~ TD

Table # L1187323

Acctnum: TGERESHTX
Template: T162172
Prelogin: P752605
PM: 134 - Mark W. Beasley
PB: LC 1/27
Shipped Via: FedEX Priority

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8270 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Hold					Remarks	Sample # (lab only)
Bay 3 Sump Base	Grab	SS	5	1/29/20	1100	3	X	X	X		X							~~09~~ -05
Bay 3 Sump (2' blw base)	Grab	SS	5	1/29/20	1101	3						X						-08
Bay 3 N. Sidewall	Grab	SS	5	1/29/20	1102	3	X	X	X		X							~~10~~
Bay 3 S. Sidewall	Grab	SS	5	1/29/20	1103	3	X	X	X		X							~~11~~
Bay 3 E. Sidewall	Grab	SS	5	1/29/20	1104	3	X	X	X		X							~~12~~
Bay 3 W. Sidewall	Grab	SS	5	1/29/20	1105	3	X	X	X		X							~~13~~
~~Exterior Sump Base~~	~~Grab~~	SS	3	~~1/29/20~~	~~1215~~	3	X	X	X		X							~~14~~
~~Ext Sump (2' blw base)~~	~~Grab~~	SS	3	~~1/29/20~~	~~1216~~	3						X						~~07~~ TD
Ext Sump N. Sidewall	Grab	SS	3	1/29/20	1217	3	X	X	X		X							15
Ext Sump S. Sidewall	Grab	SS	3	1/29/20	1218	3	X	X	X		X							~~16~~ -06

* 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 # 1382-4419 3235

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) KBarnette	Date: 1/30/20	Time: 1200	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.5+1=1.6 °C Bottles Received: 60	If preservation required by Login: Date/Time
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) Clark	Date: 1/31/20 Time: 840	Hold: Condition: [illegible]

L1187323

Andy Vann

From: Mark Beasley
Sent: Friday, February 7, 2020 1:51 PM
To: Project Service; Sample Storage
Cc: Jeremy Gupton
Subject: L1184715 & L1184753 *TGERESHTX* relog and hold samples

Log the below to one SDG as EX due 2/14. Use PO#8890.

Relog:

L1184715-01	SEG, SV8270, transfer TS
L1184753-03	SEG, transfer TS
L1184753-04	SV8270, transfer TS
L1184753-07	CR3, CR6, CRICP (place into WG1421187 and recapt data), transfer TS
L1184753-09	SV8270, transfer TS
L1184753-16	SV8270, transfer TS

Also log the below samples previously on hold:

Bay 3 Sump Base (2' blw base)	NWTPHDXNOSGT, SV8270, TS
Sump Line midpoint	CDICP, CRICP, TS

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Friday, February 07, 2020 1:21 PM
To: Mark Beasley
Cc: Tim Crump
Subject: request additional analysis at Federal Way

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please run the following samples under a standard 5-day TAT for Federal Way. PO Attached

TGE Sample ID	ESC Sample ID	Analysis	Comments
Bay 1 Sump Base	L1184753-03	Se only (re-run)	Initial sample result was not below WA screening level of 0.8 mg/kg
Bay 1 Sump E Sidewall	L1184753-07	Cr Speciation	
Bay 3 Sump Base (2' blw base)	Not assigned	NWTPH DRO/ORO	
		SVOCs	
Sump Line midpnt 2' blw	Not assigned	Cadmium and Chromium	
Sump Line midpoint	L1184715-01	Se only (re-run)	Initial sample result was not below WA screening level of 0.8 mg/kg

L1187323

		SVOCs	
Ext Sump S. Sidewall	L1184753-16	SVOCs	
Bay 3 Sump Base	L1184753-09	SVOCs	
Bay 1 Sump N Sidewall	L1184753-04	SVOCs	

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGERESOURCES, INC.

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
krbarnette@TGEResources.com| www.tgeresources.com

WBENC & SBA Certified Woman Owned Small Business
DUNS# 929574051
CAGE Code 08PQ6

certified WBENC WOMEN'S BUSINESS ENTERPRISE

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Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

February 20, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

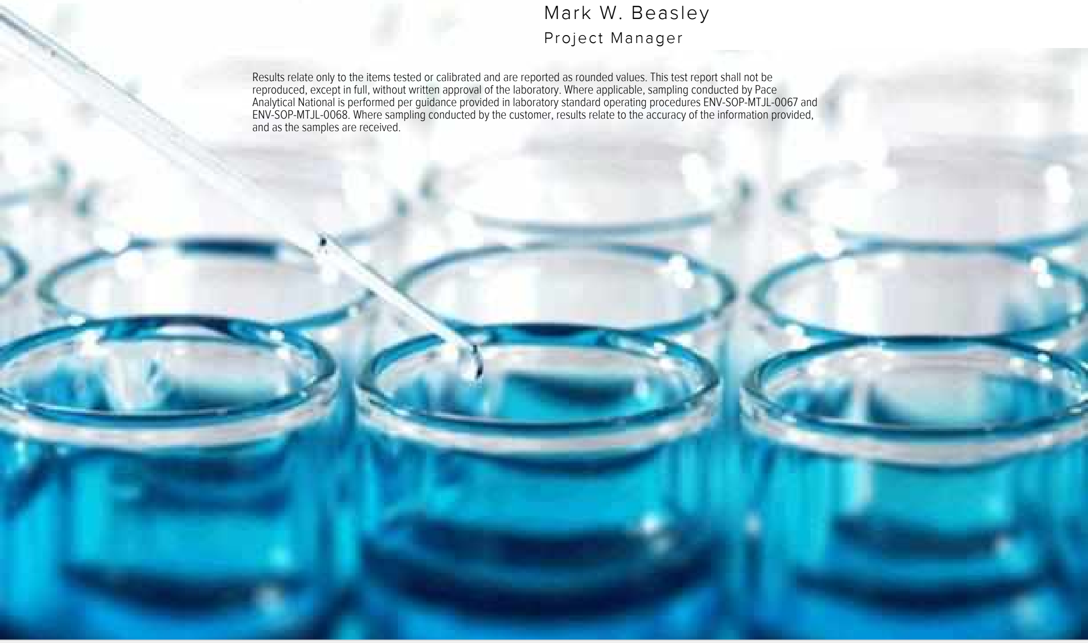
TGE Resources

Sample Delivery Group:	L1190051
Samples Received:	01/31/2020
Project Number:	R13411.07
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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Collected by	Collected date/time	Received date/time
K. Barnette	01/30/20 10:40	01/31/20 08:40

SUMP LINE MIDPOINT L1190051-01 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1421187	1	02/03/20 06:18	02/19/20 20:12	JIC	Mt. Juliet, TN
Total Solids by Method 2540 G-2011	WG1421886	1	02/04/20 23:50	02/04/20 23:59	JAV	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1429964	1	02/18/20 16:35	02/19/20 20:12	JIC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1421187	1	02/03/20 06:18	02/03/20 20:44	CCE	Mt. Juliet, TN

1 Cp
2 Tc
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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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,

  b. dilution factors,

  c. preparation methods,

  d. cleanup methods, and

  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and

  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,

  b. Calculated %R for each analyte, and

  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,

  b. MS/MSD spiking amounts,

  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

  d. Calculated %Rs and relative percent differences (RPDs), and

  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,

  b. The calculated RPD, and

  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 02/20/2020 10:07
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1190051-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1421187, WG1421886 and WG1429964

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 02/20/2020 10:07
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1190051-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1421187, WG1421886 and WG1429964

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 02/20/2020 10:07
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1190051-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1421187, WG1421886 and WG1429964

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Calculated Results

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	52.8		0.215	1.00	1.54	1	02/19/2020 20:12	WG1421187

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	65.1		1	02/04/2020 23:59	WG1421886

Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	U		0.983	2.00	3.07	1	02/19/2020 20:12	WG1429964

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium	52.8		0.215	1.00	1.54	1	02/03/2020 20:44	WG1421187

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3497187-1 02/04/20 23:59

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1184740-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1184740-01 02/04/20 23:59 • (DUP) R3497187-3 02/04/20 23:59

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	85.0	85.4	1	0.383		10

Laboratory Control Sample (LCS)

(LCS) R3497187-2 02/04/20 23:59

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) R3501287-1 02/19/20 20:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Chromium,Hexavalent	U		0.640	2.00

L1189982-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1189982-01 02/19/20 20:10 • (DUP) R3501287-6 02/19/20 20:10

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/kg	mg/kg		%		%
Chromium,Hexavalent	U	0.000	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3501287-2 02/19/20 20:06

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Chromium,Hexavalent	24.0	23.8	99.2	80.0-120	

L1189501-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1189501-06 02/19/20 20:07 • (MS) R3501287-3 02/19/20 20:08 • (MSD) R3501287-4 02/19/20 20:08

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chromium,Hexavalent	23.6	ND	22.0	22.1	93.1	93.7	1	75.0-125			0.680	20

L1189501-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1189501-06 02/19/20 20:07 • (MS) R3501287-7 02/19/20 20:20

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	mg/kg	mg/kg	mg/kg	%		%	
Chromium,Hexavalent	758	ND	638	84.2	50	75.0-125	

Method Blank (MB)

(MB) R3496582-1 02/03/20 20:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chromium	U		0.140	1.00

Laboratory Control Sample (LCS)

(LCS) R3496582-2 02/03/20 20:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chromium	100	98.8	98.8	80.0-120	

L1184753-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1184753-03 02/03/20 20:32 • (MS) R3496582-5 02/03/20 20:39 • (MSD) R3496582-6 02/03/20 20:42

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 %
Chromium	134	44.2	177	161	99.8	87.6	1	75.0-125			9.59	20

GLOSSARY OF TERMS

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1,6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T104704245-18-15
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

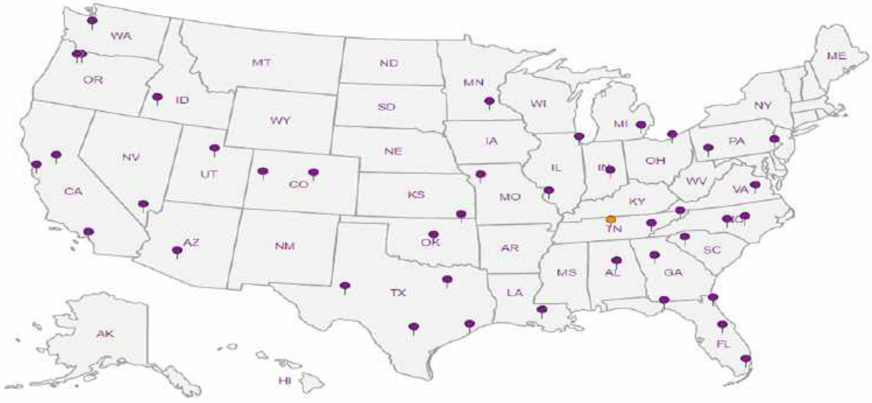
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Email To: **krbarnette@tgeresources.com**

Report to:
Kristi Barnette

Project Description: **Future Federal Way Emergency**

City/State Collected: Fed Way WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R13411.07

Lab Project # **TGERESHTX-FEDERALWAY**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8859**

Quote #

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

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

SDG # ~~L1184718~~

F062
L1190051

Acctnum: TGERESHTX

Template: **T162172**

Prelogin: **P752605**

PM: 134 - Mark W. Beasley

PB: LC 1/27

Shipped Via: **FedEX Priority**

AV
2/17/20

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8270 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold					Remarks	Sample # (lab only)
SumpLine Midpnt	Grab	SS	1	1/30/20	1040	3	X	X	X		X							~~-01~~ -01
SumpLine Midpnt 2' b/w	Grab	SS	3	1/30/20	1045	3						X						
		SS																
		SS																

* 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 # 1382 4819 3235

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) KBarnette
Date: 1/30/20
Time: 1200

Received by: (Signature)

Trip Blank Received: Yes / [✓ No]
[✓ HCL] / MeoH
TBR
O

Relinquished by: (Signature)
Date:
Time:

Received by: (Signature)

Temp: 1.5+.1=1.6 °C
Bottles Received: 6

If preservation required by Login: Date/Time

Relinquished by: (Signature)
Date:
Time:

Received for lab by: (Signature)

Date: 1/31/20
Time: 840

01-203

Condition: NCF / [✓ OK]

Andy Vann

From: Mark Beasley
Sent: Monday, February 17, 2020 10:59 AM
To: Project Service; Sample Storage
Cc: Jeremy Gupton
Subject: L1184715 *TGERESHTX* rush R4 relog

Relog L1184715-01 (already relogged as L1187323-01) for CRICP (place into WG1421187), CR3, & CR6. Transfer TS. Log as R4 due 2/20.

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Sunday, February 16, 2020 12:22 PM
To: Mark Beasley
Subject: request additional analysis at Federal Way

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please perform Cr speciation for "Sump Line Midpoint" (Pace Sample IDs L1184715-01 and L1187323-01) under an expedited 3 day TAT. Please email me Monday regarding the fees associated with this expedited analysis so that a PO can be made.

Thanks

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
Kristib@TGEResources.com| www.tgeresources.com

TGERESOURCES,INC.

WBENC & SBA Certified Woman Owned Small Business
DUNS# 929574051
CAGE Code 08PQ6

certified
WBENC
WOMEN'S BUSINESS ENTERPRISE

in g+ f

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ANALYTICAL REPORT

March 09, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

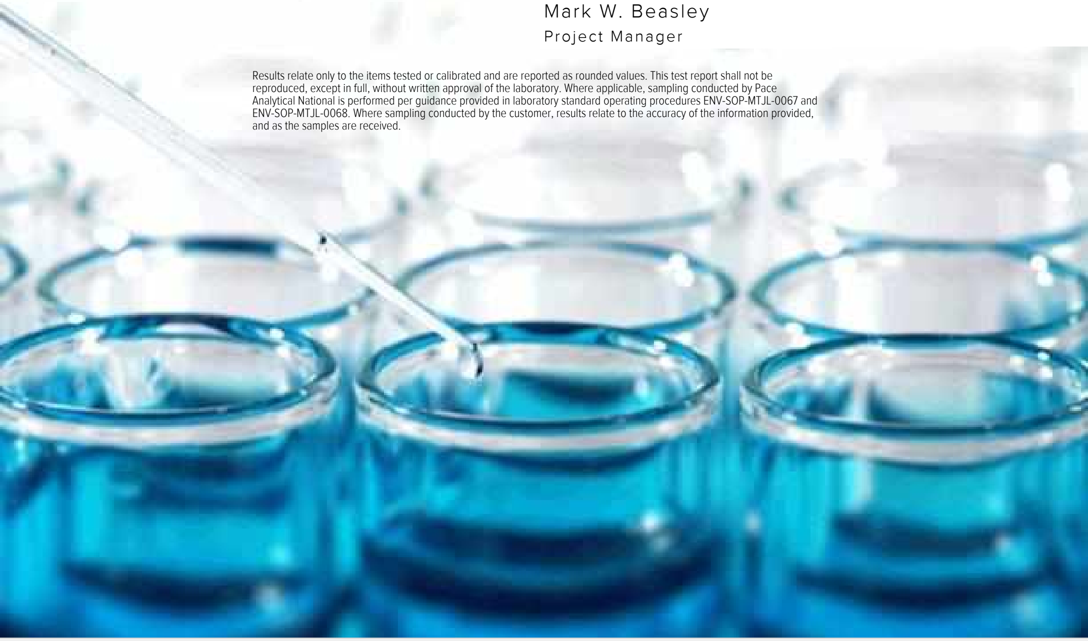
TGE Resources

Sample Delivery Group:	L1195008
Samples Received:	11/16/2019
Project Number:	R13411.07
Description:	Future Federal Way Hospital
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SB-27 (2-3) L1195008-16 Waste

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 08:42	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1440030	1	03/08/20 05:59	03/08/20 10:54	EL	Mt. Juliet, TN

SB-31 (3-3.5) L1195008-17 Waste

Collected by	Collected date/time	Received date/time
Tim Crump	11/14/19 14:34	11/16/19 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1440030	1	03/08/20 05:59	03/08/20 11:05	EL	Mt. Juliet, TN

SB33 (1.5-2) L1195008-18 Waste

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 08:58	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1439975	1	03/07/20 17:13	03/08/20 15:57	EL	Mt. Juliet, TN

SB35 (1-1.5) L1195008-20 Waste

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:10	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1439975	1	03/07/20 17:13	03/08/20 16:00	EL	Mt. Juliet, TN

SB35 (1.5-2) L1195008-21 Waste

Collected by	Collected date/time	Received date/time
K. Barnette	01/07/20 09:11	01/09/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1439975	1	03/07/20 17:13	03/08/20 16:02	EL	Mt. Juliet, TN

SB40 (10-11) L1195008-23 Waste

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:23	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1439975	1	03/07/20 17:13	03/08/20 16:05	EL	Mt. Juliet, TN

SB40 (11-12) L1195008-24 Waste

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:24	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1439975	1	03/07/20 17:13	03/08/20 16:08	EL	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB40 (16-17) L1195008-25 Waste

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:26	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1439975	1	03/07/20 17:13	03/08/20 16:11	EL	Mt. Juliet, TN

SB43 (2-3) L1195008-26 Waste

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:42	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1439975	1	03/07/20 17:13	03/08/20 16:13	EL	Mt. Juliet, TN

SB43 (11-12) L1195008-27 Waste

Collected by	Collected date/time	Received date/time
K. Barnette	01/08/20 08:49	01/10/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1439975	1	03/07/20 17:13	03/08/20 16:21	EL	Mt. Juliet, TN

BAY 1 SUMP BASE L1195008-28 Waste

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 13:30	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1439975	1	03/07/20 17:13	03/08/20 16:24	EL	Mt. Juliet, TN

BAY 1 SUMP S SIDEWALL L1195008-29 Waste

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 13:33	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1439975	1	03/07/20 17:13	03/08/20 16:27	EL	Mt. Juliet, TN

BAY 1 SUMP E SIDEWALL L1195008-30 Waste

Collected by	Collected date/time	Received date/time
K. Barnette	01/29/20 13:35	01/31/20 08:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1439354	1	03/06/20 13:52	03/06/20 13:52	IDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1439975	1	03/07/20 17:13	03/08/20 16:29	EL	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.

Mark W. Beasley
Project Manager

Sample Delivery Group (SDG) Narrative

Sample quantity was not sufficient to complete analysis per recommended method guidelines.

Lab Sample ID	Project Sample ID	Method
L1195008-28	BAY 1 SUMP BASE	1311
L1195008-30	BAY 1 SUMP E SIDEWALL	1311

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
    - a. Items consistent with NELAC Chapter 5,
    - b. dilution factors,
    - c. preparation methods,
    - d. cleanup methods, and
    - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
    - a. Calculated recovery (%R), and
    - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
    - a. LCS spiking amounts,
    - b. Calculated %R for each analyte, and
    - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
    - a. Samples associated with the MS/MSD clearly identified,
    - b. MS/MSD spiking amounts,
    - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
    - d. Calculated %Rs and relative percent differences (RPDs), and
    - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
    - a. The amount of analyte measured in the duplicate,
    - b. The calculated RPD, and
    - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/09/2020 10:26
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1195008-16, 17, 18, 20, 21, 23, 24, 25, 26, 27, 28, 29 and 30
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1440030, WG1439975 and WG1439354

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		X			1
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/09/2020 10:26
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1195008-16, 17, 18, 20, 21, 23, 24, 25, 26, 27, 28, 29 and 30
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1440030, WG1439975 and WG1439354

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/09/2020 10:26
Project Name: Future Federal Way Hospital	Laboratory Job Number: L1195008-16, 17, 18, 20, 21, 23, 24, 25, 26, 27, 28, 29 and 30
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1440030, WG1439975 and WG1439354

ER #[1]	Description
1	1311 WG1439354 L1195008-28 and 30: Sample quantity was not sufficient to complete analysis per recommended method guidelines.

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	4.72		3/6/2020 1:52:40 PM	WG1439354
Final pH	4.86		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	ND		0.100	5	1	03/08/2020 10:54	WG1440030

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	4.61		3/6/2020 1:52:40 PM	WG1439354
Final pH	4.82		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	03/08/2020 11:05	WG1440030

SB33 (1.5-2)

Collected date/time: 01/07/20 08:58

SAMPLE RESULTS - 18

L1195008

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	4.86		3/6/2020 1:52:40 PM	WG1439354
Final pH	4.81		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	03/08/2020 15:57	WG1439975
Lead	ND		0.100	5	1	03/08/2020 15:57	WG1439975

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	6.11		3/6/2020 1:52:40 PM	WG1439354
Final pH	4.81		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	03/08/2020 16:00	WG1439975
Lead	ND		0.100	5	1	03/08/2020 16:00	WG1439975

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	5.77		3/6/2020 1:52:40 PM	WG1439354
Final pH	4.82		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	03/08/2020 16:02	WG1439975
Lead	ND		0.100	5	1	03/08/2020 16:02	WG1439975

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	6.88		3/6/2020 1:52:40 PM	WG1439354
Final pH	4.85		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	ND		0.100	5	1	03/08/2020 16:05	WG1439975

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	6.89		3/6/2020 1:52:40 PM	WG1439354
Final pH	4.86		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	0.232		0.100	5	1	03/08/2020 16:08	WG1439975

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	6.45		3/6/2020 1:52:40 PM	WG1439354
Final pH	4.87		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	0.105		0.100	5	1	03/08/2020 16:11	WG1439975

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	6.52		3/6/2020 1:52:40 PM	WG1439354
Final pH	4.86		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	0.231		0.100	5	1	03/08/2020 16:13	WG1439975

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	6.19		3/6/2020 1:52:40 PM	WG1439354
Final pH	4.87		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	ND		0.100	5	1	03/08/2020 16:21	WG1439975

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	8.75		3/6/2020 1:52:40 PM	WG1439354
Final pH	9.65		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	ND		0.100	5	1	03/08/2020 16:24	WG1439975

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	8.26		3/6/2020 1:52:40 PM	WG1439354
Final pH	4.92		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	ND		0.100	5	1	03/08/2020 16:27	WG1439975

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/6/2020 1:52:40 PM	WG1439354
Fluid	1		3/6/2020 1:52:40 PM	WG1439354
Initial pH	8.75		3/6/2020 1:52:40 PM	WG1439354
Final pH	5.08		3/6/2020 1:52:40 PM	WG1439354

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	ND		0.100	5	1	03/08/2020 16:29	WG1439975

Method Blank (MB)

(MB) R3506524-1 03/08/20 15:09

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.0333	0.100
Lead	U		0.0333	0.100

Laboratory Control Sample (LCS)

(LCS) R3506524-2 03/08/20 15:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	10.0	9.66	96.6	80.0-120	
Lead	10.0	9.96	99.6	80.0-120	

WG1440030

Metals (ICP) by Method 6010D

QUALITY CONTROL SUMMARY

L1195008-16,17

Method Blank (MB)

(MB) R3506520-1 03/08/20 10:49

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Arsenic	0.0362	J	0.0330	0.100
Lead	U		0.0330	0.100

Laboratory Control Sample (LCS)

(LCS) R3506520-2 03/08/20 10:52

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Arsenic	10.0	9.86	98.6	80.0-120	
Lead	10.0	10.0	100	80.0-120	

L1195008-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1195008-16 03/08/20 10:54 • (MS) R3506520-4 03/08/20 11:00 • (MSD) R3506520-5 03/08/20 11:02

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Arsenic	10.0	ND	9.81	9.74	98.1	97.4	1	75.0-125			0.681	20
Lead	10.0	ND	9.98	9.91	99.8	99.1	1	75.0-125			0.728	20

GLOSSARY OF TERMS

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Sample Detection Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

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

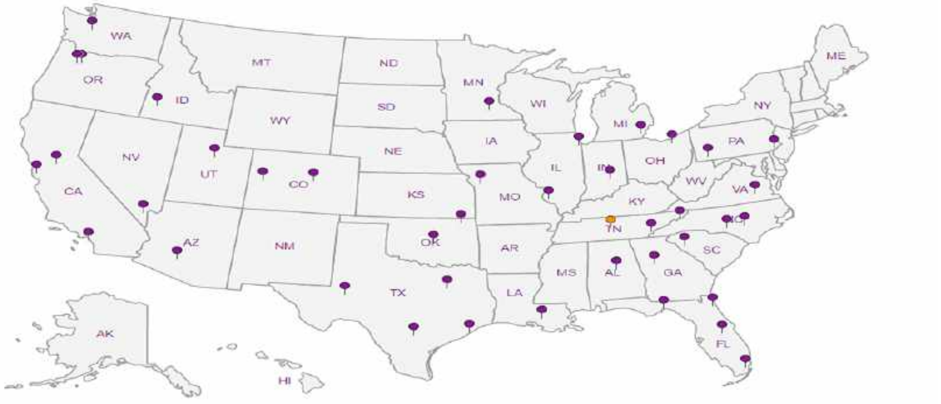
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 8

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 # ~~L1161424~~ **D212** L1195008

AV 3/3/20

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: 134 - Mark W. Beasley
PB: 11/13/19 MWB
Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-15 (0-1)	Grab	SS	0-1	11/14/19	1145	~~3~~ 2	X	X	X		X		~~01~~ -01
SB-15 (1-2)	Grab	SS	1-2	11/14/19	1146	3						Hold	
SB-15 (2-3)	Grab	SS	2-3	11/14/19	1147	3	X	X	X		X		~~02~~
SB-15 (3-4)	Grab	SS	3-4	11/14/19	1148	3						Hold	
SB-15 (6-8)	Grab	SS	6-8	11/14/19	1149	3						Hold	
SB-15 (10-12)	Grab	SS	10-12	11/14/19	1150	3	X	X	X		X		03
SB-15A (0-1)	Grab	SS	0-1	11/14/19	1125	3						Hold	
SB-15A (1-2)	Grab	SS	1-2	11/14/19	1126	3						Hold	
SB-15A (2-3)	Grab	SS	2-3	11/14/19	1127	3						Hold	
SB-15A (3-4)	Grab	SS	3-4	11/14/19	1128	3						Hold	

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: 4510 1662 0396/0411/0536/0514/ 0488/0400/ 0503/0422/0444/0433/0477/0525/0466/0455

pH ______ Temp ______
Flow ______ Other ______

Samples returned via: ___ UPS X FedEx ___ Courier ________

Tracking # 4686 6470 7042

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)	
	11/15/19	1230		Trip Blank Received: [✓ Yes] No [✓ HCl] / MeoH TBR 5
	11-15	1720		Temp [illegible] °C Bottles Received: 0.2-1=0.1 223

Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date:	Time:
				11-16-19	9:00

If preservation required by Login: Date/Time

11-131

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #: R13411.07

Lab Project #: TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #:

P.O. #: 8657

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:

Chain of Custody Page 7 of 18

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 # L1161924
Table # L1195002
Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-20 (2-3)	Grab	SS	2-3	11/14/19	0935	3	X	X	X		X							-5
SB-20 (3-4)	Grab	SS	3-4	11/14/19	0936	3											Hold	
SB-20 (4-6)	Grab	SS	4-6	11/14/19	0937	3	X	X	X		X							-6
SB-20 (6-8)	Grab	SS	6-8	11/14/19	0938	3											Hold	
SB-20 (10-11)	Grab	SS	10-11	11/14/19	0939	3	X	X	X		X							-7
SB-20 (12-14)	Grab	SS	12-14	11/14/19	0940	3											Hold	
SB-21 (0-1)	Grab	SS	0-1	11/14/19	1005	3											Hold	
SB-21 (1-2)	Grab	SS	1-2	11/14/19	1006	3											Hold	
SB-21 (2-3)	Grab	SS	2-3	11/14/19	1007	3	X	X	X		X							-8 -02
SB-21 (3-4)	Grab	SS	3-4	11/14/19	1008	3											Hold	

* 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 X 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: 11/15/19	Time: 1250	Received by: (Signature)	Trip Blank Received: [✓ Yes] No [✓ HCL] MeoH TBR 5
Relinquished by : (Signature)	Date: 11/15	Time: 1700	Received by: (Signature)	Temp: Amb °C 0.2-1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold: 11-125

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N __ Y X

Chain of Custody Page 8 of 18

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 # L1161924

Table # L1195009

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-21 (4-6)	Grab	SS	4-6	11/14/19	1009	3						Held	
SB-21 (6-8)	Grab	SS	6-8	11/14/19	1010	3	X	X	X		X		~~19~~ -03
SB-21 (9-11)	Grab	SS	9-11	11/14/19	1011	3	X	X	X		X		~~20~~ -04
SB-21 (12-14)	Grab	SS	12-14	11/14/19	1012	3						Held	
SB-22 (0-1)	Grab	SS	0-1	11/14/19	0950	3	X	X	X		X		~~21~~
SB-22 (1-2)	Grab	SS	1-2	11/14/19	0951	3						Held	
SB-22 (2-3)	Grab	SS	2-3	11/14/19	0952	3	X	X	X		X		~~22~~
SB-22 (3-4)	Grab	SS	3-4	11/14/19	0953	3						Held	
SB-22 (4-6)	Grab	SS	4-6	11/14/19	0954	3	X	X	X		X		~~23~~
SB-22 (6-8)	Grab	SS	6-8	11/14/19	0955	3						Held	

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp: °C 0.2-.1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 9 of 18

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1161924

Table # L1195008

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: 134 - Mark W. Beasley
PB:

Shipped Via: **FedEX Priority**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-22 (9-11)	Grab	SS	9-11	11/14/19	0956	3											Hold	
SB-22 (12-14)	Grab	SS	12-14	11/14/19	0957	3											Hold	
SB-23 (0-1)	Grab	SS	0-1	11/14/19	1115	3	X	X	X		X							~~24~~ -05
SB-23 (1-2)	Grab	SS	1-2	11/14/19	1116	3											Hold	
SB-23 (2-3)	Grab	SS	2-3	11/14/19	1117	3											Hold	
SB-23 (3-4)	Grab	SS	3-4	11/14/19	1118	3	X	X	X		X							~~24~~
SB-23 (4-6)	Grab	SS	4-6	11/14/19	1119	3	X	X	X		X							~~26~~
SB-23 (6-8)	Grab	SS	6-8	11/14/19	1120	3											Hold	
SB-23 (9-11)	Grab	SS	9-11	11/14/19	1121	3											Hold	
SB-23 (12-14)	Grab	SS	12-14	11/14/19	1122	3											Hold	

* 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 X 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received [✓ Yes] / No [✓ HCL] / MeoH TBR 5	
Relinquished by : (Signature)	Date: 11-15	Time: [illegible]	Received by: (Signature)	Temp: AFm °C 0.3-1=0.1	Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

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Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Chain of Custody Page 12 of 18

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Phone: 800-767-5859
Fax: 615-758-5859

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

SDG # L1161924

Table # L1195008

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P740770**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Priority**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N___ Y_X_

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-25 (17-18)	Grab	SS	17-18	11/14/19	1004	3											Hold	
SB-25 (19-20)	Grab	SS	19-20	11/14/19	1005	3	X	X	X		X							~~36~~
SB-26 (0-1)	Grab	SS	0-1	11/14/19	0917	3	X	X	X		X							~~37~~ -06
SB-26 (1-2)	Grab	SS	1-2	11/14/19	0918	3											Hold	
SB-26 (2-3)	Grab	SS	2-3	11/14/19	0919	3	X	X	X		X							~~38~~ -07
SB-26 (3-4)	Grab	SS	3-4	11/14/19	0920	3											Hold	
SB-26 (4-6)	Grab	SS	4-6	11/14/19	0921	3	X	X	X		X							~~39~~ -08
SB-26 (6-8)	Grab	SS	6-8	11/14/19	0922	3											Hold	
SB-26 (8-9)	Grab	SS	8-9	11/14/19	0923	3	X	X	X		X							~~40~~ -09
SB-26 (9-10)	Grab	SS	9-10	11/14/19	0924	3											Hold	

* 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 _X_ 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: 11/15/19	Time: 1330	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11-15	Time: 1700	Received by: (Signature)	Temp: °C 0.2-1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 13 of 18

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

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

SDG # L1161924

Table # L1195008

Acctnum: **TGERESHTX**

Template: **T158754**

Prelogin: **P740770**

PM: 134 - Mark W. Beasley

PB:

Shipped Via: **FedEX Priority**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-26 (10-11)	Grab	SS	10-11	11/14/19	0925	3	X	X	X		X		~~41~~ -10
SB-26 (11-12)	Grab	SS	11-12	11/14/19	0926	3						Hold	
SB-26 (14-15)	Grab	SS	14-15	11/14/19	0927	3						Hold	
SB-26 (16-17)	Grab	SS	16-17	11/14/19	0928	3	X	X	X		X		~~42~~
SB-26 (17-18)	Grab	SS	17-18	11/14/19	0929	3						Hold	
SB-26 (19-20)	Grab	SS	19-20	11/14/19	0930	3	X	X	X		X		~~43~~
SB-27 (0-1)	Grab	SS	0-1	11/14/19	0840	3						Hold	
SB-27 (1-2)	Grab	SS	1-2	11/14/19	0841	3	X	X	X		X		~~44~~
SB-27 (2-3)	Grab	SS	2-3	11/14/19	0842	3						Hold	
SB-27 (3-4)	Grab	SS	3-4	11/14/19	0843	3	X	X	X		X		~~45~~

* 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: 11/15/19	Time: 1250	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11-15	Time: 1700	Received by: (Signature)	Temp: Alim °C 0.2-.1=0.1 Bottles Received: 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 17 of 18

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1161924

Table # L1195008

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739846**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Standard**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-29 (8-9)	Grab	SS	8-9	11/14/19	1046	3											Hold	
SB-29 (9-10)	Grab	SS	9-10	11/14/19	1047	3	X	X	X		X							~~61~~
SB-29 (10-11)	Grab	SS	10-11	11/14/19	1048	3											Hold	
SB-29 (11-12)	Grab	SS	11-12	11/14/19	1049	3	X	X	X		X							~~62~~
SB-29 (14-15)	Grab	SS	14-15	11/14/19	1050	3											Hold	
SB-29 (16-17)	Grab	SS	16-17	11/14/19	1051	3	X	X	X		X							~~63~~
SB-29 (17-18)	Grab	SS	17-18	11/14/19	1052	3											Hold	
SB-29 (19-20)	Grab	SS	19-20	11/14/19	1053	3	X	X	X		X							~~64~~
SB-30 (0-0.5)	Grab	SS	0-0.5	11/14/19	1335	4 ~~2~~	X	X	X	X	X							~~65~~ -11
SB-30 (0.5-1)	Grab	SS	0.5-1	11/14/19	1336	4 ~~2~~	X	X	X	X	X							~~66~~ -12

* 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: 11/15/19	Time: 1230	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR 5
Relinquished by : (Signature)	Date: 11-15	Time: 170	Received by: (Signature)	Temp: [illegible] °C Bottles Received: [illegible] 223
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.07**

Lab Project # **TGERESHTX-R13411**

Collected by (print): Tim Crump

Site/Facility ID #

P.O. # **8657**

Collected by (signature):

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

Immediately Packed on Ice N ___ Y X

Chain of Custody Page 18 of 18

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1161424

Table # L1195008

Acctnum: **TGERESHTX**
Template: **T158754**
Prelogin: **P739846**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-30(1-1.5)	Grab	SS	1-1.5	11/14/19	1337	4 8	X	X	X	X	X							~~67~~ -13
SB-30(1.5-2)	Grab	SS	1.5-2	11/14/19	1338	4 8	X	X	X	X	X							68
SB-30(3-3.5)	Grab	SS	3-3.5	11/14/19	1339	4 8											Hold	
SB-30(4.5-5)	Grab	SS	4.5-5	11/14/19	1340	4 8											Hold	
SB-31(0-0.5)	Grab	SS	0-0.5	11/14/19	1430	4 8	X	X	X	X	X							~~69~~
SB-31(0.5-1)	Grab	SS	0.5-1	11/14/19	1431	4 8	X	X	X	X	X							~~70~~
SB-31(1-1.5)	Grab	SS	1-1.5	11/14/19	1432	4 8	X	X	X	X	X							~~71~~ -14
SB-31(1.5-2)	Grab	SS	1.5-2	11/14/19	1433	4 8	X	X	X	X	X							~~72~~ -15
SB-31(3-3.5)	Grab	SS	3-3.5	11/14/19	1434	4 8											Hold	
SB-31(4.5-5)	Grab	SS	4.5-5	11/14/19	1435	4 8											Hold	

* 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)		
	11/15/19	1220		Trip Blank Received: [✓ Yes] / No [✓ HCl] / MeoH TBR 5	
Relinquished by : (Signature)	Date: 1145	Time:	Received by: (Signature)	Temp: [illegible] °C [illegible]	Bottles Received 293
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19	Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.07

Lab Project #
TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #

P.O. #
8657

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

Chain of Custody Page 13 of 16

Pace Analytical®
National Center for Testing & Innovation

L1195008

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1161924

Table # ~~L1165678~~

Acctnum: TGERESHTX
Template: T158754
Prelogin: P740770
PM: 134 - Mark W. Beasley
PB:
Shipped Via: FedEX Priority

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr						Remarks	Sample # (lab only)
SB-26(10-11)	Grab	SS	10-11	11/14/19	0925	3	X	X	X		X							-41
SB-26(11-12)	Grab	SS	11-12	11/14/19	0926	3											Hold	
~~SB-26(14-15)~~	~~Grab~~	~~SS~~	~~14-15~~	~~11/14/19~~	~~0927~~	~~3~~											~~Hold~~	
SB-26(16-17)	Grab	SS	16-17	11/14/19	0928	3	X	X	X		X							-42
SB-26(17-18)	Grab	SS	17-18	11/14/19	0929	3											Hold	
SB-26(19-20)	Grab	SS	19-20	11/14/19	0930	3	X	X	X		X							-43
SB-27(0-1)	Grab	SS	0-1	11/14/19	0840	3											Hold	
SB-27(1-2)	Grab	SS	1-2	11/14/19	0841	3	X	X	X		X							-44
~~SB-27(2-3)~~	~~Grab~~	~~SS~~	~~2-3~~	~~11/14/19~~	~~0842~~	~~3~~											~~Hold~~	
SB-27(3-4)	Grab	SS	3-4	11/14/19	0843	3	X	X	X		X							-45

~~33~~

34 -16

* 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: 11/15/19	Time: 1250	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 5 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date: 11-15	Time: 1720	Received by: (Signature)	Temp: Alm °C 0.2+1=0.1 Bottles Received: 323
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #: R13411.07

Lab Project #: TGERESHTX-R13411

Collected by (print): Tim Crump

Site/Facility ID #:

P.O. #: 8657

Collected by (signature):

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:

Immediately Packed on Ice N ___ Y X

Chain of Custody Page 18 of 18

Pace Analytical®
National Center for Testing & Innovation

L1195008

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1161924

Table # L1165629

Acctnum: TGERESHTX
Template: T158754
Prelogin: P739846
PM: 134 - Mark W. Beasley
PB:

Shipped Via: FedEX Standard

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDx w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081, 8141, 8151 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-30(1-1.5)	Grab	SS	1-1.5	11/14/19	1337 4	3	X	X	X	X	X		67
SB-30(1.5-2)	Grab	SS	1.5-2	11/14/19	1338 4	3	X	X	X	X	X		68
SB-30(3-3.5)	Grab	SS	3-3.5	11/14/19	1339 4	3						Hold	39
SB-30(4.5-5)	Grab	SS	4.5-5	11/14/19	1340 4	3						Hold	40
SB-31(0-0.5)	Grab	SS	0-0.5	11/14/19	1430 4	3	X	X	X	X	X		69
SB-31(0.5-1)	Grab	SS	0.5-1	11/14/19	1431 4	3	X	X	X	X	X		70
SB-31(1-1.5)	Grab	SS	1-1.5	11/14/19	1432 4	3	X	X	X	X	X		71
SB-31(1.5-2)	Grab	SS	1.5-2	11/14/19	1433 4	3	X	X	X	X	X		72
SB-31(3-3.5)	Grab	SS	3-3.5	11/14/19	1434 4	3						Hold	41-n
SB-31(4.5-5)	Grab	SS	4.5-5	11/14/19	1435 4	3						Hold	42

* 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: 11/15/19	Time: 1220	Received by: (Signature)	Trip Blank Received: [✓ Yes] No 5 [✓ HCl] MeoH 8 TBR
Relinquished by: (Signature)	Date: 1445	Time:	Received by: (Signature)	Temp: [illegible] °C 4.2-.1=4.1 Bottles Received: 293
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-16-19 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # R13411.08

Lab Project # TGERESHTX-R13411

Collected by (print): K Barnette

Site/Facility ID #

P.O. # 8772

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Chain of Custody Page ___ of ___

Pace Analytical® National Center for Testing & Innovation

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Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~[illegible]~~

Table # L1195008

Acctnum: **TGERESHTX**

Template: **T160680**

Prelogin: **P747407**

PM: **134 - Mark W. Beasley**

PB:

Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB32(9-10)	Grab	SS	9-10	1/7/20	1025	1								X				
SB32(10-11)	Grab	SS	10-11	1/7/20	1026	1	X	X	X			X			X			06
SB32(11-12)	Grab	SS	11-12	1/7/20	1027	1								X				-07
SB33(0-.5)	Grab	SS	0-.5	1/7/20	855	1								X				-08
SB33(.5-1)	Grab	SS	.5-1	1/7/20	856	1	X	X	X			X			X			-09
SB33(1-1.5)	Grab	SS	1-1.5	1/7/20	857	1	X	X	X			X			X			-10
SB33(1.5-2)	Grab	SS	1.5-2	1/7/20	858	1	X	X	X			X			X			-11 -18
SB33(3-3.5)	Grab	SS	3-3.5	1/7/20	859	1								X				-12
SB33(4-45)	Grab	SS	4-4.5	1/7/20	900	1								X				-13
SB33(5-6)	Grab	SS	5-6	1/7/20	901	1	X	X	X			X			X			-14

* 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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCL / MeoH TBR 10	
Relinquished by: (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: 2.3-2.0=2.3 °C	Bottles Received: 148
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/9/20	Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnette

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Chain of Custody Page ___ of ___

Pace Analytical®
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Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~J1?954~~

Table # L1195008

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)	
SB35 (.5-1)	Grab	SS	.5-1	1/7/20	909	1	X	X	X			X			X			~~19~~	-19
SB35 (1-1.5)	Grab	SS	1-1.5	1/7/20	910	1	X	X	X			X			X			20	-20
SB35 (1.5-2)	Grab	SS	1.5-2	1/7/20	911	1	X	X	X			X			X			~~21~~	-21
SB35 (3-3.5)	Grab	SS	3-3.5	1/7/20	912	1								X					
SB35 (~~4~~4.5-5)	Grab	SS	~~4~~ 4.5-5	1/7/20	913	1								X					
SB35 (5-6)	Grab	SS	5-6	1/7/20	914	1	X	X	X			X			X			~~22~~	
SB35 (6-7)	Grab	SS	6-7	1/7/20	915	1								X					
SB35 (7-8)	Grab	SS	7-8	1/7/20	916	1								X					
SB35 (8-9)	Grab	SS	8-9	1/7/20	917	1	X	X	X			X			X			~~25~~	
SB35 (9-10)	Grab	SS	9-10	1/7/20	918	1								X					

* 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) KBarnette	Date: 1/7/20	Time: 2000	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 10	
Relinquished by : (Signature)	Date: 1-7-20	Time: 1500	Received by: (Signature)	Temp: 22-3=0A °C Bottles Received: 14B	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/9/20 Time: 8:30	Hold Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # R13411.08

Lab Project # TGERESHTX-R13411

Collected by (print): K Barnette

Site/Facility ID #

P.O. # 8772

Collected by (signature): K Barnette

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Chain of Custody Page ___ of ___

Pace Analytical®
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Fax: 615-758-5859

SDG # 1178010

Table # L1195008

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: 134 - Mark W. Beasley
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB40(0-1)	Grab	SS	0-1	1/8/20	0815	1								X				
SB40(1-2)	Grab	SS	1-2	1/8/20	816	1								X				
SB40(2-3)	Grab	SS	2-3	1/8/20	817	1		X	X						X			~~01~~
SB40(3-4)	Grab	SS	3-4	1/8/20	818	1								X				
SB40(4-6)	Grab	SS	4-6	1/8/20	819	1		X	X						X			~~02~~
SB40 (6-8)	Grab	SS	6-8	1/8/20	820	1								X				
SB40 (8-9)	Grab	SS	8-9	1/8/20	821	1		X	X						X			~~03~~ -22
SB40 (9-10)	Grab	SS	9-10	1/8/20	822	1								X				
SB40 (10-11)	Grab	SS	10-11	1/8/20	823	1		X	X						X			~~04~~ -23
SB40 (11-12)	Grab	SS	11-12	1/8/20	824	1		X	X						X			~~05~~ -24

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:
0.3/0.1/0.3/0.8/0.5/0.2/0.2/0.2/1.4/0.2/1.1

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
___ UPS ___ FedEx ___ Courier ________

Tracking # 1235 8607 1882/1972/1917/1870/1961/ 1928/1940/1906/1858/1750/1891

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) K Barnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 6	
Relinquished by : (Signature)	Date: 1-9-20	Time:	Received by: (Signature)	Temp: °C 1.5-.5=1.0	Bottles Received: 217
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20	Time: 9:00

If preservation required by Login: Date/Time

01-047
01-048
01-049
01-050

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): K Barnette

Immediately Packed on Ice N___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X 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 ___ of ___

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Fax: 615-758-5859

SDG# ~~1198043~~

Table # L1195008

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB40(14-15)	Grab	SS	14-15	1/8/20	825	1								X				
SB40(16-17)	Grab	SS	16-17	1/8/20	826	1		X	X						X			~~06~~ -25
SB40(17-18)	Grab	SS	17-18	1/8/20	827	1								X				
SB40(19-20)	Grab	SS	19-20	1/8/20	828	1								X				
SB41 (0-1)	Grab	SS	0-1	1/8/20	905	1								X				
SB41 (1-2)	Grab	SS	1-2	1/8/20	906	1								X				
SB41(2-3)	Grab	SS	2-3	1/8/20	907	1		X	X						X			~~07~~
SB41 (3-4)	Grab	SS	3-4	1/8/20	908	1								X				
SB41 (4-6)	Grab	SS	4-6	1/8/20	909	1		X	X						X			[illegible]
SB41 (6-8)	Grab	SS	6-8	1/8/20	910	1								X				

* 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) K Barnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCL / MeoH TBR 6	
Relinquished by : (Signature)	Date: 1-9-20	Time: 1720	Received by: (Signature)	Temp: 1.5-.5=1.0 °C Bottles Received: 217	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20 Time: 9:00	Hold: | Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **kristib@tgeresources.com, tecrump@tgeresources.com**

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way, WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # **R13411.08**

Lab Project # **TGERESHTX-R13411**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8772**

Collected by (signature): KBarnett

Immediately Packed on Ice N___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Chain of Custody Page ___ of ___

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Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~1178843~~

Table # L1195008

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB42(17-18)	Grab	SS	17-18	1/8/20	807	1								X				
SB42(19-20)	Grab	SS	19-20	1/8/20	808	1								X				
SB43(0-1)	Grab	SS	0-1	1/8/20	840	1								X				
SB43(1-2)	Grab	SS	1-2	1/8/20	841	1								X				
SB43(2-3)	Grab	SS	2-3	1/8/20	842	1		X	X						X			-19 -26
SB43(3-4)	Grab	SS	3-4	1/8/20	843	1								X				
SB43(4-6)	Grab	SS	4-6	1/8/20	844	1		X	X						X			-20
SB43(6-8)	Grab	SS	6-8	1/8/20	845	1								X				
SB43(8-9)	Grab	SS	8-9	1/8/20	846	1		X	X						X			-21
SB43(9-10)	Grab	SS	9-10	1/8/20	847	1								X				

* 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) KBarnette	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 6	
Relinquished by : (Signature)	Date: 1-9-20	Time: 1700	Received by: (Signature)	Temp: 15-5=10 °C	Bottles Received: 217
Relinquished by : (Signature)	Date:	Time	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20	Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Accounts Payable
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: kristib@tgeresources.com, tecrump@tgeresources.com

Project Description: **Future Federal Way Hospital**

City/State Collected: Federal Way WA

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #
R13411.08

Lab Project #
TGERESHTX-R13411

Collected by (print): KBarnette

Site/Facility ID #

P.O. #
8772

Collected by (signature): KBarnett

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X 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 ___ of ___

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Phone: 800-767-5859
Fax: 615-758-5859

SDG # ~~L1178073~~

Table # L1195008

Acctnum: **TGERESHTX**
Template: **T160680**
Prelogin: **P747407**
PM: 134 - Mark W. Beasley
PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Arsenic 8ozClr-NoPres	Cadmium 8ozClr-NoPres	Lead 8ozClr-NoPres	NWTPHDX w/o SGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	hold	moisture		Remarks	Sample # (lab only)
SB43(10-11)	Grab	SS	10-11	1/8/20	848	1		X	X						X			~~22~~
SB43(11-12)	Grab	SS	11-12	1/8/20	849	1		X	X						X			~~23~~ 27
SB43 (14-15)	Grab	SS	14-15	1/8/20	850	1								X				
SB43 (16-17)	Grab	SS	16-17	1/8/20	851	1		X	X						X			~~24~~
SB43 (17-18)	Grab	SS	17-18	1/8/20	852	1								X				
SB43 (19-20)	Grab	SS	19-20	1/8/20	853	1								X				
SB45(0-1)	Grab	SS	0-1	1/8/20	1310	1	X								X			~~25~~
SB45(1-2)	Grab	SS	1-2	1/8/20	1311	1	X								X			~~26~~
SB45(2-3)	Grab	SS	2-3	1/8/20	1312	1								X				
SB45(3-4)	Grab	SS	3-4	1/8/20	1313	1								X				

* Matrix:
[illegible]
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks:

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking #

Relinquished by : (Signature) KBarnett	Date: 1/8/20	Time: 1900	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 6	
Relinquished by : (Signature)	Date: 1-9-20	Time: 1700	Received by: (Signature)	Temp: °C 1.5-.5=1.0	Bottles Received: 217
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 1/10/20	Time: 9:00

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

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected: Federal Way WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #: R13411.07

Lab Project #: **TGERESHTX-FEDERALWAY**

Collected by (print): K. Barnette

Site/Facility ID #:

P.O. #: **8859**

Collected by (signature): KBarnette

Quote #:

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed:

Chain of Custody Page ___ of ___

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SDG # L1195008

Table F063

Acctnum: **TGERESHTX**
Template: **T162172**
Prelogin: **P752605**
PM: 134 - Mark W. Beasley
PB: LC 1/27
Shipped Via: **FedEX Priority**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8270 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	Hold	Remarks	Sample # (lab only)
Ext Sump E. Sidewall	Grab	SS	3	1/29/20	1219	3	X	X	X		X			~~01~~
Ext Sump W. Sidewall	Grab	SS	3	1/29/20	1220	3	X	X	X		X			~~02~~
Bay 1 Sump Base	Grab	SS	4	1/29/20	1330	3	X	X	X		X			~~03~~ -28
Bay 1 Sump N. Sidewall	Grab	SS	4	1/29/20	1332	3	X	X	X		X			~~04~~
Bay 1 Sump S. Sidewall	Grab	SS	4	1/29/20	1333	3	X	X	X		X			~~05~~ -29
Bay 1 Sump W. Sidewall	Grab	SS	4	1/29/20	1334	3	X	X	X		X			~~06~~
Bay 1 Sump E. Sidewall	Grab	SS	4	1/29/20	1335	3	X	X	X		X			~~07~~ -30
Bay 1 Sump (2' blw base)	Grab	SS	4	1/29/20	1331	3						X		
Bay 4 Sump Line End	Grab	SS	1	1/30/20	1030	3	X	X	X		X			~~8~~
Bay 4 Sump Line End (2' blw)	Grab	SS	3	1/30/20	1035	3						X		

* 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 # 1312 4819 3235

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) KBarnette	Date: 1/30/20	Time: 1200	Received by: (Signature)	Trip Blank Received: Yes [✓ No] [✓ HCl] / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.5+1=1.6 °C Bottles Received: 60
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/31/20 Time: FW

If preservation required by Login: Date/Time

01-204

Condition: NCF / [✓ OK]

Andy Vann

To: Brittnie Boyd; Project Service; Sample Storage
Cc: Mark Beasley
Subject: RE: *TGERESHTX* Relog R4 due 03/06

From: Brittnie Boyd <BBoyd@pacenational.com>
Sent: Tuesday, March 3, 2020 3:26 PM
To: Project Service <ProjServ@pacenational.com>; Sample Storage <SampleStorage@pacenational.com>
Cc: Mark Beasley <MBeasley@pacenational.com>
Subject: *TGERESHTX* Relog R4 due 03/06
Importance: High

Project Services,

Please relog the following to a new SDG as R4 due 03/06:

L1161924-01 - TCLP PBICP
L1161924-18 - TCLP PBICP, CRICP
L1161924-19 - TCLP PBICP
L1161924-20 - TCLP PBICP
L1161924-24 - TCLP PBICP
L1161924-37 - TCLP PBICP
L1161924-38 - TCLP PBICP
L1161924-39 - TCLP PBICP
L1161924-40 - TCLP PBICP
L1161924-41 - TCLP PBICP
L1161924-65 - TCLP PBICP, ASICP
L1161924-66 - TCLP PBICP, ASICP
L1161924-67 - TCLP PBICP, ASICP
L1161924-71 - TCLP PBICP, ASICP
L1161924-72 - TCLP PBICP, ASICP

L1165628-34 - TCLP PBICP
L1165628-41 – TCLP ASICP

L1177542-09 - TCLP PBICP, ASICP
L1177542-19 - TCLP PBICP, ASICP
L1177542-20 - TCLP PBICP, ASICP
L1177542-21 - TCLP PBICP, ASICP

L1178043-03 - TCLP PBICP
L1178043-04 – TCLP PBICP
L1178043-05 – TCLP PBICP
L1178043-06 – TCLP PBICP

L1178043-19 – TCLP PBICP
L1178043-23 – TCLP PBICP

L1184753-03 – TCLP PBICP
L1184753-05 – TCLP PBICP
L1184753-07 – TCLP PBICP

Thank you,

Brittnie Boyd
Project Coordinator 1

Pace Analytical National Center for Testing & Innovation
12065 Lebanon Road | Mt. Juliet, TN 37122
615.773.5916
bboyd@pacenational.com | pacenational.com

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

March 16, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1198735
Samples Received:	03/13/2020
Project Number:	
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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Collected by	Collected date/time	Received date/time
	03/12/20 10:07	03/13/20 08:45

SB15 (0-1) L1198735-01 Waste

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 16:07	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
	03/12/20 09:47	03/13/20 08:45

SB21 (2-3) L1198735-02 Waste

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 16:34	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
	03/12/20 09:48	03/13/20 08:45

SB21 (6-8) L1198735-03 Waste

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 16:37	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
	03/12/20 09:49	03/13/20 08:45

SB21 (9-11) L1198735-04 Waste

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 16:39	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
	03/12/20 10:00	03/13/20 08:45

SB23 (0-1) L1198735-05 Waste

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 16:42	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
	03/12/20 09:26	03/13/20 08:45

SB26 (2-3) L1198735-06 Waste

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 16:45	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
	03/12/20 09:27	03/13/20 08:45

SB26 (4-6) L1198735-07 Waste

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 16:48	EL	Mt. Juliet, TN

SB26 (8-9) L1198735-08 Waste

Collected by	Collected date/time	Received date/time
	03/12/20 09:28	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 16:51	EL	Mt. Juliet, TN

SB26 (10-11) L1198735-09 Waste

Collected by	Collected date/time	Received date/time
	03/12/20 09:29	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 16:54	EL	Mt. Juliet, TN

SB30 (0-0.5) L1198735-10 Waste

Collected by	Collected date/time	Received date/time
	03/12/20 10:10	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 16:56	EL	Mt. Juliet, TN

SB30 (.5-1) L1198735-11 Waste

Collected by	Collected date/time	Received date/time
	03/12/20 10:11	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 16:59	EL	Mt. Juliet, TN

SB30 (1-1.5) L1198735-12 Waste

Collected by	Collected date/time	Received date/time
	03/12/20 10:12	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 15:42	EL	Mt. Juliet, TN

SB31 (1-1.5) L1198735-13 Waste

Collected by	Collected date/time	Received date/time
	03/12/20 10:15	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 15:45	EL	Mt. Juliet, TN

SB31 (1.5-2) L1198735-14 Waste

Collected by	Collected date/time	Received date/time
	03/12/20 10:16	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 15:47	EL	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Collected by	Collected date/time	Received date/time
	03/12/20 10:20	03/13/20 08:45

SB35 (.5-1) L1198735-15 Waste

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 15:50	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
	03/12/20 09:28	03/13/20 08:45

SB40 (8-9) L1198735-16 Waste

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1443612	1	03/13/20 12:57	03/13/20 12:57	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444382	1	03/15/20 10:10	03/15/20 15:53	EL	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/16/2020 11:51
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1198735-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15 and 16
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1444514, WG1444382 and WG1443612

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/16/2020 11:51
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1198735-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15 and 16
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1444514, WG1444382 and WG1443612

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/16/2020 11:51
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1198735-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15 and 16
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1444514, WG1444382 and WG1443612

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	7.22		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.64		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	ND		0.100	5	1	03/15/2020 16:07	WG1444382

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	6.85		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.63		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Chromium	ND		0.100	5	1	03/15/2020 16:34	WG1444382
Lead	0.473		0.100	5	1	03/15/2020 16:34	WG1444382

SB21 (6-8)

Collected date/time: 03/12/20 09:48

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	6.72		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.63		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	0.240		0.100	5	1	03/15/2020 16:37	WG1444382

SB21 (9-11)

Collected date/time: 03/12/20 09:49

SAMPLE RESULTS - 04

L1198735

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	5.82		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.65		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	ND		0.100	5	1	03/15/2020 16:39	WG1444382

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	4.97		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.62		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	ND		0.100	5	1	03/15/2020 16:42	WG1444382

SB26 (2-3)
Collected date/time: 03/12/20 09:26

SAMPLE RESULTS - 06

L1198735

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	5.99		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.63		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	0.642		0.100	5	1	03/15/2020 16:45	WG1444382

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	6.05		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.63		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	0.792		0.100	5	1	03/15/2020 16:48	WG1444382

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB26 (8-9)

Collected date/time: 03/12/20 09:28

SAMPLE RESULTS - 08

L1198735

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	7.43		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.65		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	0.454		0.100	5	1	03/15/2020 16:51	WG1444382

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SAMPLE RESULTS - 09

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	7.15		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.64		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	0.400		0.100	5	1	03/15/2020 16:54	WG1444382

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	6.72		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.63		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.122		0.100	5	1	03/15/2020 16:56	WG1444382
Lead	0.293		0.100	5	1	03/15/2020 16:56	WG1444382

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	6.86		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.64		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.205		0.100	5	1	03/15/2020 16:59	WG1444382
Lead	0.317		0.100	5	1	03/15/2020 16:59	WG1444382

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	6.91		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.64		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	03/15/2020 15:42	WG1444382
Lead	ND		0.100	5	1	03/15/2020 15:42	WG1444382

SB31 (1-1.5)

Collected date/time: 03/12/20 10:15

SAMPLE RESULTS - 13

L1198735

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	6.72		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.64		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.107		0.100	5	1	03/15/2020 15:45	WG1444382
Lead	0.264		0.100	5	1	03/15/2020 15:45	WG1444382

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB31 (1.5-2)
Collected date/time: 03/12/20 10:16

SAMPLE RESULTS - 14

L1198735

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	6.80		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.65		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.195		0.100	5	1	03/15/2020 15:47	WG1444382
Lead	0.149		0.100	5	1	03/15/2020 15:47	WG1444382

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	6.75		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.64		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	03/15/2020 15:50	WG1444382
Lead	0.197		0.100	5	1	03/15/2020 15:50	WG1444382

SB40 (8-9)

Collected date/time: 03/12/20 09:28

SAMPLE RESULTS - 16

L1198735

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/13/2020 12:57:55 PM	WG1443612
Fluid	1		3/13/2020 12:57:55 PM	WG1443612
Initial pH	6.76		3/13/2020 12:57:55 PM	WG1443612
Final pH	4.64		3/13/2020 12:57:55 PM	WG1443612

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	0.133		0.100	5	1	03/15/2020 15:53	WG1444382

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3508836-1 03/15/20 16:01

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Arsenic	U		0.0333	0.100
Chromium	U		0.0333	0.100
Lead	U		0.0333	0.100

Laboratory Control Sample (LCS)

(LCS) R3508836-2 03/15/20 16:04

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Arsenic	10.0	9.68	96.8	80.0-120	
Chromium	10.0	9.85	98.5	80.0-120	
Lead	10.0	9.71	97.1	80.0-120	

L1198735-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1198735-01 03/15/20 16:07 • (MS) R3508836-4 03/15/20 16:12 • (MSD) R3508836-5 03/15/20 16:15

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Arsenic	10.0	ND	9.62	9.74	96.2	97.4	1	75.0-125			1.27	20
Chromium	10.0	ND	9.83	9.89	98.3	98.9	1	75.0-125			0.667	20
Lead	10.0	ND	9.69	9.78	96.2	97.0	1	75.0-125			0.847	20

GLOSSARY OF TERMS

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.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Sample Detection Limit.
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
	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

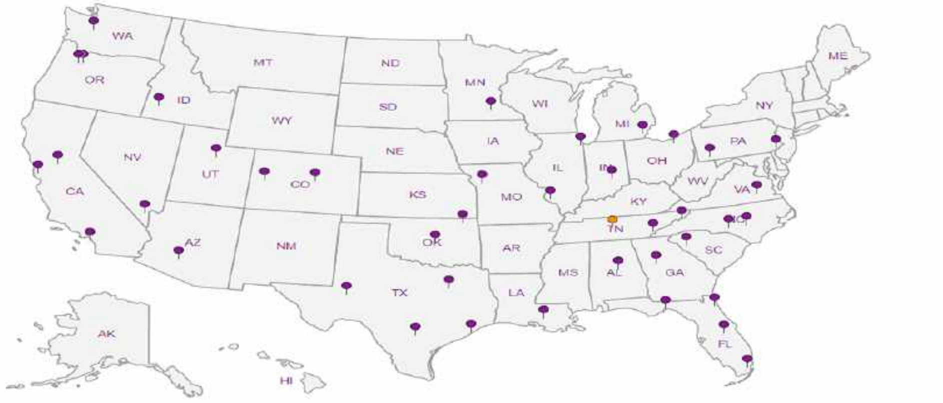
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

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

Report to:
Kristi Barnette

Email To: krbarnette@tgeresources.com

Project Description: **Future Federal Way Emergency**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project #
TGERESHTX-8933

Collected by (print):

Site/Facility ID #

P.O. #
8933

Collected by (signature):

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

SDG # 1197715
G046

Acctnum: **TGERESHTX**
Template: **T164547**
Prelogin: **P761366**
PM: 134 - Mark W. Beasley
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TCLP As 8ozClr-NoPres	TCLP Cr 8ozClr-NoPres	TCLP Pb 8ozClr-NoPres	% moisture							Remarks	Sample # (lab only)
SB15(0-1)	Grab	SS	0-1	3/12/20	1007	1			X	X								01
SB21(2-3)	Grab	SS	2-3	3/12/20	947	1		X	X	X								02
SB21(6-8)	Grab	SS	6-8	3/12/20	948	1			X	X								03
SB21(9-11)	Grab	SS	9-11	3/12/20	949	1			X	X								04
SB23(0-1)	Grab	SS	0-1	3/12/20	1000	1			X	X								05
SB26(0-1)	Grab	SS	0-1	3/12/20	925 or				X	X								
SB26(2-3)	Grab	SS	2-3	3/12/20	926	1			X	X								06
SB26(4-6)	Grab	SS	4-6	3/12/20	927	1			X	X								07
SB26(8-9)	Grab	SS	8-9	3/12/20	928	1			X	X								08
SB26(10-11)	Grab	SS	10-11	3/12/20	929	1			X	X								09

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: ****Log as R1 next day TAT****

0.8/0.3/0.9/0.5/0.4

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 1141 1752 3500/3473/3521/3598
1275 8603 9535/1676 2749 8863

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) KBarnette	Date: 3/12/20	Time: 1200	Received by: (Signature)	Trip Blank Received: Yes / [✓ No] HCL / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: [illegible] °C 1.0-4=0.6	Bottles Received: 16
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 3/13/20	Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project # **TGERESHTX-8933**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8933**

Collected by (signature): KBarnette

Immediately Packed on Ice N___ Y X

Rush? (Lab MUST Be Notified)
X 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 ___ 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

SDG # 1158775

Table #

Acctnum: **TGERESHTX**
Template: **T164547**
Prelogin: **P761366**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TCLP As 8ozClr-NoPres	TCLP Cr 8ozClr-NoPres	TCLP Pb 8ozClr-NoPres	% moisture	Remarks	Sample # (lab only)
SB30(0-0.5)	Grab	SS	0-.5	3/12/20	1010	1	X		X	X		10
SB30 (.5-1)	Grab	SS	.5-1	3/12/20	1011	1	X		X	X		11
SB30 (1-1.5)	Grab	SS	1-1.5	3/12/20	1012	1	X		X	X		12
SB31 (1-1.5)	Grab	SS	1-1.5	3/12/20	1015	1	X		X	X		13
SB31 (1.5-2)	Grab	SS	1.5-2	3/12/20	1016	1	X		X	X		14
SB35(.5-1)	Grab	SS	.5-1	3/12/20	1020	1	X		X	X		15
SB40 (8-9)	Grab	SS	8-9	3/12/20	928	1			X	X		16

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks: ****Log as R1 next day 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) KBarnette | Date: 3/12/20 | Time: 1200 | Received by: (Signature)

Trip Blank Received: Yes / [✓ No]
HCL / MeoH
TBR

Relinquished by : (Signature) | Date: | Time: | Received by: (Signature)

Temp: [illegible] °C 1.0-.4=0.6 Bottles Received: 16

If preservation required by Login: Date/Time

Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) Carol Kem

Date: 3/13/20 Time: 8:45

Hold:

Condition: [✓ NCF] / OK

Matt Shacklock

Pace Analytical®
National Center for Testing & Innovation

Login #:1198735	**Client: TGERESHTX**	**Date:3/13/20**	**Evaluated by:Carol K**

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 / Couri
	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: Didn't receive ID SB 26 (0-1)

Client informed by:		Call		Email		Voice Mail	Date: 3/13/20	Time: 1340
TSR Initials: MB	Client Contact: Kristi Barnette							

Login Instructions:

Client notified

ANALYTICAL REPORT

March 13, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

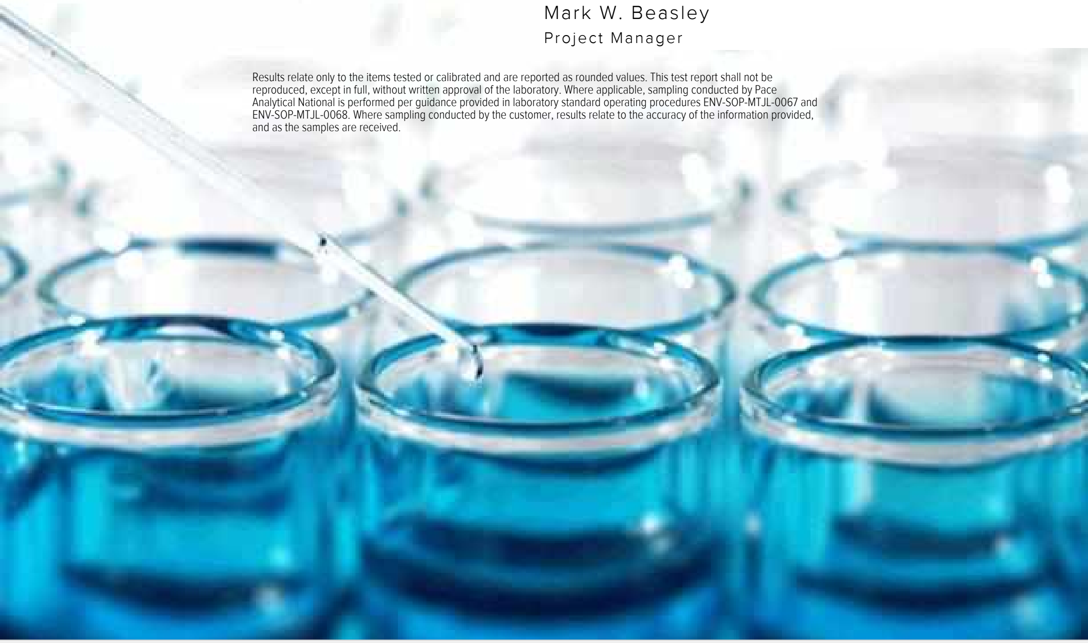
TGE Resources

Sample Delivery Group:	L1198738
Samples Received:	03/13/2020
Project Number:	
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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10 Sc

SB62 (0-3) L1198738-01 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 08:30	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443557	1	03/13/20 13:18	03/13/20 13:24	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:11	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 14:51	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443491	25	03/12/20 08:30	03/13/20 12:56	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443493	1	03/12/20 08:30	03/13/20 12:49	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	5	03/13/20 15:10	03/13/20 17:41	FM	Mt. Juliet, TN

SB62 (4-6) L1198738-02 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 08:31	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443557	1	03/13/20 13:18	03/13/20 13:24	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:01	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 14:53	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443491	25	03/12/20 08:31	03/13/20 13:44	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443493	1	03/12/20 08:31	03/13/20 13:08	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	5	03/13/20 15:10	03/13/20 19:14	FM	Mt. Juliet, TN

SB63 (0-3) L1198738-03 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 08:40	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443557	1	03/13/20 13:18	03/13/20 13:24	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:18	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 14:56	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443491	25	03/12/20 08:40	03/13/20 14:07	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443493	1	03/12/20 08:40	03/13/20 13:27	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	5	03/13/20 15:10	03/13/20 19:27	FM	Mt. Juliet, TN

SB63 (4-6) L1198738-04 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 08:41	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443557	1	03/13/20 13:18	03/13/20 13:24	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:21	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:04	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443491	25	03/12/20 08:41	03/13/20 14:31	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443493	1.03	03/12/20 08:41	03/13/20 13:46	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	50	03/13/20 15:10	03/13/20 20:14	FM	Mt. Juliet, TN

SB64 (0-3) L1198738-05 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 08:20	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443557	1	03/13/20 13:18	03/13/20 13:24	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:24	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:06	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443491	25	03/12/20 08:20	03/13/20 14:55	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443493	1	03/12/20 08:20	03/13/20 14:05	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	50	03/13/20 15:10	03/13/20 20:27	FM	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB64 (4-6) L1198738-06 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 08:21	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443557	1	03/13/20 13:18	03/13/20 13:24	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:26	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:09	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443491	25	03/12/20 08:21	03/13/20 15:19	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443493	1	03/12/20 08:21	03/13/20 14:24	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	10	03/13/20 15:10	03/13/20 19:39	FM	Mt. Juliet, TN

SB65 (0-3) L1198738-07 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 08:10	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443557	1	03/13/20 13:18	03/13/20 13:24	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:29	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 14:38	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443491	27.5	03/12/20 08:10	03/13/20 15:43	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443493	1	03/12/20 08:10	03/13/20 14:43	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	1	03/13/20 15:10	03/13/20 20:05	FM	Mt. Juliet, TN

SB65 (4-6) L1198738-08 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 08:11	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443595	1	03/13/20 12:50	03/13/20 12:58	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:31	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:11	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443527	25	03/12/20 08:11	03/13/20 13:48	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443493	1	03/12/20 08:11	03/13/20 15:02	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	5	03/13/20 15:10	03/13/20 20:18	FM	Mt. Juliet, TN

SB66 (0-3) L1198738-09 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 07:56	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443595	1	03/13/20 12:50	03/13/20 12:58	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:34	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:14	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443527	25	03/12/20 07:56	03/13/20 13:27	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443569	1	03/12/20 07:56	03/13/20 13:27	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	1	03/13/20 15:10	03/13/20 18:49	FM	Mt. Juliet, TN

SB66 (4-6) L1198738-10 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 07:57	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443595	1	03/13/20 12:50	03/13/20 12:58	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:36	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:17	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443527	25	03/12/20 07:57	03/13/20 14:08	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443569	1	03/12/20 07:57	03/13/20 13:46	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	1	03/13/20 15:10	03/13/20 18:23	FM	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB67 (0-3) L1198738-11 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 08:05	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443595	1	03/13/20 12:50	03/13/20 12:58	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:39	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:19	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443527	25	03/12/20 08:05	03/13/20 14:29	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443314	1	03/12/20 08:05	03/13/20 12:32	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	50	03/13/20 15:10	03/13/20 20:32	FM	Mt. Juliet, TN

SB67 (4-6) L1198738-12 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 08:06	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443595	1	03/13/20 12:50	03/13/20 12:58	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:42	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:22	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443527	25	03/12/20 08:06	03/13/20 14:49	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443314	1	03/12/20 08:06	03/13/20 12:51	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	20	03/13/20 15:10	03/13/20 19:52	FM	Mt. Juliet, TN

SB68 (2-4) L1198738-13 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 07:41	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443595	1	03/13/20 12:50	03/13/20 12:58	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:49	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:24	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443527	25	03/12/20 07:41	03/13/20 15:10	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443314	1	03/12/20 07:41	03/13/20 13:10	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	1	03/13/20 15:10	03/13/20 18:36	FM	Mt. Juliet, TN

SB69 (0-2) L1198738-14 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 07:30	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443595	1	03/13/20 12:50	03/13/20 12:58	MT	Mt. Juliet, TN
Mercury by Method 7471A	WG1443597	1	03/13/20 12:42	03/13/20 14:52	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:27	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1443527	25	03/12/20 07:30	03/13/20 15:31	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1443314	1	03/12/20 07:30	03/13/20 13:29	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1443607	1	03/13/20 15:10	03/13/20 18:10	FM	Mt. Juliet, TN

SB70 (0-1) L1198738-15 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:30	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443557	1	03/13/20 13:18	03/13/20 13:24	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:35	CCE	Mt. Juliet, TN

SB70 (1-2) L1198738-16 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:31	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443557	1	03/13/20 13:18	03/13/20 13:24	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:37	CCE	Mt. Juliet, TN

SB70 (2-3) L1198738-17 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:32	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443557	1	03/13/20 13:18	03/13/20 13:24	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:40	CCE	Mt. Juliet, TN

SB70 (4-5) L1198738-18 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:33	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443560	1	03/13/20 13:09	03/13/20 13:17	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:42	CCE	Mt. Juliet, TN

SB70 (5-6) L1198738-19 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:34	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443560	1	03/13/20 13:09	03/13/20 13:17	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:45	CCE	Mt. Juliet, TN

SB70 (6-7) L1198738-20 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:35	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443560	1	03/13/20 13:09	03/13/20 13:17	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443599	1	03/13/20 12:56	03/13/20 15:48	CCE	Mt. Juliet, TN

SB70 (8-9) L1198738-21 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:36	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443560	1	03/13/20 13:09	03/13/20 13:17	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:23	CCE	Mt. Juliet, TN

SB70 (10-11) L1198738-22 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:37	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443560	1	03/13/20 13:09	03/13/20 13:17	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:26	CCE	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

SB71 (0-1) L1198738-23 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:51	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443560	1	03/13/20 13:09	03/13/20 13:17	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:28	CCE	Mt. Juliet, TN

SB71 (1-2) L1198738-24 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:52	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443560	1	03/13/20 13:09	03/13/20 13:17	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:36	CCE	Mt. Juliet, TN

SB72 (5-6) L1198738-25 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 11:30	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443560	1	03/13/20 13:09	03/13/20 13:17	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:39	CCE	Mt. Juliet, TN

SB72 (6-7) L1198738-26 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 11:31	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443560	1	03/13/20 13:09	03/13/20 13:17	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:41	CCE	Mt. Juliet, TN

SB72 (8-9) L1198738-27 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 11:32	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443560	1	03/13/20 13:09	03/13/20 13:17	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:11	CCE	Mt. Juliet, TN

SB72 (10-11) L1198738-28 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 11:33	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443561	1	03/13/20 12:59	03/13/20 13:08	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:44	CCE	Mt. Juliet, TN

SB71 (2-3) L1198738-29 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:53	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443561	1	03/13/20 12:59	03/13/20 13:08	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:46	CCE	Mt. Juliet, TN

SB71 (4-5) L1198738-30 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:54	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443561	1	03/13/20 12:59	03/13/20 13:08	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:49	CCE	Mt. Juliet, TN

SB71 (5-6) L1198738-31 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:55	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443561	1	03/13/20 12:59	03/13/20 13:08	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:52	CCE	Mt. Juliet, TN

SB71 (6-7) L1198738-32 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:56	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443561	1	03/13/20 12:59	03/13/20 13:08	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:54	CCE	Mt. Juliet, TN

SB71 (8-9) L1198738-33 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:57	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443561	1	03/13/20 12:59	03/13/20 13:08	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:57	CCE	Mt. Juliet, TN

SB71 (10-11) L1198738-34 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 10:58	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443561	1	03/13/20 12:59	03/13/20 13:08	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 16:59	CCE	Mt. Juliet, TN

SB72 (0-1) L1198738-35 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 11:25	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443561	1	03/13/20 12:59	03/13/20 13:08	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 15:50	CCE	Mt. Juliet, TN

SB72 (1-2) L1198738-36 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 11:27	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443561	1	03/13/20 12:59	03/13/20 13:08	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 15:53	CCE	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 11:28	03/13/20 08:45

SB72 (2-3) L1198738-37 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443561	1	03/13/20 12:59	03/13/20 13:08	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 15:55	CCE	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 11:29	03/13/20 08:45

SB72 (4-5) L1198738-38 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1443595	1	03/13/20 12:50	03/13/20 12:58	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1443602	1	03/13/20 13:56	03/13/20 15:58	CCE	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/13/2020 23:31
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1198738-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37 and 38
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1443597, WG1443569, WG1443493, WG1443314, WG1443527, WG1443491, WG1443599, WG1443602, WG1443595, WG1443561, WG1443560, WG1443557 and WG1443607

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/13/2020 23:31
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1198738-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37 and 38
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1443597, WG1443569, WG1443493, WG1443314, WG1443527, WG1443491, WG1443599, WG1443602, WG1443595, WG1443561, WG1443560, WG1443557 and WG1443607

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/13/2020 23:31
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1198738-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37 and 38
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1443597, WG1443569, WG1443493, WG1443314, WG1443527, WG1443491, WG1443599, WG1443602, WG1443595, WG1443561, WG1443560, WG1443557 and WG1443607

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			3
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/13/2020 23:31
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1198738-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37 and 38
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1443597, WG1443569, WG1443493, WG1443314, WG1443527, WG1443491, WG1443599, WG1443602, WG1443595, WG1443561, WG1443560, WG1443557 and WG1443607

ER #[1]	**Description**
1	NWTPHDX-NO SGT WG1443607 o-Terphenyl L1198738-04, 05, 11 and 12: Percent Recovery is outside of established control limits.
2	8260B WG1443493 Acetone, Dibromomethane: Percent Recovery is outside of established control limits.
3	6010D WG1443599 Barium, Chromium, Lead: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.3		1	03/13/2020 13:24	WG1443557

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0321	J	0.00328	0.0300	0.0352	1	03/13/2020 14:11	WG1443597

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	11.0		0.540	2.00	2.35	1	03/13/2020 14:51	WG1443599
Barium	104		0.199	0.500	0.586	1	03/13/2020 14:51	WG1443599
Cadmium	0.481	J	0.0821	0.500	0.586	1	03/13/2020 14:51	WG1443599
Chromium	31.5		0.164	1.00	1.17	1	03/13/2020 14:51	WG1443599
Lead	46.8		0.223	0.500	0.586	1	03/13/2020 14:51	WG1443599
Selenium	U		0.727	2.00	2.35	1	03/13/2020 14:51	WG1443599
Silver	0.186	J	0.141	1.00	1.17	1	03/13/2020 14:51	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.994	0.100	2.93	25	03/13/2020 12:56	WG1443491
(S) a,a,a-Trifluorotoluene(FID)	*98.4*				*77.0-120*		*03/13/2020 12:56*	WG1443491

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0161	0.0250	0.0293	1	03/13/2020 12:49	WG1443493
Acrylonitrile	U		0.00223	0.0125	0.0147	1	03/13/2020 12:49	WG1443493
Benzene	U		0.000469	0.00100	0.00117	1	03/13/2020 12:49	WG1443493
Bromobenzene	U		0.00123	0.0125	0.0147	1	03/13/2020 12:49	WG1443493
Bromodichloromethane	U		0.000924	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
Bromoform	U		0.00701	0.0250	0.0293	1	03/13/2020 12:49	WG1443493
Bromomethane	U		0.00434	0.0125	0.0147	1	03/13/2020 12:49	WG1443493
n-Butylbenzene	U		0.00450	0.0125	0.0147	1	03/13/2020 12:49	WG1443493
sec-Butylbenzene	U		0.00297	0.0125	0.0147	1	03/13/2020 12:49	WG1443493
tert-Butylbenzene	U		0.00182	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
Carbon tetrachloride	U		0.00127	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
Chlorobenzene	U		0.000672	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
Chlorodibromomethane	U		0.000528	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
Chloroethane	U		0.00127	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
Chloroform	U		0.000487	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
Chloromethane	U		0.00163	0.0125	0.0147	1	03/13/2020 12:49	WG1443493
2-Chlorotoluene	U		0.00108	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
4-Chlorotoluene	U		0.00133	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
1,2-Dibromo-3-Chloropropane	U		0.00598	0.0250	0.0293	1	03/13/2020 12:49	WG1443493
1,2-Dibromoethane	U		0.000616	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
Dibromomethane	U	J4	0.00117	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
1,2-Dichlorobenzene	U		0.00170	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
1,3-Dichlorobenzene	U		0.00199	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
1,4-Dichlorobenzene	U		0.00231	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
Dichlorodifluoromethane	U		0.000959	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
1,1-Dichloroethane	U		0.000674	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
1,2-Dichloroethane	U		0.000557	0.00250	0.00293	1	03/13/2020 12:49	WG1443493

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000586	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
cis-1,2-Dichloroethene	U		0.000809	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
trans-1,2-Dichloroethene	U		0.00168	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
1,2-Dichloropropane	U		0.00149	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
1,1-Dichloropropene	U		0.000821	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
1,3-Dichloropropane	U		0.00205	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
cis-1,3-Dichloropropene	U		0.000795	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
trans-1,3-Dichloropropene	U		0.00179	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
2,2-Dichloropropane	U		0.000930	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
Di-isopropyl ether	U		0.000410	0.00100	0.00117	1	03/13/2020 12:49	WG1443493
Ethylbenzene	0.00192	B J	0.000622	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
Hexachloro-1,3-butadiene	U		0.0149	0.0250	0.0293	1	03/13/2020 12:49	WG1443493
Isopropylbenzene	U		0.00101	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
p-Isopropyltoluene	U		0.00273	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
2-Butanone (MEK)	0.0161	B J	0.0147	0.0250	0.0293	1	03/13/2020 12:49	WG1443493
Methylene Chloride	U		0.00779	0.0250	0.0293	1	03/13/2020 12:49	WG1443493
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0250	0.0293	1	03/13/2020 12:49	WG1443493
Methyl tert-butyl ether	U		0.000346	0.00100	0.00117	1	03/13/2020 12:49	WG1443493
Naphthalene	0.00448	B J	0.00366	0.0125	0.0147	1	03/13/2020 12:49	WG1443493
n-Propylbenzene	U		0.00138	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
Styrene	U		0.00320	0.0125	0.0147	1	03/13/2020 12:49	WG1443493
1,1,1,2-Tetrachloroethane	U		0.000586	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
1,1,2,2-Tetrachloroethane	U		0.000457	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
1,1,2-Trichlorotrifluoroethane	U		0.000792	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
Tetrachloroethene	U		0.000821	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
Toluene	0.00260	J	0.00147	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
1,2,3-Trichlorobenzene	U		0.000733	0.0125	0.0147	1	03/13/2020 12:49	WG1443493
1,2,4-Trichlorobenzene	U		0.00565	0.0125	0.0147	1	03/13/2020 12:49	WG1443493
1,1,1-Trichloroethane	U		0.000323	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
1,1,2-Trichloroethane	U		0.00104	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
Trichloroethene	U		0.000469	0.00100	0.00117	1	03/13/2020 12:49	WG1443493
Trichlorofluoromethane	U		0.000586	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
1,2,3-Trichloropropane	U		0.00598	0.0125	0.0147	1	03/13/2020 12:49	WG1443493
1,2,4-Trimethylbenzene	U		0.00136	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
1,2,3-Trimethylbenzene	U		0.00135	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
1,3,5-Trimethylbenzene	U		0.00127	0.00500	0.00586	1	03/13/2020 12:49	WG1443493
Vinyl chloride	U		0.000801	0.00250	0.00293	1	03/13/2020 12:49	WG1443493
Xylenes, Total	U		0.00561	0.00650	0.00762	1	03/13/2020 12:49	WG1443493
(S) Toluene-d8	*104*				*75.0-131*		*03/13/2020 12:49*	WG1443493
(S) 4-Bromofluorobenzene	*104*				*67.0-138*		*03/13/2020 12:49*	WG1443493
(S) 1,2-Dichloroethane-d4	*109*				*70.0-130*		*03/13/2020 12:49*	WG1443493

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		7.80	4.00	23.5	5	03/13/2020 17:41	WG1443607
Residual Range Organics (RRO)	46.4	J	19.5	10.0	58.6	5	03/13/2020 17:41	WG1443607
(S) o-Terphenyl	*66.6*				*18.0-148*		*03/13/2020 17:41*	WG1443607

Sample Narrative:

L1198738-01 WG1443607: Cannot run at lower dilution due to viscosity of extract

SB62 (4-6)

Collected date/time: 03/12/20 08:31

SAMPLE RESULTS - 02

L1198738

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	78.8		1	03/13/2020 13:24	WG1443557

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0444		0.00355	0.0300	0.0381	1	03/13/2020 14:01	WG1443597

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.76		0.584	2.00	2.54	1	03/13/2020 14:53	WG1443599
Barium	89.3		0.216	0.500	0.634	1	03/13/2020 14:53	WG1443599
Cadmium	0.366	J	0.0888	0.500	0.634	1	03/13/2020 14:53	WG1443599
Chromium	26.0		0.178	1.00	1.27	1	03/13/2020 14:53	WG1443599
Lead	65.7		0.241	0.500	0.634	1	03/13/2020 14:53	WG1443599
Selenium	U		0.787	2.00	2.54	1	03/13/2020 14:53	WG1443599
Silver	U		0.152	1.00	1.27	1	03/13/2020 14:53	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.08	0.100	3.17	25	03/13/2020 13:44	WG1443491
(S) a,a,a-Trifluorotoluene(FID)	*99.9*				*77.0-120*		*03/13/2020 13:44*	WG1443491

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0174	0.0250	0.0317	1	03/13/2020 13:08	WG1443493
Acrylonitrile	U		0.00241	0.0125	0.0159	1	03/13/2020 13:08	WG1443493
Benzene	U		0.000507	0.00100	0.00127	1	03/13/2020 13:08	WG1443493
Bromobenzene	U		0.00133	0.0125	0.0159	1	03/13/2020 13:08	WG1443493
Bromodichloromethane	U		0.00100	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
Bromoform	U		0.00759	0.0250	0.0317	1	03/13/2020 13:08	WG1443493
Bromomethane	U		0.00469	0.0125	0.0159	1	03/13/2020 13:08	WG1443493
n-Butylbenzene	U		0.00487	0.0125	0.0159	1	03/13/2020 13:08	WG1443493
sec-Butylbenzene	U		0.00321	0.0125	0.0159	1	03/13/2020 13:08	WG1443493
tert-Butylbenzene	U		0.00197	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
Carbon tetrachloride	U		0.00137	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
Chlorobenzene	U		0.000727	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
Chlorodibromomethane	U		0.000571	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
Chloroethane	U		0.00137	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
Chloroform	U		0.000526	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
Chloromethane	U		0.00176	0.0125	0.0159	1	03/13/2020 13:08	WG1443493
2-Chlorotoluene	U		0.00117	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
4-Chlorotoluene	U		0.00143	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
1,2-Dibromo-3-Chloropropane	U		0.00647	0.0250	0.0317	1	03/13/2020 13:08	WG1443493
1,2-Dibromoethane	U		0.000666	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
Dibromomethane	U	J4	0.00127	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
1,2-Dichlorobenzene	U		0.00184	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
1,3-Dichlorobenzene	U		0.00216	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
1,4-Dichlorobenzene	U		0.00250	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
Dichlorodifluoromethane	U		0.00104	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
1,1-Dichloroethane	U		0.000729	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
1,2-Dichloroethane	U		0.000603	0.00250	0.00317	1	03/13/2020 13:08	WG1443493

SB62 (4-6)
Collected date/time: 03/12/20 08:31

SAMPLE RESULTS - 02

L1198738

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000634	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
cis-1,2-Dichloroethene	U		0.000875	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
trans-1,2-Dichloroethene	U		0.00181	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
1,2-Dichloropropane	U		0.00161	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
1,1-Dichloropropene	U		0.000888	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
1,3-Dichloropropane	U		0.00222	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
cis-1,3-Dichloropropene	U		0.000860	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
trans-1,3-Dichloropropene	U		0.00194	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
2,2-Dichloropropane	U		0.00101	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
Di-isopropyl ether	U		0.000444	0.00100	0.00127	1	03/13/2020 13:08	WG1443493
Ethylbenzene	0.00112	B J	0.000672	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
Hexachloro-1,3-butadiene	U		0.0161	0.0250	0.0317	1	03/13/2020 13:08	WG1443493
Isopropylbenzene	U		0.00109	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
p-Isopropyltoluene	0.00397	J	0.00296	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
2-Butanone (MEK)	U		0.0159	0.0250	0.0317	1	03/13/2020 13:08	WG1443493
Methylene Chloride	U		0.00842	0.0250	0.0317	1	03/13/2020 13:08	WG1443493
4-Methyl-2-pentanone (MIBK)	U		0.0127	0.0250	0.0317	1	03/13/2020 13:08	WG1443493
Methyl tert-butyl ether	U		0.000374	0.00100	0.00127	1	03/13/2020 13:08	WG1443493
Naphthalene	0.00438	B J	0.00396	0.0125	0.0159	1	03/13/2020 13:08	WG1443493
n-Propylbenzene	U		0.00150	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
Styrene	U		0.00346	0.0125	0.0159	1	03/13/2020 13:08	WG1443493
1,1,1,2-Tetrachloroethane	U		0.000634	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
1,1,2,2-Tetrachloroethane	U		0.000495	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
1,1,2-Trichlorotrifluoroethane	U		0.000856	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
Tetrachloroethene	U		0.000888	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
Toluene	U		0.00159	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
1,2,3-Trichlorobenzene	U		0.000793	0.0125	0.0159	1	03/13/2020 13:08	WG1443493
1,2,4-Trichlorobenzene	U		0.00611	0.0125	0.0159	1	03/13/2020 13:08	WG1443493
1,1,1-Trichloroethane	U		0.000349	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
1,1,2-Trichloroethane	U		0.00112	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
Trichloroethene	U		0.000507	0.00100	0.00127	1	03/13/2020 13:08	WG1443493
Trichlorofluoromethane	U		0.000634	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
1,2,3-Trichloropropane	U		0.00647	0.0125	0.0159	1	03/13/2020 13:08	WG1443493
1,2,4-Trimethylbenzene	U		0.00147	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
1,2,3-Trimethylbenzene	U		0.00146	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
1,3,5-Trimethylbenzene	U		0.00137	0.00500	0.00634	1	03/13/2020 13:08	WG1443493
Vinyl chloride	U		0.000866	0.00250	0.00317	1	03/13/2020 13:08	WG1443493
Xylenes, Total	U		0.00606	0.00650	0.00825	1	03/13/2020 13:08	WG1443493
(S) Toluene-d8	*107*				*75.0-131*		*03/13/2020 13:08*	WG1443493
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*03/13/2020 13:08*	WG1443493
(S) 1,2-Dichloroethane-d4	*102*				*70.0-130*		*03/13/2020 13:08*	WG1443493

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	11.7	J	8.44	4.00	25.4	5	03/13/2020 19:14	WG1443607
Residual Range Organics (RRO)	101		21.1	10.0	63.4	5	03/13/2020 19:14	WG1443607
(S) o-Terphenyl	*67.5*				*18.0-148*		*03/13/2020 19:14*	WG1443607

Sample Narrative:

L1198738-02 WG1443607: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	84.4		1	03/13/2020 13:24	WG1443557

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0280	J	0.00332	0.0300	0.0356	1	03/13/2020 14:18	WG1443597

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	4.86		0.545	2.00	2.37	1	03/13/2020 14:56	WG1443599
Barium	87.1		0.201	0.500	0.593	1	03/13/2020 14:56	WG1443599
Cadmium	0.365	J	0.0830	0.500	0.593	1	03/13/2020 14:56	WG1443599
Chromium	23.7		0.166	1.00	1.19	1	03/13/2020 14:56	WG1443599
Lead	56.8		0.225	0.500	0.593	1	03/13/2020 14:56	WG1443599
Selenium	0.931	J	0.735	2.00	2.37	1	03/13/2020 14:56	WG1443599
Silver	U		0.142	1.00	1.19	1	03/13/2020 14:56	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.00	0.100	2.96	25	03/13/2020 14:07	WG1443491
(S) a,a,a-Trifluorotoluene(FID)	*98.3*				*77.0-120*		*03/13/2020 14:07*	WG1443491

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U	J4	0.0162	0.0250	0.0296	1	03/13/2020 13:27	WG1443493
Acrylonitrile	U		0.00225	0.0125	0.0148	1	03/13/2020 13:27	WG1443493
Benzene	U		0.000474	0.00100	0.00119	1	03/13/2020 13:27	WG1443493
Bromobenzene	U		0.00124	0.0125	0.0148	1	03/13/2020 13:27	WG1443493
Bromodichloromethane	U		0.000934	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
Bromoform	U		0.00709	0.0250	0.0296	1	03/13/2020 13:27	WG1443493
Bromomethane	U		0.00438	0.0125	0.0148	1	03/13/2020 13:27	WG1443493
n-Butylbenzene	U		0.00455	0.0125	0.0148	1	03/13/2020 13:27	WG1443493
sec-Butylbenzene	U		0.00300	0.0125	0.0148	1	03/13/2020 13:27	WG1443493
tert-Butylbenzene	U		0.00184	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
Carbon tetrachloride	U		0.00128	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
Chlorobenzene	U		0.000679	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
Chlorodibromomethane	U		0.000533	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
Chloroethane	U		0.00128	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
Chloroform	U		0.000492	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
Chloromethane	U		0.00165	0.0125	0.0148	1	03/13/2020 13:27	WG1443493
2-Chlorotoluene	U		0.00109	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
4-Chlorotoluene	U		0.00134	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
1,2-Dibromo-3-Chloropropane	U		0.00604	0.0250	0.0296	1	03/13/2020 13:27	WG1443493
1,2-Dibromoethane	U		0.000622	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
Dibromomethane	U	J4	0.00119	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
1,2-Dichlorobenzene	U		0.00172	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
1,3-Dichlorobenzene	U		0.00201	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
1,4-Dichlorobenzene	U		0.00233	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
Dichlorodifluoromethane	U		0.000969	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
1,1-Dichloroethane	U		0.000681	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
1,2-Dichloroethane	U		0.000563	0.00250	0.00296	1	03/13/2020 13:27	WG1443493

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000593	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
cis-1,2-Dichloroethene	U		0.000818	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
trans-1,2-Dichloroethene	U		0.00169	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
1,2-Dichloropropane	U		0.00151	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
1,1-Dichloropropene	U		0.000830	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
1,3-Dichloropropane	U		0.00207	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
cis-1,3-Dichloropropene	U		0.000803	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
trans-1,3-Dichloropropene	U		0.00181	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
2,2-Dichloropropane	U		0.000940	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
Di-isopropyl ether	U		0.000415	0.00100	0.00119	1	03/13/2020 13:27	WG1443493
Ethylbenzene	0.00154	B J	0.000628	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
Hexachloro-1,3-butadiene	U		0.0151	0.0250	0.0296	1	03/13/2020 13:27	WG1443493
Isopropylbenzene	U		0.00102	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
p-Isopropyltoluene	0.00570	J	0.00276	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
2-Butanone (MEK)	U		0.0148	0.0250	0.0296	1	03/13/2020 13:27	WG1443493
Methylene Chloride	U		0.00787	0.0250	0.0296	1	03/13/2020 13:27	WG1443493
4-Methyl-2-pentanone (MIBK)	U		0.0119	0.0250	0.0296	1	03/13/2020 13:27	WG1443493
Methyl tert-butyl ether	U		0.000350	0.00100	0.00119	1	03/13/2020 13:27	WG1443493
Naphthalene	0.00433	B J	0.00370	0.0125	0.0148	1	03/13/2020 13:27	WG1443493
n-Propylbenzene	U		0.00140	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
Styrene	U		0.00324	0.0125	0.0148	1	03/13/2020 13:27	WG1443493
1,1,1,2-Tetrachloroethane	U		0.000593	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
1,1,2,2-Tetrachloroethane	U		0.000462	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
1,1,2-Trichlorotrifluoroethane	U		0.000800	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
Tetrachloroethene	U		0.000830	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
Toluene	U		0.00148	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
1,2,3-Trichlorobenzene	U		0.000741	0.0125	0.0148	1	03/13/2020 13:27	WG1443493
1,2,4-Trichlorobenzene	U		0.00571	0.0125	0.0148	1	03/13/2020 13:27	WG1443493
1,1,1-Trichloroethane	U		0.000326	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
1,1,2-Trichloroethane	U		0.00105	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
Trichloroethene	U		0.000474	0.00100	0.00119	1	03/13/2020 13:27	WG1443493
Trichlorofluoromethane	U		0.000593	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
1,2,3-Trichloropropane	U		0.00604	0.0125	0.0148	1	03/13/2020 13:27	WG1443493
1,2,4-Trimethylbenzene	U		0.00137	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
1,2,3-Trimethylbenzene	U		0.00136	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
1,3,5-Trimethylbenzene	U		0.00128	0.00500	0.00593	1	03/13/2020 13:27	WG1443493
Vinyl chloride	U		0.000809	0.00250	0.00296	1	03/13/2020 13:27	WG1443493
Xylenes, Total	U		0.00566	0.00650	0.00770	1	03/13/2020 13:27	WG1443493
(S) Toluene-d8	*104*				*75.0-131*		*03/13/2020 13:27*	WG1443493
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*03/13/2020 13:27*	WG1443493
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*03/13/2020 13:27*	WG1443493

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		7.88	4.00	23.7	5	03/13/2020 19:27	WG1443607
Residual Range Organics (RRO)	69.7		19.7	10.0	59.3	5	03/13/2020 19:27	WG1443607
(S) o-Terphenyl	*69.5*				*18.0-148*		*03/13/2020 19:27*	WG1443607

Sample Narrative:

L1198738-03 WG1443607: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.0		1	03/13/2020 13:24	WG1443557

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0393		0.00329	0.0300	0.0353	1	03/13/2020 14:21	WG1443597

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.84		0.541	2.00	2.35	1	03/13/2020 15:04	WG1443599
Barium	98.4		0.200	0.500	0.588	1	03/13/2020 15:04	WG1443599
Cadmium	0.355	J	0.0823	0.500	0.588	1	03/13/2020 15:04	WG1443599
Chromium	20.8		0.165	1.00	1.18	1	03/13/2020 15:04	WG1443599
Lead	51.8		0.223	0.500	0.588	1	03/13/2020 15:04	WG1443599
Selenium	U		0.729	2.00	2.35	1	03/13/2020 15:04	WG1443599
Silver	U		0.141	1.00	1.18	1	03/13/2020 15:04	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.997	0.100	2.94	25	03/13/2020 14:31	WG1443491
(S) a,a,a-Trifluorotoluene(FID)	*98.3*				*77.0-120*		*03/13/2020 14:31*	WG1443491

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0166	0.0250	0.0303	1.03	03/13/2020 13:46	WG1443493
Acrylonitrile	U		0.00230	0.0125	0.0152	1.03	03/13/2020 13:46	WG1443493
Benzene	U		0.000485	0.00100	0.00121	1.03	03/13/2020 13:46	WG1443493
Bromobenzene	U		0.00127	0.0125	0.0152	1.03	03/13/2020 13:46	WG1443493
Bromodichloromethane	U		0.000955	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
Bromoform	U		0.00724	0.0250	0.0303	1.03	03/13/2020 13:46	WG1443493
Bromomethane	U		0.00448	0.0125	0.0152	1.03	03/13/2020 13:46	WG1443493
n-Butylbenzene	U		0.00465	0.0125	0.0152	1.03	03/13/2020 13:46	WG1443493
sec-Butylbenzene	U		0.00306	0.0125	0.0152	1.03	03/13/2020 13:46	WG1443493
tert-Butylbenzene	U		0.00188	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
Carbon tetrachloride	U		0.00131	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
Chlorobenzene	U		0.000694	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
Chlorodibromomethane	U		0.000545	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
Chloroethane	U		0.00131	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
Chloroform	U		0.000503	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
Chloromethane	U		0.00168	0.0125	0.0152	1.03	03/13/2020 13:46	WG1443493
2-Chlorotoluene	U		0.00111	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
4-Chlorotoluene	U		0.00137	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
1,2-Dibromo-3-Chloropropane	U		0.00618	0.0250	0.0303	1.03	03/13/2020 13:46	WG1443493
1,2-Dibromoethane	U		0.000636	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
Dibromomethane	U	J4	0.00121	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
1,2-Dichlorobenzene	U		0.00176	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
1,3-Dichlorobenzene	U		0.00206	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
1,4-Dichlorobenzene	U		0.00239	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
Dichlorodifluoromethane	U		0.000991	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
1,1-Dichloroethane	U		0.000697	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
1,2-Dichloroethane	U		0.000575	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493

SB63 (4-6)

Collected date/time: 03/12/20 08:41

SAMPLE RESULTS - 04

L1198738

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000606	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
cis-1,2-Dichloroethene	U		0.000836	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
trans-1,2-Dichloroethene	U		0.00173	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
1,2-Dichloropropane	U		0.00154	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
1,1-Dichloropropene	U		0.000848	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
1,3-Dichloropropane	U		0.00212	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
cis-1,3-Dichloropropene	U		0.000821	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
trans-1,3-Dichloropropene	U		0.00185	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
2,2-Dichloropropane	U		0.000961	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
Di-isopropyl ether	U		0.000424	0.00100	0.00121	1.03	03/13/2020 13:46	WG1443493
Ethylbenzene	0.00136	B J	0.000642	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
Hexachloro-1,3-butadiene	U		0.0154	0.0250	0.0303	1.03	03/13/2020 13:46	WG1443493
Isopropylbenzene	U		0.00105	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
p-Isopropyltoluene	U		0.00282	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
2-Butanone (MEK)	0.0167	B J	0.0151	0.0250	0.0303	1.03	03/13/2020 13:46	WG1443493
Methylene Chloride	U		0.00804	0.0250	0.0303	1.03	03/13/2020 13:46	WG1443493
4-Methyl-2-pentanone (MIBK)	U		0.0121	0.0250	0.0303	1.03	03/13/2020 13:46	WG1443493
Methyl tert-butyl ether	U		0.000357	0.00100	0.00121	1.03	03/13/2020 13:46	WG1443493
Naphthalene	0.00490	B J	0.00378	0.0125	0.0152	1.03	03/13/2020 13:46	WG1443493
n-Propylbenzene	U		0.00143	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
Styrene	U		0.00331	0.0125	0.0152	1.03	03/13/2020 13:46	WG1443493
1,1,1,2-Tetrachloroethane	U		0.000606	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
1,1,2,2-Tetrachloroethane	U		0.000472	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
1,1,2-Trichlorotrifluoroethane	U		0.000818	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
Tetrachloroethene	U		0.000848	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
Toluene	U		0.00151	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
1,2,3-Trichlorobenzene	U		0.000757	0.0125	0.0152	1.03	03/13/2020 13:46	WG1443493
1,2,4-Trichlorobenzene	U		0.00584	0.0125	0.0152	1.03	03/13/2020 13:46	WG1443493
1,1,1-Trichloroethane	U		0.000333	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
1,1,2-Trichloroethane	U		0.00107	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
Trichloroethene	U		0.000485	0.00100	0.00121	1.03	03/13/2020 13:46	WG1443493
Trichlorofluoromethane	U		0.000606	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
1,2,3-Trichloropropane	U		0.00618	0.0125	0.0152	1.03	03/13/2020 13:46	WG1443493
1,2,4-Trimethylbenzene	U		0.00141	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
1,2,3-Trimethylbenzene	U		0.00139	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
1,3,5-Trimethylbenzene	U		0.00131	0.00500	0.00606	1.03	03/13/2020 13:46	WG1443493
Vinyl chloride	U		0.000827	0.00250	0.00303	1.03	03/13/2020 13:46	WG1443493
Xylenes, Total	U		0.00579	0.00650	0.00788	1.03	03/13/2020 13:46	WG1443493
(S) Toluene-d8	*106*				*75.0-131*		*03/13/2020 13:46*	WG1443493
(S) 4-Bromofluorobenzene	*99.6*				*67.0-138*		*03/13/2020 13:46*	WG1443493
(S) 1,2-Dichloroethane-d4	*104*				*70.0-130*		*03/13/2020 13:46*	WG1443493

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		78.2	4.00	235	50	03/13/2020 20:14	WG1443607
Residual Range Organics (RRO)	610		196	10.0	588	50	03/13/2020 20:14	WG1443607
(S) o-Terphenyl	*79.2*	J7			*18.0-148*		*03/13/2020 20:14*	WG1443607

Sample Narrative:

L1198738-04 WG1443607: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.4		1	03/13/2020 13:24	WG1443557

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0406		0.00303	0.0300	0.0325	1	03/13/2020 14:24	WG1443597

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.34		0.498	2.00	2.17	1	03/13/2020 15:06	WG1443599
Barium	126		0.184	0.500	0.541	1	03/13/2020 15:06	WG1443599
Cadmium	0.326	J	0.0758	0.500	0.541	1	03/13/2020 15:06	WG1443599
Chromium	33.0		0.152	1.00	1.08	1	03/13/2020 15:06	WG1443599
Lead	37.1		0.206	0.500	0.541	1	03/13/2020 15:06	WG1443599
Selenium	U		0.671	2.00	2.17	1	03/13/2020 15:06	WG1443599
Silver	0.518	J	0.130	1.00	1.08	1	03/13/2020 15:06	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2.92		0.917	0.100	2.71	25	03/13/2020 14:55	WG1443491
(S) a,a,a-Trifluorotoluene(FID)	*99.1*				*77.0-120*		*03/13/2020 14:55*	WG1443491

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0148	0.0250	0.0271	1	03/13/2020 14:05	WG1443493
Acrylonitrile	U		0.00206	0.0125	0.0135	1	03/13/2020 14:05	WG1443493
Benzene	U		0.000433	0.00100	0.00108	1	03/13/2020 14:05	WG1443493
Bromobenzene	U		0.00114	0.0125	0.0135	1	03/13/2020 14:05	WG1443493
Bromodichloromethane	U		0.000853	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
Bromoform	U		0.00647	0.0250	0.0271	1	03/13/2020 14:05	WG1443493
Bromomethane	U		0.00401	0.0125	0.0135	1	03/13/2020 14:05	WG1443493
n-Butylbenzene	U		0.00416	0.0125	0.0135	1	03/13/2020 14:05	WG1443493
sec-Butylbenzene	U		0.00274	0.0125	0.0135	1	03/13/2020 14:05	WG1443493
tert-Butylbenzene	U		0.00168	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
Carbon tetrachloride	U		0.00117	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
Chlorobenzene	U		0.000620	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
Chlorodibromomethane	U		0.000487	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
Chloroethane	U		0.00117	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
Chloroform	U		0.000449	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
Chloromethane	U		0.00150	0.0125	0.0135	1	03/13/2020 14:05	WG1443493
2-Chlorotoluene	U		0.000996	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
4-Chlorotoluene	U		0.00122	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
1,2-Dibromo-3-Chloropropane	U		0.00552	0.0250	0.0271	1	03/13/2020 14:05	WG1443493
1,2-Dibromoethane	U		0.000568	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
Dibromomethane	U	J4	0.00108	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
1,2-Dichlorobenzene	U		0.00157	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
1,3-Dichlorobenzene	U		0.00184	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
1,4-Dichlorobenzene	U		0.00213	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
Dichlorodifluoromethane	U		0.000885	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
1,1-Dichloroethane	U		0.000622	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
1,2-Dichloroethane	U		0.000514	0.00250	0.00271	1	03/13/2020 14:05	WG1443493

SB64 (0-3)

Collected date/time: 03/12/20 08:20

SAMPLE RESULTS - 05

L1198738

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000541	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
cis-1,2-Dichloroethene	U		0.000747	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
trans-1,2-Dichloroethene	U		0.00155	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
1,2-Dichloropropane	U		0.00137	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
1,1-Dichloropropene	U		0.000758	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
1,3-Dichloropropane	U		0.00189	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
cis-1,3-Dichloropropene	U		0.000734	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
trans-1,3-Dichloropropene	U		0.00166	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
2,2-Dichloropropane	U		0.000858	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
Di-isopropyl ether	U		0.000379	0.00100	0.00108	1	03/13/2020 14:05	WG1443493
Ethylbenzene	0.00134	B J	0.000574	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
Hexachloro-1,3-butadiene	U		0.0137	0.0250	0.0271	1	03/13/2020 14:05	WG1443493
Isopropylbenzene	U		0.000934	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
p-Isopropyltoluene	U		0.00252	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
2-Butanone (MEK)	U		0.0135	0.0250	0.0271	1	03/13/2020 14:05	WG1443493
Methylene Chloride	U		0.00719	0.0250	0.0271	1	03/13/2020 14:05	WG1443493
4-Methyl-2-pentanone (MIBK)	U		0.0108	0.0250	0.0271	1	03/13/2020 14:05	WG1443493
Methyl tert-butyl ether	U		0.000319	0.00100	0.00108	1	03/13/2020 14:05	WG1443493
Naphthalene	U		0.00338	0.0125	0.0135	1	03/13/2020 14:05	WG1443493
n-Propylbenzene	U		0.00128	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
Styrene	U		0.00296	0.0125	0.0135	1	03/13/2020 14:05	WG1443493
1,1,1,2-Tetrachloroethane	U		0.000541	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
1,1,2,2-Tetrachloroethane	U		0.000422	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
1,1,2-Trichlorotrifluoroethane	U		0.000731	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
Tetrachloroethene	U		0.000758	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
Toluene	0.0118		0.00135	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
1,2,3-Trichlorobenzene	U		0.000677	0.0125	0.0135	1	03/13/2020 14:05	WG1443493
1,2,4-Trichlorobenzene	U		0.00522	0.0125	0.0135	1	03/13/2020 14:05	WG1443493
1,1,1-Trichloroethane	U		0.000298	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
1,1,2-Trichloroethane	U		0.000956	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
Trichloroethene	U		0.000433	0.00100	0.00108	1	03/13/2020 14:05	WG1443493
Trichlorofluoromethane	U		0.000541	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
1,2,3-Trichloropropane	U		0.00552	0.0125	0.0135	1	03/13/2020 14:05	WG1443493
1,2,4-Trimethylbenzene	U		0.00126	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
1,2,3-Trimethylbenzene	U		0.00124	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
1,3,5-Trimethylbenzene	U		0.00117	0.00500	0.00541	1	03/13/2020 14:05	WG1443493
Vinyl chloride	U		0.000739	0.00250	0.00271	1	03/13/2020 14:05	WG1443493
Xylenes, Total	U		0.00517	0.00650	0.00704	1	03/13/2020 14:05	WG1443493
(S) Toluene-d8	*104*				*75.0-131*		*03/13/2020 14:05*	WG1443493
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*03/13/2020 14:05*	WG1443493
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*03/13/2020 14:05*	WG1443493

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		72.0	4.00	217	50	03/13/2020 20:27	WG1443607
Residual Range Organics (RRO)	1290		180	10.0	541	50	03/13/2020 20:27	WG1443607
(S) o-Terphenyl	*75.9*	J7			*18.0-148*		*03/13/2020 20:27*	WG1443607

Sample Narrative:

L1198738-05 WG1443607: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	77.2		1	03/13/2020 13:24	WG1443557

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0560		0.00363	0.0300	0.0389	1	03/13/2020 14:26	WG1443597

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.21		0.596	2.00	2.59	1	03/13/2020 15:09	WG1443599
Barium	84.0		0.220	0.500	0.648	1	03/13/2020 15:09	WG1443599
Cadmium	0.439	J	0.0907	0.500	0.648	1	03/13/2020 15:09	WG1443599
Chromium	24.4		0.181	1.00	1.30	1	03/13/2020 15:09	WG1443599
Lead	89.7		0.246	0.500	0.648	1	03/13/2020 15:09	WG1443599
Selenium	U		0.803	2.00	2.59	1	03/13/2020 15:09	WG1443599
Silver	3.07		0.155	1.00	1.30	1	03/13/2020 15:09	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.10	0.100	3.24	25	03/13/2020 15:19	WG1443491
(S) a,a,a-Trifluorotoluene(FID)	*98.3*				*77.0-120*		*03/13/2020 15:19*	WG1443491

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0177	0.0250	0.0324	1	03/13/2020 14:24	WG1443493
Acrylonitrile	U		0.00246	0.0125	0.0162	1	03/13/2020 14:24	WG1443493
Benzene	0.000589	J	0.000518	0.00100	0.00130	1	03/13/2020 14:24	WG1443493
Bromobenzene	U		0.00136	0.0125	0.0162	1	03/13/2020 14:24	WG1443493
Bromodichloromethane	U		0.00102	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
Bromoform	U		0.00775	0.0250	0.0324	1	03/13/2020 14:24	WG1443493
Bromomethane	U		0.00479	0.0125	0.0162	1	03/13/2020 14:24	WG1443493
n-Butylbenzene	U		0.00497	0.0125	0.0162	1	03/13/2020 14:24	WG1443493
sec-Butylbenzene	U		0.00328	0.0125	0.0162	1	03/13/2020 14:24	WG1443493
tert-Butylbenzene	U		0.00201	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
Carbon tetrachloride	U		0.00140	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
Chlorobenzene	U		0.000742	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
Chlorodibromomethane	U		0.000583	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
Chloroethane	U		0.00140	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
Chloroform	U		0.000538	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
Chloromethane	U		0.00180	0.0125	0.0162	1	03/13/2020 14:24	WG1443493
2-Chlorotoluene	U		0.00119	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
4-Chlorotoluene	U		0.00146	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
1,2-Dibromo-3-Chloropropane	U		0.00661	0.0250	0.0324	1	03/13/2020 14:24	WG1443493
1,2-Dibromoethane	U		0.000680	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
Dibromomethane	U	J4	0.00130	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
1,2-Dichlorobenzene	U		0.00188	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
1,3-Dichlorobenzene	U		0.00220	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
1,4-Dichlorobenzene	U		0.00255	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
Dichlorodifluoromethane	U		0.00106	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
1,1-Dichloroethane	U		0.000745	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
1,2-Dichloroethane	U		0.000615	0.00250	0.00324	1	03/13/2020 14:24	WG1443493

SB64 (4-6)

Collected date/time: 03/12/20 08:21

SAMPLE RESULTS - 06

L1198738

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000648	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
cis-1,2-Dichloroethene	U		0.000894	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
trans-1,2-Dichloroethene	U		0.00185	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
1,2-Dichloropropane	U		0.00165	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
1,1-Dichloropropene	U		0.000907	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
1,3-Dichloropropane	U		0.00227	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
cis-1,3-Dichloropropene	U		0.000878	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
trans-1,3-Dichloropropene	U		0.00198	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
2,2-Dichloropropane	U		0.00103	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
Di-isopropyl ether	U		0.000453	0.00100	0.00130	1	03/13/2020 14:24	WG1443493
Ethylbenzene	0.000821	B J	0.000687	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
Hexachloro-1,3-butadiene	U		0.0165	0.0250	0.0324	1	03/13/2020 14:24	WG1443493
Isopropylbenzene	U		0.00112	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
p-Isopropyltoluene	0.00939		0.00302	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
2-Butanone (MEK)	U		0.0162	0.0250	0.0324	1	03/13/2020 14:24	WG1443493
Methylene Chloride	U		0.00860	0.0250	0.0324	1	03/13/2020 14:24	WG1443493
4-Methyl-2-pentanone (MIBK)	U		0.0130	0.0250	0.0324	1	03/13/2020 14:24	WG1443493
Methyl tert-butyl ether	U		0.000382	0.00100	0.00130	1	03/13/2020 14:24	WG1443493
Naphthalene	U		0.00404	0.0125	0.0162	1	03/13/2020 14:24	WG1443493
n-Propylbenzene	U		0.00153	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
Styrene	U		0.00354	0.0125	0.0162	1	03/13/2020 14:24	WG1443493
1,1,1,2-Tetrachloroethane	U		0.000648	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
1,1,2,2-Tetrachloroethane	U		0.000505	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
1,1,2-Trichlorotrifluoroethane	U		0.000874	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
Tetrachloroethene	U		0.000907	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
Toluene	0.00973		0.00162	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
1,2,3-Trichlorobenzene	U		0.000810	0.0125	0.0162	1	03/13/2020 14:24	WG1443493
1,2,4-Trichlorobenzene	U		0.00624	0.0125	0.0162	1	03/13/2020 14:24	WG1443493
1,1,1-Trichloroethane	U		0.000356	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
1,1,2-Trichloroethane	U		0.00114	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
Trichloroethene	U		0.000518	0.00100	0.00130	1	03/13/2020 14:24	WG1443493
Trichlorofluoromethane	U		0.000648	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
1,2,3-Trichloropropane	U		0.00661	0.0125	0.0162	1	03/13/2020 14:24	WG1443493
1,2,4-Trimethylbenzene	U		0.00150	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
1,2,3-Trimethylbenzene	U		0.00149	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
1,3,5-Trimethylbenzene	U		0.00140	0.00500	0.00648	1	03/13/2020 14:24	WG1443493
Vinyl chloride	U		0.000885	0.00250	0.00324	1	03/13/2020 14:24	WG1443493
Xylenes, Total	U		0.00619	0.00650	0.00842	1	03/13/2020 14:24	WG1443493
(S) Toluene-d8	*105*				*75.0-131*		*03/13/2020 14:24*	WG1443493
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*03/13/2020 14:24*	WG1443493
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*03/13/2020 14:24*	WG1443493

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		17.2	4.00	51.8	10	03/13/2020 19:39	WG1443607
Residual Range Organics (RRO)	91.7	J	43.1	10.0	130	10	03/13/2020 19:39	WG1443607
(S) o-Terphenyl	*78.9*				*18.0-148*		*03/13/2020 19:39*	WG1443607

Sample Narrative:

L1198738-06 WG1443607: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.0		1	03/13/2020 13:24	WG1443557

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0548		0.00322	0.0300	0.0345	1	03/13/2020 14:29	WG1443597

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.40		0.529	2.00	2.30	1	03/13/2020 14:38	WG1443599
Barium	102	O1	0.195	0.500	0.575	1	03/13/2020 14:38	WG1443599
Cadmium	0.350	J	0.0805	0.500	0.575	1	03/13/2020 14:38	WG1443599
Chromium	23.3	O1	0.161	1.00	1.15	1	03/13/2020 14:38	WG1443599
Lead	13.9	O1	0.218	0.500	0.575	1	03/13/2020 14:38	WG1443599
Selenium	U		0.713	2.00	2.30	1	03/13/2020 14:38	WG1443599
Silver	U		0.138	1.00	1.15	1	03/13/2020 14:38	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.07	0.100	3.16	27.5	03/13/2020 15:43	WG1443491
(S) a,a,a-Trifluorotoluene(FID)	*97.8*				*77.0-120*		*03/13/2020 15:43*	WG1443491

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.0157	0.0250	0.0287	1	03/13/2020 14:43	WG1443493
Acrylonitrile	U		0.00218	0.0125	0.0144	1	03/13/2020 14:43	WG1443493
Benzene	U		0.000460	0.00100	0.00115	1	03/13/2020 14:43	WG1443493
Bromobenzene	U		0.00121	0.0125	0.0144	1	03/13/2020 14:43	WG1443493
Bromodichloromethane	U		0.000906	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
Bromoform	U		0.00687	0.0250	0.0287	1	03/13/2020 14:43	WG1443493
Bromomethane	U		0.00425	0.0125	0.0144	1	03/13/2020 14:43	WG1443493
n-Butylbenzene	U		0.00441	0.0125	0.0144	1	03/13/2020 14:43	WG1443493
sec-Butylbenzene	U		0.00291	0.0125	0.0144	1	03/13/2020 14:43	WG1443493
tert-Butylbenzene	U		0.00178	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
Carbon tetrachloride	U		0.00124	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
Chlorobenzene	U		0.000659	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
Chlorodibromomethane	U		0.000517	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
Chloroethane	U		0.00124	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
Chloroform	U		0.000477	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
Chloromethane	U		0.00160	0.0125	0.0144	1	03/13/2020 14:43	WG1443493
2-Chlorotoluene	U		0.00106	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
4-Chlorotoluene	U		0.00130	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
1,2-Dibromo-3-Chloropropane	U		0.00586	0.0250	0.0287	1	03/13/2020 14:43	WG1443493
1,2-Dibromoethane	U		0.000603	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
Dibromomethane	U	J4	0.00115	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
1,2-Dichlorobenzene	U		0.00167	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
1,3-Dichlorobenzene	U		0.00195	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
1,4-Dichlorobenzene	U		0.00226	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
Dichlorodifluoromethane	U		0.000940	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
1,1-Dichloroethane	U		0.000661	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
1,2-Dichloroethane	U		0.000546	0.00250	0.00287	1	03/13/2020 14:43	WG1443493

SB65 (0-3)

Collected date/time: 03/12/20 08:10

SAMPLE RESULTS - 07

L1198738

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000575	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
cis-1,2-Dichloroethene	U		0.000793	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
trans-1,2-Dichloroethene	U		0.00164	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
1,2-Dichloropropane	U		0.00146	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
1,1-Dichloropropene	U		0.000805	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
1,3-Dichloropropane	U		0.00201	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
cis-1,3-Dichloropropene	U		0.000779	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
trans-1,3-Dichloropropene	U		0.00176	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
2,2-Dichloropropane	U		0.000911	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
Di-isopropyl ether	U		0.000402	0.00100	0.00115	1	03/13/2020 14:43	WG1443493
Ethylbenzene	0.00109	B J	0.000609	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
Hexachloro-1,3-butadiene	U		0.0146	0.0250	0.0287	1	03/13/2020 14:43	WG1443493
Isopropylbenzene	U		0.000992	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
p-Isopropyltoluene	U		0.00268	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
2-Butanone (MEK)	0.0233	B J	0.0144	0.0250	0.0287	1	03/13/2020 14:43	WG1443493
Methylene Chloride	U		0.00763	0.0250	0.0287	1	03/13/2020 14:43	WG1443493
4-Methyl-2-pentanone (MIBK)	U		0.0115	0.0250	0.0287	1	03/13/2020 14:43	WG1443493
Methyl tert-butyl ether	U		0.000339	0.00100	0.00115	1	03/13/2020 14:43	WG1443493
Naphthalene	0.00488	B J	0.00359	0.0125	0.0144	1	03/13/2020 14:43	WG1443493
n-Propylbenzene	U		0.00136	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
Styrene	U		0.00314	0.0125	0.0144	1	03/13/2020 14:43	WG1443493
1,1,1,2-Tetrachloroethane	U		0.000575	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
1,1,2,2-Tetrachloroethane	U		0.000448	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
1,1,2-Trichlorotrifluoroethane	U		0.000776	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
Tetrachloroethene	U		0.000805	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
Toluene	U		0.00144	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
1,2,3-Trichlorobenzene	U		0.000718	0.0125	0.0144	1	03/13/2020 14:43	WG1443493
1,2,4-Trichlorobenzene	U		0.00554	0.0125	0.0144	1	03/13/2020 14:43	WG1443493
1,1,1-Trichloroethane	U		0.000316	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
1,1,2-Trichloroethane	U		0.00101	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
Trichloroethene	U		0.000460	0.00100	0.00115	1	03/13/2020 14:43	WG1443493
Trichlorofluoromethane	U		0.000575	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
1,2,3-Trichloropropane	U		0.00586	0.0125	0.0144	1	03/13/2020 14:43	WG1443493
1,2,4-Trimethylbenzene	U		0.00133	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
1,2,3-Trimethylbenzene	U		0.00132	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
1,3,5-Trimethylbenzene	U		0.00124	0.00500	0.00575	1	03/13/2020 14:43	WG1443493
Vinyl chloride	U		0.000785	0.00250	0.00287	1	03/13/2020 14:43	WG1443493
Xylenes, Total	U		0.00549	0.00650	0.00747	1	03/13/2020 14:43	WG1443493
(S) Toluene-d8	*107*				*75.0-131*		*03/13/2020 14:43*	WG1443493
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*03/13/2020 14:43*	WG1443493
(S) 1,2-Dichloroethane-d4	*102*				*70.0-130*		*03/13/2020 14:43*	WG1443493

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	2.48	J	1.53	4.00	4.60	1	03/13/2020 20:05	WG1443607
Residual Range Organics (RRO)	14.1		3.83	10.0	11.5	1	03/13/2020 20:05	WG1443607
(S) o-Terphenyl	*78.1*				*18.0-148*		*03/13/2020 20:05*	WG1443607

Sample Narrative:

L1198738-07 WG1443607: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	80.0		1	03/13/2020 12:58	WG1443595

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0604		0.00350	0.0300	0.0375	1	03/13/2020 14:31	WG1443597

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	7.13		0.575	2.00	2.50	1	03/13/2020 15:11	WG1443599
Barium	91.5		0.213	0.500	0.625	1	03/13/2020 15:11	WG1443599
Cadmium	0.539	J	0.0876	0.500	0.625	1	03/13/2020 15:11	WG1443599
Chromium	22.9		0.175	1.00	1.25	1	03/13/2020 15:11	WG1443599
Lead	18.3		0.238	0.500	0.625	1	03/13/2020 15:11	WG1443599
Selenium	U		0.775	2.00	2.50	1	03/13/2020 15:11	WG1443599
Silver	U		0.150	1.00	1.25	1	03/13/2020 15:11	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.06	0.100	3.13	25	03/13/2020 13:48	WG1443527
(S) a,a,a-Trifluorotoluene(FID)	*97.6*				*77.0-120*		*03/13/2020 13:48*	WG1443527

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U	J4	0.0171	0.0250	0.0313	1	03/13/2020 15:02	WG1443493
Acrylonitrile	U		0.00238	0.0125	0.0156	1	03/13/2020 15:02	WG1443493
Benzene	U		0.000500	0.00100	0.00125	1	03/13/2020 15:02	WG1443493
Bromobenzene	U		0.00131	0.0125	0.0156	1	03/13/2020 15:02	WG1443493
Bromodichloromethane	U		0.000986	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
Bromoform	U		0.00748	0.0250	0.0313	1	03/13/2020 15:02	WG1443493
Bromomethane	U		0.00463	0.0125	0.0156	1	03/13/2020 15:02	WG1443493
n-Butylbenzene	U		0.00480	0.0125	0.0156	1	03/13/2020 15:02	WG1443493
sec-Butylbenzene	U		0.00316	0.0125	0.0156	1	03/13/2020 15:02	WG1443493
tert-Butylbenzene	U		0.00194	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
Carbon tetrachloride	U		0.00135	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
Chlorobenzene	U		0.000717	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
Chlorodibromomethane	U		0.000563	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
Chloroethane	U		0.00135	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
Chloroform	U		0.000519	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
Chloromethane	U		0.00174	0.0125	0.0156	1	03/13/2020 15:02	WG1443493
2-Chlorotoluene	U		0.00115	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
4-Chlorotoluene	U		0.00141	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
1,2-Dibromo-3-Chloropropane	U		0.00638	0.0250	0.0313	1	03/13/2020 15:02	WG1443493
1,2-Dibromoethane	U		0.000657	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
Dibromomethane	U	J4	0.00125	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
1,2-Dichlorobenzene	U		0.00181	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
1,3-Dichlorobenzene	U		0.00213	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
1,4-Dichlorobenzene	U		0.00246	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
Dichlorodifluoromethane	U		0.00102	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
1,1-Dichloroethane	U		0.000719	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
1,2-Dichloroethane	U		0.000594	0.00250	0.00313	1	03/13/2020 15:02	WG1443493

SB65 (4-6)

Collected date/time: 03/12/20 08:11

SAMPLE RESULTS - 08

L1198738

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000625	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
cis-1,2-Dichloroethene	U		0.000863	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
trans-1,2-Dichloroethene	U		0.00179	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
1,2-Dichloropropane	U		0.00159	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
1,1-Dichloropropene	U		0.000876	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
1,3-Dichloropropane	U		0.00219	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
cis-1,3-Dichloropropene	U		0.000848	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
trans-1,3-Dichloropropene	U		0.00191	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
2,2-Dichloropropane	U		0.000992	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
Di-isopropyl ether	U		0.000438	0.00100	0.00125	1	03/13/2020 15:02	WG1443493
Ethylbenzene	0.00135	B J	0.000663	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
Hexachloro-1,3-butadiene	U		0.0159	0.0250	0.0313	1	03/13/2020 15:02	WG1443493
Isopropylbenzene	U		0.00108	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
p-Isopropyltoluene	U		0.00291	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
2-Butanone (MEK)	0.0185	B J	0.0156	0.0250	0.0313	1	03/13/2020 15:02	WG1443493
Methylene Chloride	U		0.00830	0.0250	0.0313	1	03/13/2020 15:02	WG1443493
4-Methyl-2-pentanone (MIBK)	U		0.0125	0.0250	0.0313	1	03/13/2020 15:02	WG1443493
Methyl tert-butyl ether	U		0.000369	0.00100	0.00125	1	03/13/2020 15:02	WG1443493
Naphthalene	U		0.00390	0.0125	0.0156	1	03/13/2020 15:02	WG1443493
n-Propylbenzene	U		0.00148	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
Styrene	U		0.00341	0.0125	0.0156	1	03/13/2020 15:02	WG1443493
1,1,1,2-Tetrachloroethane	U		0.000625	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
1,1,2,2-Tetrachloroethane	U		0.000488	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
1,1,2-Trichlorotrifluoroethane	U		0.000844	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
Tetrachloroethene	U		0.000876	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
Toluene	0.00178	J	0.00156	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
1,2,3-Trichlorobenzene	U		0.000782	0.0125	0.0156	1	03/13/2020 15:02	WG1443493
1,2,4-Trichlorobenzene	U		0.00603	0.0125	0.0156	1	03/13/2020 15:02	WG1443493
1,1,1-Trichloroethane	U		0.000344	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
1,1,2-Trichloroethane	U		0.00110	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
Trichloroethene	U		0.000500	0.00100	0.00125	1	03/13/2020 15:02	WG1443493
Trichlorofluoromethane	U		0.000625	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
1,2,3-Trichloropropane	U		0.00638	0.0125	0.0156	1	03/13/2020 15:02	WG1443493
1,2,4-Trimethylbenzene	U		0.00145	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
1,2,3-Trimethylbenzene	U		0.00144	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
1,3,5-Trimethylbenzene	U		0.00135	0.00500	0.00625	1	03/13/2020 15:02	WG1443493
Vinyl chloride	U		0.000854	0.00250	0.00313	1	03/13/2020 15:02	WG1443493
Xylenes, Total	U		0.00598	0.00650	0.00813	1	03/13/2020 15:02	WG1443493
(S) Toluene-d8	*106*				*75.0-131*		*03/13/2020 15:02*	WG1443493
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*03/13/2020 15:02*	WG1443493
(S) 1,2-Dichloroethane-d4	*105*				*70.0-130*		*03/13/2020 15:02*	WG1443493

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	11.1	J	8.32	4.00	25.0	5	03/13/2020 20:18	WG1443607
Residual Range Organics (RRO)	59.0	J	20.8	10.0	62.5	5	03/13/2020 20:18	WG1443607
(S) o-Terphenyl	*78.6*				*18.0-148*		*03/13/2020 20:18*	WG1443607

Sample Narrative:

L1198738-08 WG1443607: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.3		1	03/13/2020 12:58	WG1443595

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0499		0.00328	0.0300	0.0352	1	03/13/2020 14:34	WG1443597

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	15.9		0.539	2.00	2.34	1	03/13/2020 15:14	WG1443599
Barium	161		0.199	0.500	0.586	1	03/13/2020 15:14	WG1443599
Cadmium	0.255	J	0.0820	0.500	0.586	1	03/13/2020 15:14	WG1443599
Chromium	30.7		0.164	1.00	1.17	1	03/13/2020 15:14	WG1443599
Lead	22.5		0.223	0.500	0.586	1	03/13/2020 15:14	WG1443599
Selenium	U		0.727	2.00	2.34	1	03/13/2020 15:14	WG1443599
Silver	U		0.141	1.00	1.17	1	03/13/2020 15:14	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.22	J	0.993	0.100	2.93	25	03/13/2020 13:27	WG1443527
(S) a,a,a-Trifluorotoluene(FID)	*98.3*				*77.0-120*		*03/13/2020 13:27*	WG1443527

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0161	0.0250	0.0293	1	03/13/2020 13:27	WG1443569
Acrylonitrile	U		0.00223	0.0125	0.0146	1	03/13/2020 13:27	WG1443569
Benzene	U		0.000469	0.00100	0.00117	1	03/13/2020 13:27	WG1443569
Bromobenzene	U		0.00123	0.0125	0.0146	1	03/13/2020 13:27	WG1443569
Bromodichloromethane	U		0.000923	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
Bromoform	U		0.00701	0.0250	0.0293	1	03/13/2020 13:27	WG1443569
Bromomethane	U		0.00434	0.0125	0.0146	1	03/13/2020 13:27	WG1443569
n-Butylbenzene	U		0.00450	0.0125	0.0146	1	03/13/2020 13:27	WG1443569
sec-Butylbenzene	U		0.00297	0.0125	0.0146	1	03/13/2020 13:27	WG1443569
tert-Butylbenzene	U		0.00182	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
Carbon tetrachloride	U		0.00127	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
Chlorobenzene	U		0.000672	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
Chlorodibromomethane	U		0.000527	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
Chloroethane	U		0.00127	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
Chloroform	U		0.000486	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
Chloromethane	U		0.00163	0.0125	0.0146	1	03/13/2020 13:27	WG1443569
2-Chlorotoluene	U		0.00108	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
4-Chlorotoluene	U		0.00132	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
1,2-Dibromo-3-Chloropropane	U		0.00598	0.0250	0.0293	1	03/13/2020 13:27	WG1443569
1,2-Dibromoethane	U		0.000615	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
Dibromomethane	U		0.00117	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
1,2-Dichlorobenzene	U		0.00170	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
1,3-Dichlorobenzene	U		0.00199	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
1,4-Dichlorobenzene	U		0.00231	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
Dichlorodifluoromethane	U		0.000959	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
1,1-Dichloroethane	U		0.000674	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
1,2-Dichloroethane	U		0.000557	0.00250	0.00293	1	03/13/2020 13:27	WG1443569

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000586	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
cis-1,2-Dichloroethene	U		0.000809	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
trans-1,2-Dichloroethene	U		0.00168	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
1,2-Dichloropropane	U		0.00149	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
1,1-Dichloropropene	U		0.000820	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
1,3-Dichloropropane	U		0.00205	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
cis-1,3-Dichloropropene	U		0.000795	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
trans-1,3-Dichloropropene	U		0.00179	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
2,2-Dichloropropane	U		0.000929	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
Di-isopropyl ether	U		0.000410	0.00100	0.00117	1	03/13/2020 13:27	WG1443569
Ethylbenzene	U		0.000621	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
Hexachloro-1,3-butadiene	U		0.0149	0.0250	0.0293	1	03/13/2020 13:27	WG1443569
Isopropylbenzene	U		0.00101	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
p-Isopropyltoluene	U		0.00273	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
2-Butanone (MEK)	0.0675	B	0.0146	0.0250	0.0293	1	03/13/2020 13:27	WG1443569
Methylene Chloride	U		0.00778	0.0250	0.0293	1	03/13/2020 13:27	WG1443569
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0250	0.0293	1	03/13/2020 13:27	WG1443569
Methyl tert-butyl ether	U		0.000346	0.00100	0.00117	1	03/13/2020 13:27	WG1443569
Naphthalene	U		0.00366	0.0125	0.0146	1	03/13/2020 13:27	WG1443569
n-Propylbenzene	U		0.00138	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
Styrene	U		0.00320	0.0125	0.0146	1	03/13/2020 13:27	WG1443569
1,1,1,2-Tetrachloroethane	U		0.000586	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
1,1,2,2-Tetrachloroethane	U		0.000457	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
1,1,2-Trichlorotrifluoroethane	U		0.000791	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
Tetrachloroethene	U		0.000820	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
Toluene	0.00230	J	0.00146	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
1,2,3-Trichlorobenzene	U		0.000732	0.0125	0.0146	1	03/13/2020 13:27	WG1443569
1,2,4-Trichlorobenzene	U		0.00565	0.0125	0.0146	1	03/13/2020 13:27	WG1443569
1,1,1-Trichloroethane	U		0.000322	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
1,1,2-Trichloroethane	U		0.00103	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
Trichloroethene	U		0.000469	0.00100	0.00117	1	03/13/2020 13:27	WG1443569
Trichlorofluoromethane	U		0.000586	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
1,2,3-Trichloropropane	U		0.00598	0.0125	0.0146	1	03/13/2020 13:27	WG1443569
1,2,4-Trimethylbenzene	U		0.00136	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
1,2,3-Trimethylbenzene	U		0.00135	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
1,3,5-Trimethylbenzene	U		0.00127	0.00500	0.00586	1	03/13/2020 13:27	WG1443569
Vinyl chloride	U		0.000800	0.00250	0.00293	1	03/13/2020 13:27	WG1443569
Xylenes, Total	U		0.00560	0.00650	0.00762	1	03/13/2020 13:27	WG1443569
(S) Toluene-d8	*114*				*75.0-131*		*03/13/2020 13:27*	WG1443569
(S) 4-Bromofluorobenzene	*98.1*				*67.0-138*		*03/13/2020 13:27*	WG1443569
(S) 1,2-Dichloroethane-d4	*92.3*				*70.0-130*		*03/13/2020 13:27*	WG1443569

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	12.2		1.56	4.00	4.69	1	03/13/2020 18:49	WG1443607
Residual Range Organics (RRO)	62.0		3.90	10.0	11.7	1	03/13/2020 18:49	WG1443607
(S) o-Terphenyl	*83.3*				*18.0-148*		*03/13/2020 18:49*	WG1443607

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.5		1	03/13/2020 12:58	WG1443595

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0429		0.00324	0.0300	0.0347	1	03/13/2020 14:36	WG1443597

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.24		0.532	2.00	2.31	1	03/13/2020 15:17	WG1443599
Barium	119		0.196	0.500	0.578	1	03/13/2020 15:17	WG1443599
Cadmium	0.178	J	0.0809	0.500	0.578	1	03/13/2020 15:17	WG1443599
Chromium	32.9		0.162	1.00	1.16	1	03/13/2020 15:17	WG1443599
Lead	6.91		0.220	0.500	0.578	1	03/13/2020 15:17	WG1443599
Selenium	0.749	J	0.717	2.00	2.31	1	03/13/2020 15:17	WG1443599
Silver	U		0.139	1.00	1.16	1	03/13/2020 15:17	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.979	0.100	2.89	25	03/13/2020 14:08	WG1443527
(S) a,a,a-Trifluorotoluene(FID)	*98.9*				*77.0-120*		*03/13/2020 14:08*	WG1443527

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0158	0.0250	0.0289	1	03/13/2020 13:46	WG1443569
Acrylonitrile	U		0.00220	0.0125	0.0144	1	03/13/2020 13:46	WG1443569
Benzene	U		0.000462	0.00100	0.00116	1	03/13/2020 13:46	WG1443569
Bromobenzene	U		0.00121	0.0125	0.0144	1	03/13/2020 13:46	WG1443569
Bromodichloromethane	U		0.000911	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
Bromoform	U		0.00691	0.0250	0.0289	1	03/13/2020 13:46	WG1443569
Bromomethane	U		0.00428	0.0125	0.0144	1	03/13/2020 13:46	WG1443569
n-Butylbenzene	U		0.00444	0.0125	0.0144	1	03/13/2020 13:46	WG1443569
sec-Butylbenzene	U		0.00292	0.0125	0.0144	1	03/13/2020 13:46	WG1443569
tert-Butylbenzene	U		0.00179	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
Carbon tetrachloride	U		0.00125	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
Chlorobenzene	U		0.000662	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
Chlorodibromomethane	U		0.000520	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
Chloroethane	U		0.00125	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
Chloroform	U		0.000480	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
Chloromethane	U		0.00161	0.0125	0.0144	1	03/13/2020 13:46	WG1443569
2-Chlorotoluene	U		0.00106	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
4-Chlorotoluene	U		0.00131	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
1,2-Dibromo-3-Chloropropane	U		0.00589	0.0250	0.0289	1	03/13/2020 13:46	WG1443569
1,2-Dibromoethane	U		0.000607	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
Dibromomethane	U		0.00116	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
1,2-Dichlorobenzene	U		0.00168	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
1,3-Dichlorobenzene	U		0.00196	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
1,4-Dichlorobenzene	U		0.00228	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
Dichlorodifluoromethane	U		0.000945	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
1,1-Dichloroethane	U		0.000664	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
1,2-Dichloroethane	U		0.000549	0.00250	0.00289	1	03/13/2020 13:46	WG1443569

SB66 (4-6)

Collected date/time: 03/12/20 07:57

SAMPLE RESULTS - 10

L1198738

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000578	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
cis-1,2-Dichloroethene	U		0.000797	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
trans-1,2-Dichloroethene	U		0.00165	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
1,2-Dichloropropane	U		0.00147	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
1,1-Dichloropropene	U		0.000809	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
1,3-Dichloropropane	U		0.00202	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
cis-1,3-Dichloropropene	U		0.000784	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
trans-1,3-Dichloropropene	U		0.00177	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
2,2-Dichloropropane	U		0.000916	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
Di-isopropyl ether	U		0.000404	0.00100	0.00116	1	03/13/2020 13:46	WG1443569
Ethylbenzene	U		0.000612	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
Hexachloro-1,3-butadiene	U		0.0147	0.0250	0.0289	1	03/13/2020 13:46	WG1443569
Isopropylbenzene	U		0.000997	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
p-Isopropyltoluene	U		0.00269	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
2-Butanone (MEK)	0.0544	B	0.0144	0.0250	0.0289	1	03/13/2020 13:46	WG1443569
Methylene Chloride	U		0.00767	0.0250	0.0289	1	03/13/2020 13:46	WG1443569
4-Methyl-2-pentanone (MIBK)	U		0.0116	0.0250	0.0289	1	03/13/2020 13:46	WG1443569
Methyl tert-butyl ether	U		0.000341	0.00100	0.00116	1	03/13/2020 13:46	WG1443569
Naphthalene	U		0.00361	0.0125	0.0144	1	03/13/2020 13:46	WG1443569
n-Propylbenzene	U		0.00136	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
Styrene	U		0.00315	0.0125	0.0144	1	03/13/2020 13:46	WG1443569
1,1,1,2-Tetrachloroethane	U		0.000578	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
1,1,2,2-Tetrachloroethane	U		0.000451	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
1,1,2-Trichlorotrifluoroethane	U		0.000780	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
Tetrachloroethene	U		0.000809	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
Toluene	U		0.00144	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
1,2,3-Trichlorobenzene	U		0.000722	0.0125	0.0144	1	03/13/2020 13:46	WG1443569
1,2,4-Trichlorobenzene	U		0.00557	0.0125	0.0144	1	03/13/2020 13:46	WG1443569
1,1,1-Trichloroethane	U		0.000318	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
1,1,2-Trichloroethane	U		0.00102	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
Trichloroethene	U		0.000462	0.00100	0.00116	1	03/13/2020 13:46	WG1443569
Trichlorofluoromethane	U		0.000578	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
1,2,3-Trichloropropane	U		0.00589	0.0125	0.0144	1	03/13/2020 13:46	WG1443569
1,2,4-Trimethylbenzene	U		0.00134	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
1,2,3-Trimethylbenzene	U		0.00133	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
1,3,5-Trimethylbenzene	U		0.00125	0.00500	0.00578	1	03/13/2020 13:46	WG1443569
Vinyl chloride	U		0.000789	0.00250	0.00289	1	03/13/2020 13:46	WG1443569
Xylenes, Total	U		0.00552	0.00650	0.00751	1	03/13/2020 13:46	WG1443569
(S) Toluene-d8	*113*				*75.0-131*		*03/13/2020 13:46*	WG1443569
(S) 4-Bromofluorobenzene	*99.9*				*67.0-138*		*03/13/2020 13:46*	WG1443569
(S) 1,2-Dichloroethane-d4	*88.7*				*70.0-130*		*03/13/2020 13:46*	WG1443569

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	2.40	J	1.54	4.00	4.62	1	03/13/2020 18:23	WG1443607
Residual Range Organics (RRO)	11.7		3.85	10.0	11.6	1	03/13/2020 18:23	WG1443607
(S) o-Terphenyl	*84.3*				*18.0-148*		*03/13/2020 18:23*	WG1443607

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.9		1	03/13/2020 12:58	WG1443595

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0425		0.00322	0.0300	0.0345	1	03/13/2020 14:39	WG1443597

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.85		0.530	2.00	2.30	1	03/13/2020 15:19	WG1443599
Barium	93.6		0.196	0.500	0.576	1	03/13/2020 15:19	WG1443599
Cadmium	0.317	J	0.0806	0.500	0.576	1	03/13/2020 15:19	WG1443599
Chromium	23.6		0.161	1.00	1.15	1	03/13/2020 15:19	WG1443599
Lead	23.4		0.219	0.500	0.576	1	03/13/2020 15:19	WG1443599
Selenium	U		0.714	2.00	2.30	1	03/13/2020 15:19	WG1443599
Silver	U		0.138	1.00	1.15	1	03/13/2020 15:19	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.21	J	0.976	0.100	2.88	25	03/13/2020 14:29	WG1443527
(S) a,a,a-Trifluorotoluene(FID)	*97.7*				*77.0-120*		*03/13/2020 14:29*	WG1443527

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0158	0.0250	0.0288	1	03/13/2020 12:32	WG1443314
Acrylonitrile	U		0.00219	0.0125	0.0144	1	03/13/2020 12:32	WG1443314
Benzene	0.000776	J	0.000460	0.00100	0.00115	1	03/13/2020 12:32	WG1443314
Bromobenzene	U		0.00121	0.0125	0.0144	1	03/13/2020 12:32	WG1443314
Bromodichloromethane	U		0.000907	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
Bromoform	U		0.00688	0.0250	0.0288	1	03/13/2020 12:32	WG1443314
Bromomethane	U		0.00426	0.0125	0.0144	1	03/13/2020 12:32	WG1443314
n-Butylbenzene	U		0.00442	0.0125	0.0144	1	03/13/2020 12:32	WG1443314
sec-Butylbenzene	U		0.00291	0.0125	0.0144	1	03/13/2020 12:32	WG1443314
tert-Butylbenzene	U		0.00178	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
Carbon tetrachloride	U		0.00124	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
Chlorobenzene	U		0.000660	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
Chlorodibromomethane	U		0.000518	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
Chloroethane	U		0.00124	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
Chloroform	U		0.000478	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
Chloromethane	U		0.00160	0.0125	0.0144	1	03/13/2020 12:32	WG1443314
2-Chlorotoluene	U		0.00106	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
4-Chlorotoluene	U		0.00130	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
1,2-Dibromo-3-Chloropropane	U		0.00587	0.0250	0.0288	1	03/13/2020 12:32	WG1443314
1,2-Dibromoethane	U		0.000604	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
Dibromomethane	U		0.00115	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
1,2-Dichlorobenzene	U		0.00167	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
1,3-Dichlorobenzene	U		0.00196	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
1,4-Dichlorobenzene	U		0.00227	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
Dichlorodifluoromethane	U		0.000942	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
1,1-Dichloroethane	U		0.000662	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
1,2-Dichloroethane	U		0.000547	0.00250	0.00288	1	03/13/2020 12:32	WG1443314

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000576	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
cis-1,2-Dichloroethene	U		0.000794	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
trans-1,2-Dichloroethene	U		0.00165	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
1,2-Dichloropropane	U		0.00146	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
1,1-Dichloropropene	U		0.000806	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
1,3-Dichloropropane	U		0.00201	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
cis-1,3-Dichloropropene	U		0.000780	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
trans-1,3-Dichloropropene	U		0.00176	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
2,2-Dichloropropane	U		0.000913	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
Di-isopropyl ether	U		0.000403	0.00100	0.00115	1	03/13/2020 12:32	WG1443314
Ethylbenzene	U		0.000610	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
Hexachloro-1,3-butadiene	U		0.0146	0.0250	0.0288	1	03/13/2020 12:32	WG1443314
Isopropylbenzene	U		0.000993	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
p-Isopropyltoluene	U		0.00268	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
2-Butanone (MEK)	0.0381	B	0.0144	0.0250	0.0288	1	03/13/2020 12:32	WG1443314
Methylene Chloride	U		0.00764	0.0250	0.0288	1	03/13/2020 12:32	WG1443314
4-Methyl-2-pentanone (MIBK)	U		0.0115	0.0250	0.0288	1	03/13/2020 12:32	WG1443314
Methyl tert-butyl ether	U		0.000340	0.00100	0.00115	1	03/13/2020 12:32	WG1443314
Naphthalene	0.00420	J	0.00359	0.0125	0.0144	1	03/13/2020 12:32	WG1443314
n-Propylbenzene	U		0.00136	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
Styrene	U		0.00314	0.0125	0.0144	1	03/13/2020 12:32	WG1443314
1,1,1,2-Tetrachloroethane	U		0.000576	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
1,1,2,2-Tetrachloroethane	U		0.000449	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
1,1,2-Trichlorotrifluoroethane	U		0.000777	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
Tetrachloroethene	0.00117	J	0.000806	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
Toluene	0.00153	J	0.00144	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
1,2,3-Trichlorobenzene	U		0.000719	0.0125	0.0144	1	03/13/2020 12:32	WG1443314
1,2,4-Trichlorobenzene	U		0.00555	0.0125	0.0144	1	03/13/2020 12:32	WG1443314
1,1,1-Trichloroethane	U		0.000317	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
1,1,2-Trichloroethane	U		0.00102	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
Trichloroethene	U		0.000460	0.00100	0.00115	1	03/13/2020 12:32	WG1443314
Trichlorofluoromethane	U		0.000576	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
1,2,3-Trichloropropane	U		0.00587	0.0125	0.0144	1	03/13/2020 12:32	WG1443314
1,2,4-Trimethylbenzene	0.00205	B J	0.00134	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
1,2,3-Trimethylbenzene	0.00458	B J	0.00132	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
1,3,5-Trimethylbenzene	U		0.00124	0.00500	0.00576	1	03/13/2020 12:32	WG1443314
Vinyl chloride	U		0.000786	0.00250	0.00288	1	03/13/2020 12:32	WG1443314
Xylenes, Total	U		0.00550	0.00650	0.00748	1	03/13/2020 12:32	WG1443314
(S) Toluene-d8	*102*				*75.0-131*		*03/13/2020 12:32*	WG1443314
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*03/13/2020 12:32*	WG1443314
(S) 1,2-Dichloroethane-d4	*102*				*70.0-130*		*03/13/2020 12:32*	WG1443314

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	81.0	J	76.5	4.00	230	50	03/13/2020 20:32	WG1443607
Residual Range Organics (RRO)	532	J	192	10.0	576	50	03/13/2020 20:32	WG1443607
(S) o-Terphenyl	*105*	J7			*18.0-148*		*03/13/2020 20:32*	WG1443607

Sample Narrative:

L1198738-11 WG1443607: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.0		1	03/13/2020 12:58	WG1443595

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0592		0.00330	0.0300	0.0353	1	03/13/2020 14:42	WG1443597

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.80		0.541	2.00	2.35	1	03/13/2020 15:22	WG1443599
Barium	103		0.200	0.500	0.588	1	03/13/2020 15:22	WG1443599
Cadmium	0.333	J	0.0824	0.500	0.588	1	03/13/2020 15:22	WG1443599
Chromium	29.9		0.165	1.00	1.18	1	03/13/2020 15:22	WG1443599
Lead	22.8		0.224	0.500	0.588	1	03/13/2020 15:22	WG1443599
Selenium	U		0.730	2.00	2.35	1	03/13/2020 15:22	WG1443599
Silver	U		0.141	1.00	1.18	1	03/13/2020 15:22	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.33	J	0.997	0.100	2.94	25	03/13/2020 14:49	WG1443527
(S) a,a,a-Trifluorotoluene(FID)	*98.5*				*77.0-120*		*03/13/2020 14:49*	WG1443527

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0161	0.0250	0.0294	1	03/13/2020 12:51	WG1443314
Acrylonitrile	U		0.00224	0.0125	0.0147	1	03/13/2020 12:51	WG1443314
Benzene	0.000724	J	0.000471	0.00100	0.00118	1	03/13/2020 12:51	WG1443314
Bromobenzene	U		0.00124	0.0125	0.0147	1	03/13/2020 12:51	WG1443314
Bromodichloromethane	U		0.000927	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
Bromoform	U		0.00704	0.0250	0.0294	1	03/13/2020 12:51	WG1443314
Bromomethane	U		0.00435	0.0125	0.0147	1	03/13/2020 12:51	WG1443314
n-Butylbenzene	U		0.00452	0.0125	0.0147	1	03/13/2020 12:51	WG1443314
sec-Butylbenzene	U		0.00298	0.0125	0.0147	1	03/13/2020 12:51	WG1443314
tert-Butylbenzene	U		0.00182	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
Carbon tetrachloride	U		0.00127	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
Chlorobenzene	U		0.000674	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
Chlorodibromomethane	U		0.000530	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
Chloroethane	U		0.00127	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
Chloroform	U		0.000488	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
Chloromethane	U		0.00164	0.0125	0.0147	1	03/13/2020 12:51	WG1443314
2-Chlorotoluene	U		0.00108	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
4-Chlorotoluene	U		0.00133	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
1,2-Dibromo-3-Chloropropane	U		0.00600	0.0250	0.0294	1	03/13/2020 12:51	WG1443314
1,2-Dibromoethane	U		0.000618	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
Dibromomethane	U		0.00118	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
1,2-Dichlorobenzene	U		0.00171	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
1,3-Dichlorobenzene	U		0.00200	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
1,4-Dichlorobenzene	U		0.00232	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
Dichlorodifluoromethane	U		0.000963	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
1,1-Dichloroethane	U		0.000677	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
1,2-Dichloroethane	U		0.000559	0.00250	0.00294	1	03/13/2020 12:51	WG1443314

SB67 (4-6)

Collected date/time: 03/12/20 08:06

SAMPLE RESULTS - 12

L1198738

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000588	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
cis-1,2-Dichloroethene	U		0.000812	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
trans-1,2-Dichloroethene	U		0.00168	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
1,2-Dichloropropane	U		0.00149	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
1,1-Dichloropropene	U		0.000824	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
1,3-Dichloropropane	U		0.00206	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
cis-1,3-Dichloropropene	U		0.000798	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
trans-1,3-Dichloropropene	U		0.00180	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
2,2-Dichloropropane	U		0.000933	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
Di-isopropyl ether	U		0.000412	0.00100	0.00118	1	03/13/2020 12:51	WG1443314
Ethylbenzene	U		0.000624	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
Hexachloro-1,3-butadiene	U		0.0149	0.0250	0.0294	1	03/13/2020 12:51	WG1443314
Isopropylbenzene	U		0.00102	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
p-Isopropyltoluene	U		0.00274	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
2-Butanone (MEK)	0.0317	B	0.0147	0.0250	0.0294	1	03/13/2020 12:51	WG1443314
Methylene Chloride	U		0.00781	0.0250	0.0294	1	03/13/2020 12:51	WG1443314
4-Methyl-2-pentanone (MIBK)	U		0.0118	0.0250	0.0294	1	03/13/2020 12:51	WG1443314
Methyl tert-butyl ether	U		0.000347	0.00100	0.00118	1	03/13/2020 12:51	WG1443314
Naphthalene	U		0.00367	0.0125	0.0147	1	03/13/2020 12:51	WG1443314
n-Propylbenzene	U		0.00139	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
Styrene	U		0.00321	0.0125	0.0147	1	03/13/2020 12:51	WG1443314
1,1,1,2-Tetrachloroethane	U		0.000588	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
1,1,2,2-Tetrachloroethane	U		0.000459	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
1,1,2-Trichlorotrifluoroethane	U		0.000794	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
Tetrachloroethene	U		0.000824	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
Toluene	U		0.00147	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
1,2,3-Trichlorobenzene	U		0.000736	0.0125	0.0147	1	03/13/2020 12:51	WG1443314
1,2,4-Trichlorobenzene	U		0.00567	0.0125	0.0147	1	03/13/2020 12:51	WG1443314
1,1,1-Trichloroethane	U		0.000324	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
1,1,2-Trichloroethane	U		0.00104	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
Trichloroethene	U		0.000471	0.00100	0.00118	1	03/13/2020 12:51	WG1443314
Trichlorofluoromethane	U		0.000588	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
1,2,3-Trichloropropane	U		0.00600	0.0125	0.0147	1	03/13/2020 12:51	WG1443314
1,2,4-Trimethylbenzene	U		0.00137	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
1,2,3-Trimethylbenzene	U		0.00135	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
1,3,5-Trimethylbenzene	U		0.00127	0.00500	0.00588	1	03/13/2020 12:51	WG1443314
Vinyl chloride	U		0.000804	0.00250	0.00294	1	03/13/2020 12:51	WG1443314
Xylenes, Total	U		0.00563	0.00650	0.00765	1	03/13/2020 12:51	WG1443314
(S) Toluene-d8	*103*				*75.0-131*		*03/13/2020 12:51*	WG1443314
(S) 4-Bromofluorobenzene	*102*				*67.0-138*		*03/13/2020 12:51*	WG1443314
(S) 1,2-Dichloroethane-d4	*99.3*				*70.0-130*		*03/13/2020 12:51*	WG1443314

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	35.5	J	31.3	4.00	94.2	20	03/13/2020 19:52	WG1443607
Residual Range Organics (RRO)	219	J	78.4	10.0	235	20	03/13/2020 19:52	WG1443607
(S) o-Terphenyl	*88.4*	J7			*18.0-148*		*03/13/2020 19:52*	WG1443607

Sample Narrative:

L1198738-12 WG1443607: Cannot run at lower dilution due to viscosity of extract

SB68 (2-4)

Collected date/time: 03/12/20 07:41

SAMPLE RESULTS - 13

L1198738

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.7		1	03/13/2020 12:58	WG1443595

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0148	J	0.00296	0.0300	0.0317	1	03/13/2020 14:49	WG1443597

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.21		0.486	2.00	2.11	1	03/13/2020 15:24	WG1443599
Barium	57.0		0.180	0.500	0.528	1	03/13/2020 15:24	WG1443599
Cadmium	0.139	J	0.0739	0.500	0.528	1	03/13/2020 15:24	WG1443599
Chromium	20.0		0.148	1.00	1.06	1	03/13/2020 15:24	WG1443599
Lead	3.29		0.201	0.500	0.528	1	03/13/2020 15:24	WG1443599
Selenium	U		0.655	2.00	2.11	1	03/13/2020 15:24	WG1443599
Silver	0.343	J	0.127	1.00	1.06	1	03/13/2020 15:24	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.895	0.100	2.64	25	03/13/2020 15:10	WG1443527
(S) a,a,a-Trifluorotoluene(FID)	*98.2*				*77.0-120*		*03/13/2020 15:10*	WG1443527

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0145	0.0250	0.0264	1	03/13/2020 13:10	WG1443314
Acrylonitrile	U		0.00201	0.0125	0.0132	1	03/13/2020 13:10	WG1443314
Benzene	U		0.000422	0.00100	0.00106	1	03/13/2020 13:10	WG1443314
Bromobenzene	U		0.00111	0.0125	0.0132	1	03/13/2020 13:10	WG1443314
Bromodichloromethane	U		0.000832	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
Bromoform	U		0.00632	0.0250	0.0264	1	03/13/2020 13:10	WG1443314
Bromomethane	U		0.00391	0.0125	0.0132	1	03/13/2020 13:10	WG1443314
n-Butylbenzene	U		0.00406	0.0125	0.0132	1	03/13/2020 13:10	WG1443314
sec-Butylbenzene	U		0.00267	0.0125	0.0132	1	03/13/2020 13:10	WG1443314
tert-Butylbenzene	U		0.00164	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
Carbon tetrachloride	U		0.00114	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
Chlorobenzene	U		0.000605	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
Chlorodibromomethane	U		0.000475	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
Chloroethane	U		0.00114	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
Chloroform	U		0.000438	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
Chloromethane	U		0.00147	0.0125	0.0132	1	03/13/2020 13:10	WG1443314
2-Chlorotoluene	U		0.000972	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
4-Chlorotoluene	U		0.00119	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
1,2-Dibromo-3-Chloropropane	U		0.00539	0.0250	0.0264	1	03/13/2020 13:10	WG1443314
1,2-Dibromoethane	U		0.000554	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
Dibromomethane	U		0.00106	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
1,2-Dichlorobenzene	U		0.00153	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
1,3-Dichlorobenzene	U		0.00180	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
1,4-Dichlorobenzene	U		0.00208	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
Dichlorodifluoromethane	U		0.000864	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
1,1-Dichloroethane	U		0.000607	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
1,2-Dichloroethane	U		0.000502	0.00250	0.00264	1	03/13/2020 13:10	WG1443314

SB68 (2-4)

Collected date/time: 03/12/20 07:41

SAMPLE RESULTS - 13

L1198738

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000528	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
cis-1,2-Dichloroethene	U		0.000729	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
trans-1,2-Dichloroethene	U		0.00151	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
1,2-Dichloropropane	U		0.00134	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
1,1-Dichloropropene	U		0.000739	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
1,3-Dichloropropane	U		0.00185	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
cis-1,3-Dichloropropene	U		0.000716	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
trans-1,3-Dichloropropene	U		0.00162	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
2,2-Dichloropropane	U		0.000837	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
Di-isopropyl ether	U		0.000370	0.00100	0.00106	1	03/13/2020 13:10	WG1443314
Ethylbenzene	U		0.000560	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
Hexachloro-1,3-butadiene	U		0.0134	0.0250	0.0264	1	03/13/2020 13:10	WG1443314
Isopropylbenzene	U		0.000911	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
p-Isopropyltoluene	U		0.00246	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
2-Butanone (MEK)	U		0.0132	0.0250	0.0264	1	03/13/2020 13:10	WG1443314
Methylene Chloride	U		0.00701	0.0250	0.0264	1	03/13/2020 13:10	WG1443314
4-Methyl-2-pentanone (MIBK)	U		0.0106	0.0250	0.0264	1	03/13/2020 13:10	WG1443314
Methyl tert-butyl ether	U		0.000312	0.00100	0.00106	1	03/13/2020 13:10	WG1443314
Naphthalene	U		0.00330	0.0125	0.0132	1	03/13/2020 13:10	WG1443314
n-Propylbenzene	U		0.00125	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
Styrene	U		0.00288	0.0125	0.0132	1	03/13/2020 13:10	WG1443314
1,1,1,2-Tetrachloroethane	U		0.000528	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
1,1,2,2-Tetrachloroethane	U		0.000412	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
1,1,2-Trichlorotrifluoroethane	U		0.000713	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
Tetrachloroethene	U		0.000739	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
Toluene	U		0.00132	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
1,2,3-Trichlorobenzene	U		0.000660	0.0125	0.0132	1	03/13/2020 13:10	WG1443314
1,2,4-Trichlorobenzene	U		0.00509	0.0125	0.0132	1	03/13/2020 13:10	WG1443314
1,1,1-Trichloroethane	U		0.000290	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
1,1,2-Trichloroethane	U		0.000933	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
Trichloroethene	U		0.000422	0.00100	0.00106	1	03/13/2020 13:10	WG1443314
Trichlorofluoromethane	U		0.000528	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
1,2,3-Trichloropropane	U		0.00539	0.0125	0.0132	1	03/13/2020 13:10	WG1443314
1,2,4-Trimethylbenzene	U		0.00123	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
1,2,3-Trimethylbenzene	U		0.00121	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
1,3,5-Trimethylbenzene	U		0.00114	0.00500	0.00528	1	03/13/2020 13:10	WG1443314
Vinyl chloride	U		0.000721	0.00250	0.00264	1	03/13/2020 13:10	WG1443314
Xylenes, Total	U		0.00505	0.00650	0.00686	1	03/13/2020 13:10	WG1443314
(S) Toluene-d8	*103*				*75.0-131*		*03/13/2020 13:10*	WG1443314
(S) 4-Bromofluorobenzene	*98.9*				*67.0-138*		*03/13/2020 13:10*	WG1443314
(S) 1,2-Dichloroethane-d4	*98.4*				*70.0-130*		*03/13/2020 13:10*	WG1443314

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	2.44	J	1.40	4.00	4.22	1	03/13/2020 18:36	WG1443607
Residual Range Organics (RRO)	5.17	J	3.52	10.0	10.6	1	03/13/2020 18:36	WG1443607
(S) o-Terphenyl	*78.5*				*18.0-148*		*03/13/2020 18:36*	WG1443607

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	95.0		1	03/13/2020 12:58	WG1443595

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.00617	J	0.00295	0.0300	0.0316	1	03/13/2020 14:52	WG1443597

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	1.83	J	0.484	2.00	2.10	1	03/13/2020 15:27	WG1443599
Barium	52.1		0.179	0.500	0.526	1	03/13/2020 15:27	WG1443599
Cadmium	0.118	J	0.0736	0.500	0.526	1	03/13/2020 15:27	WG1443599
Chromium	16.9		0.147	1.00	1.05	1	03/13/2020 15:27	WG1443599
Lead	2.25		0.200	0.500	0.526	1	03/13/2020 15:27	WG1443599
Selenium	U		0.652	2.00	2.10	1	03/13/2020 15:27	WG1443599
Silver	U		0.126	1.00	1.05	1	03/13/2020 15:27	WG1443599

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.892	0.100	2.63	25	03/13/2020 15:31	WG1443527
(S) a,a,a-Trifluorotoluene(FID)	*97.6*				*77.0-120*		*03/13/2020 15:31*	WG1443527

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0144	0.0250	0.0263	1	03/13/2020 13:29	WG1443314
Acrylonitrile	U		0.00200	0.0125	0.0132	1	03/13/2020 13:29	WG1443314
Benzene	U		0.000421	0.00100	0.00105	1	03/13/2020 13:29	WG1443314
Bromobenzene	U		0.00110	0.0125	0.0132	1	03/13/2020 13:29	WG1443314
Bromodichloromethane	U		0.000829	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
Bromoform	U		0.00629	0.0250	0.0263	1	03/13/2020 13:29	WG1443314
Bromomethane	U		0.00389	0.0125	0.0132	1	03/13/2020 13:29	WG1443314
n-Butylbenzene	U		0.00404	0.0125	0.0132	1	03/13/2020 13:29	WG1443314
sec-Butylbenzene	U		0.00266	0.0125	0.0132	1	03/13/2020 13:29	WG1443314
tert-Butylbenzene	U		0.00163	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
Carbon tetrachloride	U		0.00114	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
Chlorobenzene	U		0.000603	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
Chlorodibromomethane	U		0.000473	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
Chloroethane	U		0.00114	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
Chloroform	U		0.000437	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
Chloromethane	U		0.00146	0.0125	0.0132	1	03/13/2020 13:29	WG1443314
2-Chlorotoluene	U		0.000968	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
4-Chlorotoluene	U		0.00119	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
1,2-Dibromo-3-Chloropropane	U		0.00537	0.0250	0.0263	1	03/13/2020 13:29	WG1443314
1,2-Dibromoethane	U		0.000552	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
Dibromomethane	U		0.00105	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
1,2-Dichlorobenzene	U		0.00153	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
1,3-Dichlorobenzene	U		0.00179	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
1,4-Dichlorobenzene	U		0.00207	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
Dichlorodifluoromethane	U		0.000861	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
1,1-Dichloroethane	U		0.000605	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
1,2-Dichloroethane	U		0.000500	0.00250	0.00263	1	03/13/2020 13:29	WG1443314

SB69 (0-2)

Collected date/time: 03/12/20 07:30

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Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000526	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
cis-1,2-Dichloroethene	U		0.000726	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
trans-1,2-Dichloroethene	U		0.00150	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
1,2-Dichloropropane	U		0.00134	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
1,1-Dichloropropene	U		0.000736	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
1,3-Dichloropropane	U		0.00184	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
cis-1,3-Dichloropropene	U		0.000713	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
trans-1,3-Dichloropropene	U		0.00161	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
2,2-Dichloropropane	U		0.000834	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
Di-isopropyl ether	U		0.000368	0.00100	0.00105	1	03/13/2020 13:29	WG1443314
Ethylbenzene	U		0.000558	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
Hexachloro-1,3-butadiene	U		0.0134	0.0250	0.0263	1	03/13/2020 13:29	WG1443314
Isopropylbenzene	U		0.000908	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
p-Isopropyltoluene	U		0.00245	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
2-Butanone (MEK)	U		0.0132	0.0250	0.0263	1	03/13/2020 13:29	WG1443314
Methylene Chloride	U		0.00699	0.0250	0.0263	1	03/13/2020 13:29	WG1443314
4-Methyl-2-pentanone (MIBK)	U		0.0105	0.0250	0.0263	1	03/13/2020 13:29	WG1443314
Methyl tert-butyl ether	U		0.000310	0.00100	0.00105	1	03/13/2020 13:29	WG1443314
Naphthalene	U		0.00328	0.0125	0.0132	1	03/13/2020 13:29	WG1443314
n-Propylbenzene	U		0.00124	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
Styrene	U		0.00287	0.0125	0.0132	1	03/13/2020 13:29	WG1443314
1,1,1,2-Tetrachloroethane	U		0.000526	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
1,1,2,2-Tetrachloroethane	U		0.000410	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
1,1,2-Trichlorotrifluoroethane	U		0.000710	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
Tetrachloroethene	U		0.000736	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
Toluene	U		0.00132	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
1,2,3-Trichlorobenzene	U		0.000658	0.0125	0.0132	1	03/13/2020 13:29	WG1443314
1,2,4-Trichlorobenzene	U		0.00507	0.0125	0.0132	1	03/13/2020 13:29	WG1443314
1,1,1-Trichloroethane	U		0.000289	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
1,1,2-Trichloroethane	U		0.000929	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
Trichloroethene	U		0.000421	0.00100	0.00105	1	03/13/2020 13:29	WG1443314
Trichlorofluoromethane	U		0.000526	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
1,2,3-Trichloropropane	U		0.00537	0.0125	0.0132	1	03/13/2020 13:29	WG1443314
1,2,4-Trimethylbenzene	U		0.00122	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
1,2,3-Trimethylbenzene	U		0.00121	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
1,3,5-Trimethylbenzene	U		0.00114	0.00500	0.00526	1	03/13/2020 13:29	WG1443314
Vinyl chloride	U		0.000719	0.00250	0.00263	1	03/13/2020 13:29	WG1443314
Xylenes, Total	U		0.00503	0.00650	0.00684	1	03/13/2020 13:29	WG1443314
(S) Toluene-d8	*101*				*75.0-131*		*03/13/2020 13:29*	WG1443314
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*03/13/2020 13:29*	WG1443314
(S) 1,2-Dichloroethane-d4	*99.1*				*70.0-130*		*03/13/2020 13:29*	WG1443314

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.40	4.00	4.21	1	03/13/2020 18:10	WG1443607
Residual Range Organics (RRO)	U		3.50	10.0	10.5	1	03/13/2020 18:10	WG1443607
(S) o-Terphenyl	*84.1*				*18.0-148*		*03/13/2020 18:10*	WG1443607

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.3		1	03/13/2020 13:24	WG1443557

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.24		0.539	2.00	2.34	1	03/13/2020 15:35	WG1443599

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.9		1	03/13/2020 13:24	WG1443557

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	13.2		0.529	2.00	2.30	1	03/13/2020 15:37	WG1443599

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.7		1	03/13/2020 13:24	WG1443557

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.85		0.519	2.00	2.26	1	03/13/2020 15:40	WG1443599

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.0		1	03/13/2020 13:17	WG1443560

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.48		0.495	2.00	2.15	1	03/13/2020 15:42	WG1443599

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.0		1	03/13/2020 13:17	WG1443560

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.56		0.490	2.00	2.13	1	03/13/2020 15:45	WG1443599

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.6		1	03/13/2020 13:17	WG1443560

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.48		0.491	2.00	2.14	1	03/13/2020 15:48	WG1443599

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.3		1	03/13/2020 13:17	WG1443560

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	5.39		0.498	2.00	2.17	1	03/13/2020 16:23	WG1443602

SB70 (10-11)

Collected date/time: 03/12/20 10:37

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L1198738

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.7		1	03/13/2020 13:17	WG1443560

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.84	J	0.502	2.00	2.18	1	03/13/2020 16:26	WG1443602

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.2		1	03/13/2020 13:17	WG1443560

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	16.8		0.505	2.00	2.19	1	03/13/2020 16:28	WG1443602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.0		1	03/13/2020 13:17	WG1443560

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.09		0.500	2.00	2.17	1	03/13/2020 16:36	WG1443602

SB72 (5-6)
Collected date/time: 03/12/20 11:30

SAMPLE RESULTS - 25

L1198738

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.5		1	03/13/2020 13:17	WG1443560

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	16.5		0.487	2.00	2.12	1	03/13/2020 16:39	WG1443602

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.6		1	03/13/2020 13:17	WG1443560

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.53		0.502	2.00	2.18	1	03/13/2020 16:41	WG1443602

SB72 (8-9)

Collected date/time: 03/12/20 11:32

SAMPLE RESULTS - 27

L1198738

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	91.6		1	03/13/2020 13:17	WG1443560

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	2.72		0.502	2.00	2.18	1	03/13/2020 16:11	WG1443602

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	03/13/2020 13:08	WG1443561

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.03		0.496	2.00	2.16	1	03/13/2020 16:44	WG1443602

SB71 (2-3)
Collected date/time: 03/12/20 10:53

SAMPLE RESULTS - 29

L1198738

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.1		1	03/13/2020 13:08	WG1443561

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.81		0.528	2.00	2.29	1	03/13/2020 16:46	WG1443602

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.5		1	03/13/2020 13:08	WG1443561

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.09		0.503	2.00	2.19	1	03/13/2020 16:49	WG1443602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.7		1	03/13/2020 13:08	WG1443561

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.19	J	0.530	2.00	2.31	1	03/13/2020 16:52	WG1443602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.2		1	03/13/2020 13:08	WG1443561

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.76	J	0.515	2.00	2.24	1	03/13/2020 16:54	WG1443602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.2		1	03/13/2020 13:08	WG1443561

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.92		0.522	2.00	2.27	1	03/13/2020 16:57	WG1443602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.3		1	03/13/2020 13:08	WG1443561

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.38		0.515	2.00	2.24	1	03/13/2020 16:59	WG1443602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.7		1	03/13/2020 13:08	WG1443561

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	35.3		0.519	2.00	2.26	1	03/13/2020 15:50	WG1443602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.9		1	03/13/2020 13:08	WG1443561

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	28.9		0.523	2.00	2.28	1	03/13/2020 15:53	WG1443602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.9		1	03/13/2020 13:08	WG1443561

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	48.6		0.529	2.00	2.30	1	03/13/2020 15:55	WG1443602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.6		1	03/13/2020 12:58	WG1443595

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	9.95		0.531	2.00	2.31	1	03/13/2020 15:58	WG1443602

Method Blank (MB)

(MB) R3508533-1 03/13/20 13:24

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00400			

L1198738-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1198738-15 03/13/20 13:24 • (DUP) R3508533-3 03/13/20 13:24

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	85.3	92.8	1	8.37		10

Laboratory Control Sample (LCS)

(LCS) R3508533-2 03/13/20 13:24

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) R3508531-1 03/13/20 13:17

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1198738-27 Original Sample (OS) • Duplicate (DUP)

(OS) L1198738-27 03/13/20 13:17 • (DUP) R3508531-3 03/13/20 13:17

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.6	91.7	1	0.113		10

Laboratory Control Sample (LCS)

(LCS) R3508531-2 03/13/20 13:17

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) R3508530-1 03/13/20 13:08

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1198738-35 Original Sample (OS) • Duplicate (DUP)

(OS) L1198738-35 03/13/20 13:08 • (DUP) R3508530-3 03/13/20 13:08

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.7	86.9	1	1.99		10

Laboratory Control Sample (LCS)

(LCS) R3508530-2 03/13/20 13:08

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) R3508527-1 03/13/20 12:58

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00300			

L1198714-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1198714-01 03/13/20 12:58 • (DUP) R3508527-3 03/13/20 12:58

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.2	89.1	1	0.0542		10

Laboratory Control Sample (LCS)

(LCS) R3508527-2 03/13/20 12:58

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	49.9	99.9	85.0-115	

WG1443597

Mercury by Method 7471A

QUALITY CONTROL SUMMARY

L1198738-01,02,03,04,05,06,07,08,09,10,11,12,13,14

Method Blank (MB)

(MB) R3508421-1 03/13/20 13:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.00280	0.0300

Laboratory Control Sample (LCS)

(LCS) R3508421-2 03/13/20 13:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.500	0.457	91.4	80.0-120	

L1198738-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1198738-02 03/13/20 14:01 • (MS) R3508421-3 03/13/20 14:03 • (MSD) R3508421-4 03/13/20 14:06

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 %
Mercury	0.634	0.0444	0.616	0.613	90.1	89.7	1	75.0-125			0.426	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3508513-1 03/13/20 14:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	0.354	J	0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	U		0.120	1.00

Laboratory Control Sample (LCS)

(LCS) R3508513-2 03/13/20 14:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	95.5	95.5	80.0-120	
Barium	100	101	101	80.0-120	
Cadmium	100	95.6	95.6	80.0-120	
Chromium	100	98.8	98.8	80.0-120	
Lead	100	97.6	97.6	80.0-120	
Selenium	100	96.2	96.2	80.0-120	
Silver	20.0	18.7	93.6	80.0-120	

L1198738-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1198738-07 03/13/20 14:38 • (MS) R3508513-5 03/13/20 14:46 • (MSD) R3508513-6 03/13/20 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 %
Arsenic	115	5.40	111	116	92.2	96.0	1	75.0-125			3.90	20
Barium	115	102	195	195	81.1	80.7	1	75.0-125			0.236	20
Cadmium	115	0.350	107	110	93.1	95.0	1	75.0-125			2.06	20
Chromium	115	23.3	128	134	90.8	96.1	1	75.0-125			4.68	20
Lead	115	13.9	120	123	92.5	95.0	1	75.0-125			2.35	20
Selenium	115	U	107	110	93.5	96.1	1	75.0-125			2.81	20
Silver	23.0	U	21.8	21.9	94.7	95.2	1	75.0-125			0.565	20

Method Blank (MB)

(MB) R3508514-1 03/13/20 16:06

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00

Laboratory Control Sample (LCS)

(LCS) R3508514-2 03/13/20 16:08

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	92.2	92.2	80.0-120	

L1198738-27 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1198738-27 03/13/20 16:11 • (MS) R3508514-5 03/13/20 16:18 • (MSD) R3508514-6 03/13/20 16:21

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 %
Arsenic	109	2.72	106	109	94.3	97.1	1	75.0-125			2.79	20

WG1443491

Volatile Organic Compounds (GC) by Method NWTPHGX

QUALITY CONTROL SUMMARY

L1198738-01,02,03,04,05,06,07

Method Blank (MB)

(MB) R3508493-2 03/13/20 11:58

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)	*99.4*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3508493-1 03/13/20 10:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	4.97	90.4	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*104*	*77.0-120*	

Method Blank (MB)

(MB) R3508440-2 03/13/20 12:27

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)	*97.5*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3508440-1 03/13/20 11:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.18	94.2	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*113*	*77.0-120*	

Method Blank (MB)

(MB) R3508437-3 03/13/20 07:24

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3508437-3 03/13/20 07:24

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0185	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	0.00285	J	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	0.00128	J	0.00115	0.00500
1,2,4-Trimethylbenzene	0.00155	J	0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*104*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*99.8*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3508437-1 03/13/20 06:07 • (LCSD) R3508437-2 03/13/20 06:26

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	0.888	0.905	142	145	10.0-160			1.90	31
Acrylonitrile	0.625	0.781	0.745	125	119	45.0-153			4.72	22
Benzene	0.125	0.106	0.105	84.8	84.0	70.0-123			0.948	20
Bromobenzene	0.125	0.111	0.117	88.8	93.6	73.0-121			5.26	20
Bromodichloromethane	0.125	0.144	0.148	115	118	73.0-121			2.74	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3508437-1 03/13/20 06:07 • (LCSD) R3508437-2 03/13/20 06:26

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Bromoform	0.125	0.135	0.143	108	114	64.0-132			5.76	20
Bromomethane	0.125	0.130	0.133	104	106	56.0-147			2.28	20
n-Butylbenzene	0.125	0.121	0.120	96.8	96.0	68.0-135			0.830	20
sec-Butylbenzene	0.125	0.117	0.119	93.6	95.2	74.0-130			1.69	20
tert-Butylbenzene	0.125	0.118	0.120	94.4	96.0	75.0-127			1.68	20
Carbon tetrachloride	0.125	0.130	0.135	104	108	66.0-128			3.77	20
Chlorobenzene	0.125	0.121	0.127	96.8	102	76.0-128			4.84	20
Chlorodibromomethane	0.125	0.109	0.108	87.2	86.4	74.0-127			0.922	20
Chloroethane	0.125	0.105	0.104	84.0	83.2	61.0-134			0.957	20
Chloroform	0.125	0.138	0.140	110	112	72.0-123			1.44	20
Chloromethane	0.125	0.149	0.154	119	123	51.0-138			3.30	20
2-Chlorotoluene	0.125	0.117	0.122	93.6	97.6	75.0-124			4.18	20
4-Chlorotoluene	0.125	0.110	0.112	88.0	89.6	75.0-124			1.80	20
1,2-Dibromo-3-Chloropropane	0.125	0.123	0.128	98.4	102	59.0-130			3.98	20
1,2-Dibromoethane	0.125	0.136	0.134	109	107	74.0-128			1.48	20
Dibromomethane	0.125	0.147	0.146	118	117	75.0-122			0.683	20
1,2-Dichlorobenzene	0.125	0.119	0.125	95.2	100	76.0-124			4.92	20
1,3-Dichlorobenzene	0.125	0.118	0.120	94.4	96.0	76.0-125			1.68	20
1,4-Dichlorobenzene	0.125	0.112	0.117	89.6	93.6	77.0-121			4.37	20
Dichlorodifluoromethane	0.125	0.108	0.113	86.4	90.4	43.0-156			4.52	20
1,1-Dichloroethane	0.125	0.142	0.147	114	118	70.0-127			3.46	20
1,2-Dichloroethane	0.125	0.135	0.137	108	110	65.0-131			1.47	20
1,1-Dichloroethene	0.125	0.138	0.138	110	110	65.0-131			0.000	20
cis-1,2-Dichloroethene	0.125	0.120	0.122	96.0	97.6	73.0-125			1.65	20
trans-1,2-Dichloroethene	0.125	0.116	0.124	92.8	99.2	71.0-125			6.67	20
1,2-Dichloropropane	0.125	0.123	0.119	98.4	95.2	74.0-125			3.31	20
1,1-Dichloropropene	0.125	0.109	0.109	87.2	87.2	73.0-125			0.000	20
1,3-Dichloropropane	0.125	0.125	0.126	100	101	80.0-125			0.797	20
cis-1,3-Dichloropropene	0.125	0.112	0.112	89.6	89.6	76.0-127			0.000	20
trans-1,3-Dichloropropene	0.125	0.104	0.103	83.2	82.4	73.0-127			0.966	20
2,2-Dichloropropane	0.125	0.143	0.148	114	118	59.0-135			3.44	20
Di-isopropyl ether	0.125	0.123	0.125	98.4	100	60.0-136			1.61	20
Ethylbenzene	0.125	0.108	0.108	86.4	86.4	74.0-126			0.000	20
Hexachloro-1,3-butadiene	0.125	0.108	0.121	86.4	96.8	57.0-150			11.4	20
Isopropylbenzene	0.125	0.113	0.115	90.4	92.0	72.0-127			1.75	20
p-Isopropyltoluene	0.125	0.108	0.111	86.4	88.8	72.0-133			2.74	20
2-Butanone (MEK)	0.625	0.620	0.615	99.2	98.4	30.0-160			0.810	24
Methylene Chloride	0.125	0.111	0.110	88.8	88.0	68.0-123			0.905	20
4-Methyl-2-pentanone (MIBK)	0.625	0.594	0.594	95.0	95.0	56.0-143			0.000	20
Methyl tert-butyl ether	0.125	0.148	0.150	118	120	66.0-132			1.34	20

WG1443314

Volatile Organic Compounds (GC/MS) by Method 8260B

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3508437-1 03/13/20 06:07 • (LCSD) R3508437-2 03/13/20 06:26

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 %
Naphthalene	0.125	0.109	0.114	87.2	91.2	59.0-130			4.48	20
n-Propylbenzene	0.125	0.122	0.123	97.6	98.4	74.0-126			0.816	20
Styrene	0.125	0.141	0.140	113	112	72.0-127			0.712	20
1,1,1,2-Tetrachloroethane	0.125	0.123	0.128	98.4	102	74.0-129			3.98	20
1,1,2,2-Tetrachloroethane	0.125	0.109	0.115	87.2	92.0	68.0-128			5.36	20
Tetrachloroethene	0.125	0.123	0.122	98.4	97.6	70.0-136			0.816	20
Toluene	0.125	0.103	0.102	82.4	81.6	75.0-121			0.976	20
1,1,2-Trichlorotrifluoroethane	0.125	0.118	0.125	94.4	100	61.0-139			5.76	20
1,2,3-Trichlorobenzene	0.125	0.101	0.113	80.8	90.4	59.0-139			11.2	20
1,2,4-Trichlorobenzene	0.125	0.0950	0.0999	76.0	79.9	62.0-137			5.03	20
1,1,1-Trichloroethane	0.125	0.123	0.129	98.4	103	69.0-126			4.76	20
1,1,2-Trichloroethane	0.125	0.116	0.117	92.8	93.6	78.0-123			0.858	20
Trichloroethene	0.125	0.122	0.117	97.6	93.6	76.0-126			4.18	20
Trichlorofluoromethane	0.125	0.135	0.136	108	109	61.0-142			0.738	20
1,2,3-Trichloropropane	0.125	0.144	0.149	115	119	67.0-129			3.41	20
1,2,3-Trimethylbenzene	0.125	0.120	0.125	96.0	100	74.0-124			4.08	20
1,2,4-Trimethylbenzene	0.125	0.121	0.117	96.8	93.6	70.0-126			3.36	20
1,3,5-Trimethylbenzene	0.125	0.126	0.129	101	103	73.0-127			2.35	20
Vinyl chloride	0.125	0.146	0.147	117	118	63.0-134			0.683	20
Xylenes, Total	0.375	0.342	0.353	91.2	94.1	72.0-127			3.17	20
(S) Toluene-d8				*99.7*	*100*	*75.0-131*				
(S) 4-Bromofluorobenzene				*102*	*104*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*103*	*104*	*70.0-130*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3508433-1 03/13/20 10:44

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
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 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
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
Ethylbenzene	0.000825	J	0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3508433-1 03/13/20 10:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0201	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	0.00430	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 chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*103*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3508433-2 03/13/20 11:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	1.27	203	10.0-160	J4
Acrylonitrile	0.625	0.920	147	45.0-153	
Benzene	0.125	0.109	87.2	70.0-123	
Bromobenzene	0.125	0.122	97.6	73.0-121	
Bromodichloromethane	0.125	0.122	97.6	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3508433-2 03/13/20 11:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.155	124	64.0-132	
Bromomethane	0.125	0.125	100	56.0-147	
n-Butylbenzene	0.125	0.132	106	68.0-135	
sec-Butylbenzene	0.125	0.127	102	74.0-130	
tert-Butylbenzene	0.125	0.118	94.4	75.0-127	
Carbon tetrachloride	0.125	0.127	102	66.0-128	
Chlorobenzene	0.125	0.135	108	76.0-128	
Chlorodibromomethane	0.125	0.129	103	74.0-127	
Chloroethane	0.125	0.110	88.0	61.0-134	
Chloroform	0.125	0.110	88.0	72.0-123	
Chloromethane	0.125	0.0982	78.6	51.0-138	
2-Chlorotoluene	0.125	0.134	107	75.0-124	
4-Chlorotoluene	0.125	0.131	105	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.142	114	59.0-130	
1,2-Dibromoethane	0.125	0.128	102	74.0-128	
Dibromomethane	0.125	0.155	124	75.0-122	J4
1,2-Dichlorobenzene	0.125	0.134	107	76.0-124	
1,3-Dichlorobenzene	0.125	0.132	106	76.0-125	
1,4-Dichlorobenzene	0.125	0.119	95.2	77.0-121	
Dichlorodifluoromethane	0.125	0.147	118	43.0-156	
1,1-Dichloroethane	0.125	0.112	89.6	70.0-127	
1,2-Dichloroethane	0.125	0.110	88.0	65.0-131	
1,1-Dichloroethene	0.125	0.132	106	65.0-131	
cis-1,2-Dichloroethene	0.125	0.115	92.0	73.0-125	
trans-1,2-Dichloroethene	0.125	0.131	105	71.0-125	
1,2-Dichloropropane	0.125	0.155	124	74.0-125	
1,1-Dichloropropene	0.125	0.122	97.6	73.0-125	
1,3-Dichloropropane	0.125	0.117	93.6	80.0-125	
cis-1,3-Dichloropropene	0.125	0.142	114	76.0-127	
trans-1,3-Dichloropropene	0.125	0.134	107	73.0-127	
2,2-Dichloropropane	0.125	0.122	97.6	59.0-135	
Di-isopropyl ether	0.125	0.129	103	60.0-136	
Ethylbenzene	0.125	0.136	109	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.133	106	57.0-150	
Isopropylbenzene	0.125	0.144	115	72.0-127	
p-Isopropyltoluene	0.125	0.132	106	72.0-133	
2-Butanone (MEK)	0.625	0.826	132	30.0-160	
Methylene Chloride	0.125	0.111	88.8	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.775	124	56.0-143	
Methyl tert-butyl ether	0.125	0.136	109	66.0-132	

Laboratory Control Sample (LCS)

(LCS) R3508433-2 03/13/20 11:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.120	96.0	59.0-130	
n-Propylbenzene	0.125	0.120	96.0	74.0-126	
Styrene	0.125	0.159	127	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.138	110	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.106	84.8	68.0-128	
Tetrachloroethene	0.125	0.135	108	70.0-136	
Toluene	0.125	0.110	88.0	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.134	107	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.145	116	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.137	110	62.0-137	
1,1,1-Trichloroethane	0.125	0.146	117	69.0-126	
1,1,2-Trichloroethane	0.125	0.110	88.0	78.0-123	
Trichloroethene	0.125	0.150	120	76.0-126	
Trichlorofluoromethane	0.125	0.129	103	61.0-142	
1,2,3-Trichloropropane	0.125	0.130	104	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.117	93.6	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.113	90.4	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.111	88.8	73.0-127	
Vinyl chloride	0.125	0.136	109	63.0-134	
Xylenes, Total	0.375	0.411	110	72.0-127	
(S) Toluene-d8			*101*	*75.0-131*	
(S) 4-Bromofluorobenzene			*106*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*115*	*70.0-130*	

Method Blank (MB)

(MB) R3508426-2 03/13/20 12:26

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3508426-2 03/13/20 12:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0219	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 chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*111*			*75.0-131*
(S) 4-Bromofluorobenzene	*98.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*87.9*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3508426-1 03/13/20 11:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.481	77.0	10.0-160	
Acrylonitrile	0.625	0.615	98.4	45.0-153	
Benzene	0.125	0.118	94.4	70.0-123	
Bromobenzene	0.125	0.143	114	73.0-121	
Bromodichloromethane	0.125	0.118	94.4	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3508426-1 03/13/20 11:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.144	115	64.0-132	
Bromomethane	0.125	0.124	99.2	56.0-147	
n-Butylbenzene	0.125	0.104	83.2	68.0-135	
sec-Butylbenzene	0.125	0.115	92.0	74.0-130	
tert-Butylbenzene	0.125	0.117	93.6	75.0-127	
Carbon tetrachloride	0.125	0.137	110	66.0-128	
Chlorobenzene	0.125	0.135	108	76.0-128	
Chlorodibromomethane	0.125	0.128	102	74.0-127	
Chloroethane	0.125	0.119	95.2	61.0-134	
Chloroform	0.125	0.122	97.6	72.0-123	
Chloromethane	0.125	0.105	84.0	51.0-138	
2-Chlorotoluene	0.125	0.0997	79.8	75.0-124	
4-Chlorotoluene	0.125	0.111	88.8	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.109	87.2	59.0-130	
1,2-Dibromoethane	0.125	0.129	103	74.0-128	
Dibromomethane	0.125	0.115	92.0	75.0-122	
1,2-Dichlorobenzene	0.125	0.139	111	76.0-124	
1,3-Dichlorobenzene	0.125	0.131	105	76.0-125	
1,4-Dichlorobenzene	0.125	0.126	101	77.0-121	
Dichlorodifluoromethane	0.125	0.0865	69.2	43.0-156	
1,1-Dichloroethane	0.125	0.108	86.4	70.0-127	
1,2-Dichloroethane	0.125	0.118	94.4	65.0-131	
1,1-Dichloroethene	0.125	0.107	85.6	65.0-131	
cis-1,2-Dichloroethene	0.125	0.146	117	73.0-125	
trans-1,2-Dichloroethene	0.125	0.114	91.2	71.0-125	
1,2-Dichloropropane	0.125	0.125	100	74.0-125	
1,1-Dichloropropene	0.125	0.0933	74.6	73.0-125	
1,3-Dichloropropane	0.125	0.124	99.2	80.0-125	
cis-1,3-Dichloropropene	0.125	0.109	87.2	76.0-127	
trans-1,3-Dichloropropene	0.125	0.115	92.0	73.0-127	
2,2-Dichloropropane	0.125	0.107	85.6	59.0-135	
Di-isopropyl ether	0.125	0.116	92.8	60.0-136	
Ethylbenzene	0.125	0.119	95.2	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.117	93.6	57.0-150	
Isopropylbenzene	0.125	0.113	90.4	72.0-127	
p-Isopropyltoluene	0.125	0.105	84.0	72.0-133	
2-Butanone (MEK)	0.625	0.593	94.9	30.0-160	
Methylene Chloride	0.125	0.133	106	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.656	105	56.0-143	
Methyl tert-butyl ether	0.125	0.127	102	66.0-132	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS)

(LCS) R3508426-1 03/13/20 11:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.110	88.0	59.0-130	
n-Propylbenzene	0.125	0.115	92.0	74.0-126	
Styrene	0.125	0.121	96.8	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.146	117	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.107	85.6	68.0-128	
Tetrachloroethene	0.125	0.163	130	70.0-136	
Toluene	0.125	0.118	94.4	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.128	102	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.118	94.4	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.110	88.0	62.0-137	
1,1,1-Trichloroethane	0.125	0.141	113	69.0-126	
1,1,2-Trichloroethane	0.125	0.152	122	78.0-123	
Trichloroethene	0.125	0.138	110	76.0-126	
Trichlorofluoromethane	0.125	0.114	91.2	61.0-142	
1,2,3-Trichloropropane	0.125	0.136	109	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.101	80.8	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.112	89.6	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.114	91.2	73.0-127	
Vinyl chloride	0.125	0.115	92.0	63.0-134	
Xylenes, Total	0.375	0.343	91.5	72.0-127	
(S) Toluene-d8			*108*	*75.0-131*	
(S) 4-Bromofluorobenzene			*95.0*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*92.4*	*70.0-130*	

Method Blank (MB)

(MB) R3508549-1 03/13/20 17:14

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Diesel Range Organics (DRO)	U		1.33	4.00
Residual Range Organics (RRO)	U		3.33	10.0
(S) o-Terphenyl	*70.7*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3508549-2 03/13/20 17:27

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Diesel Range Organics (DRO)	50.0	40.4	80.8	50.0-150	
(S) o-Terphenyl			*71.0*	*18.0-148*	

L1198738-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1198738-01 03/13/20 17:41 • (MS) R3508549-3 03/13/20 17:54 • (MSD) R3508549-4 03/13/20 18:07

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Diesel Range Organics (DRO)	55.5	U	44.5	44.6	80.1	80.7	5	50.0-150			0.264	20
(S) o-Terphenyl					*59.7*	*63.4*		*18.0-148*				

Sample Narrative:

OS: Cannot run at lower dilution due to viscosity of extract

GLOSSARY OF TERMS

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
J4	The associated batch QC was outside the established quality control range for accuracy.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

ACCREDITATIONS & LOCATIONS

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

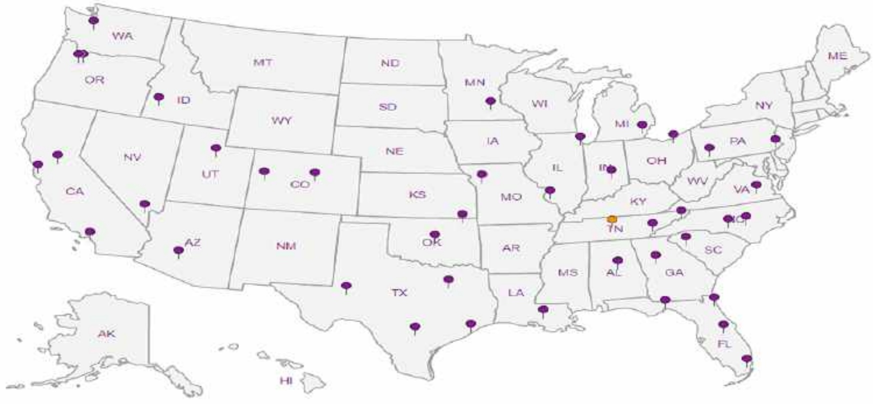
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project # **TGERESHTX-8933**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8933**

Collected by (signature): KBarnette

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

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

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

SDG # 1168738

G047

Acctnum: **TGERESHTX**
Template: **T164547**
Prelogin: **P761366**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TCLP As 8ozClr-NoPres	TCLP Cr 8ozClr-NoPres	TCLP Pb 8ozClr-NoPres	% moisture	VOCs	RCRA-8	NWTPH Gx	NWTPH Dx			Remarks	Sample # (lab only)
SB62(0-3)	Comp	SS	0-3	3/12/20	830	3				X	X	X	X	X				01
SB62 (4-6)	Comp	SS	4-6	3/12/20	831	3				X	X	X	X	X				02
SB63 (0-3)	Comp	SS	0-3	3/12/20	840	3				X	X	X	X	X				03
SB63 (4-6)	Comp	SS	4-6	3/12/20	841	3				X	X	X	X	X				04
SB64 (0-3)	Comp	SS	0-3	3/12/20	820	3				X	X	X	X	X				05
SB64 (4-6)	Comp	SS	4-6	3/12/20	821	3				X	X	X	X	X				06
SB65 (0-3)	Comp	SS	0-3	3/12/20	810	3				X	X	X	X	X				07
SB65 (4-6)	Comp	SS	4-6	3/12/20	811	3				X	X	X	X	X				08
SB66 (0-3)	Comp	SS	0-3	3/12/20	756	3				X	X	X	X	X				09
SB66(4-6)	Comp	SS	4-6	3/12/20	757	3				X	X	X	X	X				10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: ****Log as R1 next day TAT****

0.8/0.3/0.9/0.5/0.4

pH ________ Temp ________

Flow ________ Other ________

Samples returned via:
☐ UPS ☐ FedEx ☐ Courier ________

Tracking # 1411 1752 3500/3473/3521/3598
1275 8603 9535/1676 2749 8863

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) KBarnette	Date: 3/12/20	Time: 1200	Received by: (Signature)	Trip Blank Received: Yes / [✓ No] HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C 1.0-.4=0.6 Bottles Received: 78
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 3/13/20 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Analysis / Container / Preservative

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

Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project # **TGERESHTX-8933**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8933**

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

SDG # 1198738

Table #

Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P761365**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	hold	% moisture	Remarks	Sample # (lab only)
						CK								
SB107 (0-3)	Comp	SS	0-3	3/12/20	805	3	X	X	X	X		X		11
SB107 (4-6)	Comp	SS	4-6	3/12/20	806		X	X	X	X		X		12
SB168 (0-2)	Comp	SS	0-2	3/12/20	740						X			
SB168 (2-4)	Comp	SS	2-4	3/12/20	741		X	X	X	X		X		13
SB168 (4-6)	Comp	SS	4-6	3/12/20	742						X			
SB169 (0-2)	Comp	SS	0-2	3/12/20	730		X	X	X	X		X		14
SB169 (4-6)	Comp	SS	4-6	3/12/20	732						X			
SB169 (2-4)	Comp	SS	2-4	3/12/20	731						X			
		SS												
		SS												

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks: ****Log as R1 same day 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) KBarnette
Date: 3/12/20
Time: 1200
Received by: (Signature)

Trip Blank Received: Yes / [✓ No]
HCL / MeoH
TBR

Relinquished by : (Signature)
Date:
Time:
Received by: (Signature)

Temp 1.0-.4=0.6 °C
Bottles Received: 78

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature) Carol Kemp

Date: 3/13/20
Time: 8:45

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project # **TGERESHTX-8933**

Collected by (print): KBarnette

Site/Facility ID #

P.O. # **8933**

Collected by (signature): KBarnette

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

Chain of Custody Page ___ of ___

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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 # 1188737

Table #

Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P760774**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time CK	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	do moisture	Arsenic					Remarks	Sample # (lab only)
SB70 (0-1)	Grab	SS	0-1	3/12/20	10:30	1					X	X						15
SB70 (1-2)	Grab	SS	1-2	3/12/20	10:31	1					X	X						16
SB70 (2-3)	Grab	SS	2-3	3/12/20	10:32	1					X	X						17
SB70 (4-5)	Grab	SS	4-5	3/12/20	10:33	1					X	X						18
SB70 (5-6)	Grab	SS	5-6	3/12/20	10:34	1					X	X						19
SB70 (6-7)	Grab	SS	6-7	3/12/20	10:35	1					X	X						20
SB70 (8-9)	Grab	SS	8-9	3/12/20	10:36	1					X	X						21
SB70 (10-11)	Grab	SS	10-11	3/12/20	10:37	1					X	X						22
SB71 (0-1)	Grab	SS	0-1	3/12/20	10:51	1					X	X						23
SB71 (1-2)	Grab	SS	1-2	3/12/20	10:52	1					X	X						24

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks: ****Log as R1 same day 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) KBarnette	Date: 3/12/20	Time: 1200	Received by: (Signature)	Trip Blank Received: Yes / [✓ No] HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: ~~[illegible]~~ °C 1.0+[illegible] Bottles Received: 78
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 3/13/20 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

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

Report to: **Kristi Barnette**

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project # **TGERESHTX-8933**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8933**

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

SDG #
Table #
Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P761365**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time CK	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	% moisture	Arsenic					Remarks	Sample # (lab only)
SB71(2-3)	Grab	SS	2-3	3/12/20	10:53	1					X	X						29
SB71(4-5)	Grab	SS	4-5	3/12/20	10:54	1					X	X						30
SB71 (5-6)	Grab	SS	5-6	3/12/20	10:55	1					X	X						31
SB71(6-7)	Grab	SS	6-7	3/12/20	10:56	1					X	X						32
SB71(8-9)	Grab	SS	8-9	3/12/20	10:57	1					X	X						33
SB71 (10-11)	Grab	SS	10-11	3/12/20	10:58	1					X	X						34
SB72(0-1)	Grab	SS	0-1	3/12/20	11:26	1					X	X						35
SB72(1-2)	Grab	SS	1-2	3/12/20	11:27	1					X	X						36
SB72(2-3)	Grab	SS	2-3	3/12/20	11:28	1					X	X						37
SB72(4-5)	Grab	SS	4-5	3/12/20	11:29	1					X	X						38

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ___________

Remarks: ****Log as R1 same day TAT****

pH ________ Temp ________

Flow ________ Other ________

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

Samples returned via:
__ UPS __ FedEx __ Courier ___________

Tracking #

Relinquished by : (Signature) KBarnette	Date: 3/12/20	Time: 1200	Received by: (Signature)	Trip Blank Received: Yes / [✓ No] HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: [illegible] °C 1.0-.4=0.6 Bottles Received: 78
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 3/13/20 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Email To: **krbarnette@tgeresources.com**

Report to:
Kristi Barnette

Project Description: **Future Federal Way Emergency**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project # **TGERESHTX-8933**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8933**

Collected by (signature): K Barnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

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

SDG # 1198798

Table #

Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P760774**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	% moisture	Arsenic	Remarks	Sample # (lab only)
SB72(5-6)	Grab	SS	5-6	3/12/20	CK 11:30	1					X	X		25
SB72(6-7)	Grab	SS	6-7	3/12/20	11:31	1					X	X		26
SB72(8-9)	Grab	SS	8-9	3/12/20	11:32	1					X	X		27
SB72(10-11)	Grab	SS	10-11	3/12/20	11:33	1					X	X		28
		SS												29
		SS												30
		SS												31
		SS												32
		SS												33
		SS												34

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: ****Log as R1 same day 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) K Barnette	Date: 3/12/20	Time: 1200	Received by: (Signature)	Trip Blank Received: Yes / [✓ No] HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C 1.0-4=0.6 Bottles Received: 78
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp	Date: 3/13/20 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

ANALYTICAL REPORT

March 16, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1199148
Samples Received:	03/14/2020
Project Number:	
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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	Collected by	Collected date/time	Received date/time
SB26 (0-1) L1199148-01 Waste	K. Barnette	03/13/20 12:15	03/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1444280	1	03/14/20 20:50	03/14/20 20:50	CGD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444438	1	03/15/20 12:53	03/15/20 15:20	EL	Mt. Juliet, TN

CASE NARRATIVE

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

ONE LAB. NATIONWIDE.

Laboratory Name: Pace Analytical National	LRC Date: 03/16/2020 13:40
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1199148-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1444438, WG1444511 and WG1444280

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/16/2020 13:40
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1199148-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1444438, WG1444511 and WG1444280

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/16/2020 13:40
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1199148-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1444438, WG1444511 and WG1444280

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

SB26 (0-1)

Collected date/time: 03/13/20 12:15

SAMPLE RESULTS - 01

L1199148

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		3/14/2020 8:50:24 PM	WG1444280
Fluid	1		3/14/2020 8:50:24 PM	WG1444280
Initial pH	6.95		3/14/2020 8:50:24 PM	WG1444280
Final pH	4.66		3/14/2020 8:50:24 PM	WG1444280

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	0.571		0.100	5	1	03/15/2020 15:20	WG1444438

WG1444438

Metals (ICP) by Method 6010D

QUALITY CONTROL SUMMARY

L1199148-01

Method Blank (MB)

(MB) R3508835-1 03/15/20 15:04

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.0333	0.100

Laboratory Control Sample (LCS)

(LCS) R3508835-2 03/15/20 15:07

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Lead	10.0	9.74	97.4	80.0-120	

L1197678-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1197678-13 03/15/20 15:10 • (MS) R3508835-4 03/15/20 15:15 • (MSD) R3508835-5 03/15/20 15:17

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	10.0	ND	9.43	9.56	94.3	95.6	1	75.0-125			1.46	20

L1199148-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199148-01 03/15/20 15:20 • (MS) R3508835-6 03/15/20 15:23 • (MSD) R3508835-7 03/15/20 15:26

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	10.0	0.571	10.2	10.2	96.2	96.7	1	75.0-125			0.507	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Sample Detection Limit.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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

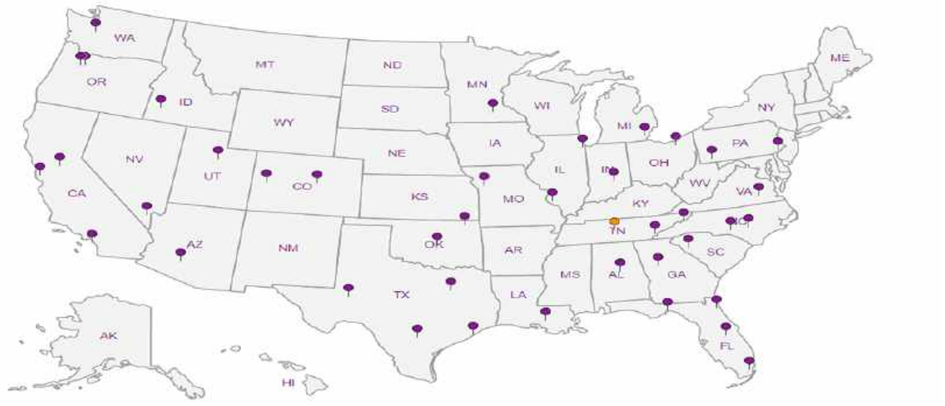
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project # **TGERESHTX-8933**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # **8933**

Collected by (signature): K Barnette

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 ___ 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

SDG # 1199148

A175

Table #

Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P760774**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	TCLP Lead	% moisture					Remarks	Sample # (lab only)
SB26(0-1)	Grab	SS	0-1	3/13/20	1215	1					X	X						01
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks: ****Log as R1 same day TAT****

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
___ UPS ___ FedEx ___ Courier ________

Tracking # 4142 5218 2757

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) K Barnette
Date: 3/13/20
Time: 1300
Received by: (Signature)
Trip Blank Received: Yes [✓ No]
~~HCL / MeoH~~
TBR

Relinquished by : (Signature)
Date:
Time:
Received by: (Signature)
Temp: 0.7-.3=0.4 °C
Bottles Received: 1

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature) Sandy yossef
Date: 3/14/20
Time:

Hold:

Condition:
NCF / [✓ OK]

ANALYTICAL REPORT

March 16, 2020

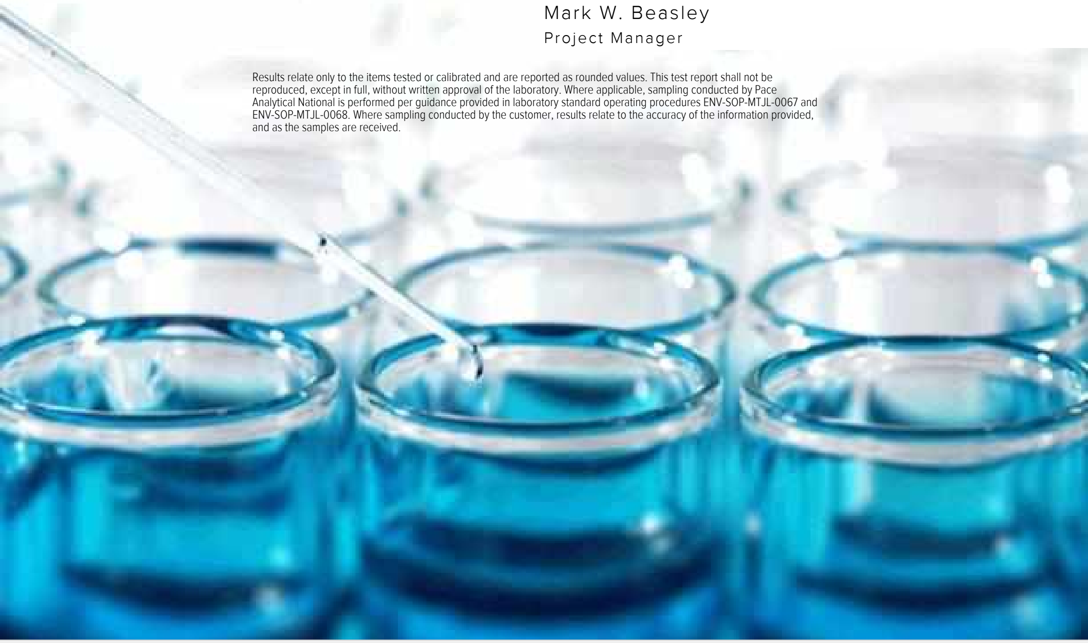
1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1199216
Samples Received:	03/13/2020
Project Number:	
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SB63 (0-3) L1199216-01 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	03/12/20 08:40	03/13/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1444672	1	03/16/20 08:32	03/16/20 08:35	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1444152	1	03/14/20 15:29	03/15/20 17:13	CCE	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/16/2020 15:12
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1199216-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1444152 and WG1444672

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/16/2020 15:12
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1199216-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1444152 and WG1444672

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/16/2020 15:12
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1199216-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1444152 and WG1444672

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.0		1	03/16/2020 08:35	WG1444672

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Selenium	U		0.756	2.00	2.44	1	03/15/2020 17:13	WG1444152

Method Blank (MB)

(MB) R3509085-1 03/16/20 08:35

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1199216-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1199216-01 03/16/20 08:35 • (DUP) R3509085-3 03/16/20 08:35

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.0	82.9	1	1.11		10

Laboratory Control Sample (LCS)

(LCS) R3509085-2 03/16/20 08:35

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) R3508844-1 03/15/20 17:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Selenium	U		0.620	2.00

Laboratory Control Sample (LCS)

(LCS) R3508844-2 03/15/20 17:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Selenium	100	95.5	95.5	80.0-120	

L1199216-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199216-01 03/15/20 17:13 • (MS) R3508844-5 03/15/20 17:21 • (MSD) R3508844-6 03/15/20 17:24

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 %
Selenium	122	U	110	116	89.8	95.0	1	75.0-125			5.63	20

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1,6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T104704245-18-15
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

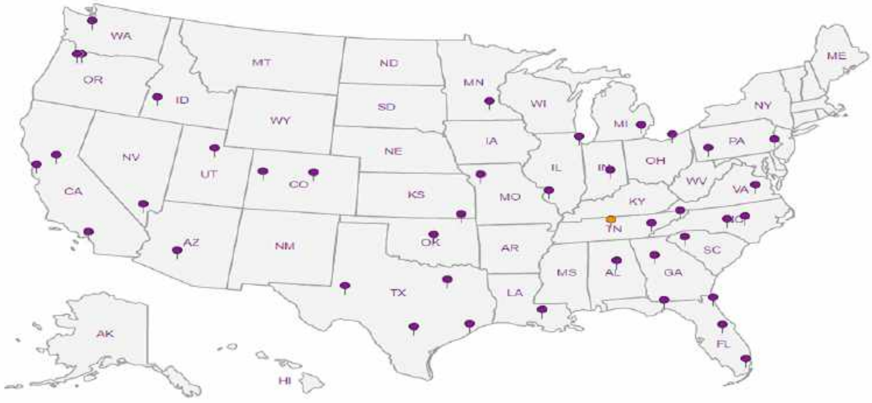
A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: Kristi Barnette

Email To: krbarnette@tgeresources.com

Project Description: Future Federal Way Emergency

City/State Collected:

Please Circle: PT MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project #

Lab Project # TGERESHTX-8933

Collected by (print): KBarnette

Site/Facility ID #

P.O. # 8933

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N___ Y X

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

SDG # ~~[illegible]~~
G047
1149216

Acctnum: **TGERESHTX**
Template: **T164547**
Prelogin: **P761366**
PM: 134 - Mark W. Beasley
PB:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TCLP As 8ozClr-NoPres	TCLP Cr 8ozClr-NoPres	TCLP Pb 8ozClr-NoPres	% moisture	VOCs	RCRA 8	NWTPH Gx	NWTPH Dx			Remarks	Sample # (lab only)
SB62(0-3)	Comp	SS	0-3	3/12/20	830	3				X	X	X	X	X				01
SB62 (4-6)	Comp	SS	4-6	3/12/20	831	3				X	X	X	X	X				02
SB63(0-3)	Comp	SS	0-3	3/12/20	840	3				X	X	X	X	X			01	03
SB63 (4-6)	Comp	SS	4-6	3/12/20	841	3				X	X	X	X	X				04
SB64(0-3)	Comp	SS	0-3	3/12/20	820	3				X	X	X	X	X				05
SB64 (4-6)	Comp	SS	4-6	3/12/20	821	3				X	X	X	X	X				06
SB65 (0-3)	Comp	SS	0-3	3/12/20	810	3				X	X	X	X	X				07
SB65 (4-6)	Comp	SS	4-6	3/12/20	811	3				X	X	X	X	X				08
SB66 (0-3)	Comp	SS	0-3	3/12/20	756	3				X	X	X	X	X				09
SB66(4-6)	Comp	SS	4-6	3/12/20	757	3				X	X	X	X	X				10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks: ****Log as R1 next day TAT****

0.8/0.3/0.9/0.5/0.4

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 1411 1752 3500/3473/3521/3598
1275 8603 9535/1676 2749 8863

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) KBarnette
Date: 3/12/20
Time: 1200
Received by: (Signature)

Trip Blank Received: Yes / [✓ No]
HCL / MeoH
TBR

Relinquished by : (Signature)
Date:
Time:
Received by: (Signature)

Temp: [illegible] °C
1.0-.4=.6
Bottles Received: 78

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature) Carol Kemp

Date: 3/13/20
Time: 8:45

Hold:

Condition: [✓ NCF] / OK

Matt Shacklock

From: Mark Beasley
Sent: Saturday, March 14, 2020 12:57 PM
To: Project Service; Sample Storage; Due Metals
Subject: L1198738 *TGERESHTX* rush R1 relog

Importance: High

Relog L1198738-03 for SEICP. Transfer TS. Log as R1 due 3/16.

Thanks

Mark Beasley
Supervisor – Client Operations
Pace Analytical National Center for Testing & Innovation
12065 Lebanon Road | Mt. Juliet, TN 37122
Office: 615.773.9672 | Cell: 615.330.1602
mbeasley@pacenational.com

ANALYTICAL REPORT

March 20, 2020

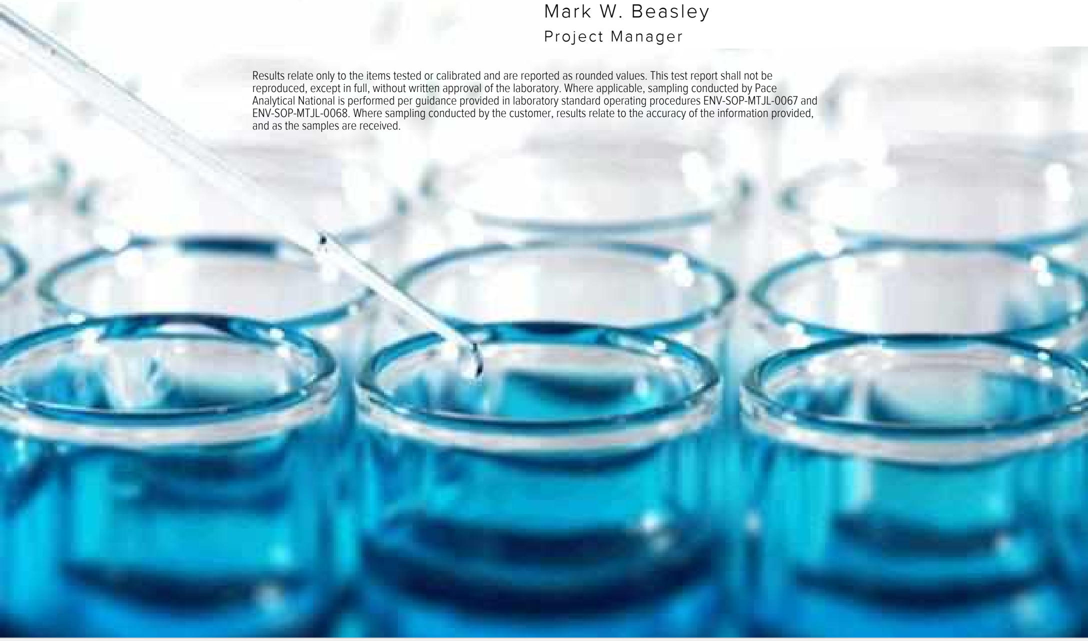
1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1201106
Samples Received:	03/20/2020
Project Number:	
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

BAY 3 SUMP S SIDEWALL (9) L1201106-01 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 09:00	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447595	1	03/20/20 13:06	03/20/20 13:14	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	1	03/20/20 12:49	03/20/20 15:35	FM	Mt. Juliet, TN

BAY 3 SUMP N SIDEWALL (9) L1201106-02 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 09:01	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447595	1	03/20/20 13:06	03/20/20 13:14	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	1	03/20/20 12:49	03/20/20 16:51	FM	Mt. Juliet, TN

BAY 3 SUMP W SIDEWALL (9) L1201106-03 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 09:02	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447595	1	03/20/20 13:06	03/20/20 13:14	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	1	03/20/20 12:49	03/20/20 16:13	FM	Mt. Juliet, TN

BAY 3 SUMP E SIDEWALL (9) L1201106-04 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 09:03	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447595	1	03/20/20 13:06	03/20/20 13:14	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	1	03/20/20 12:49	03/20/20 16:26	FM	Mt. Juliet, TN

BAY 3 SUMP BASE (9) L1201106-05 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 09:04	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447595	1	03/20/20 13:06	03/20/20 13:14	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	1	03/20/20 12:49	03/20/20 16:38	FM	Mt. Juliet, TN

SUMP LINE (3) L1201106-06 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 09:05	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447595	1	03/20/20 13:06	03/20/20 13:14	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1447589	1	03/20/20 12:27	03/20/20 13:58	CCE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	1	03/20/20 12:49	03/20/20 15:14	FM	Mt. Juliet, TN

B1 S. SIDEWALL L1201106-07 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 11:40	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447595	1	03/20/20 13:06	03/20/20 13:14	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	1	03/20/20 12:49	03/20/20 16:09	FM	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

B1-1 CENTER L1201106-08 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 11:41	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447595	1	03/20/20 13:06	03/20/20 13:14	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	1	03/20/20 12:49	03/20/20 15:28	FM	Mt. Juliet, TN

B1-1 W. SIDEWALL L1201106-09 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 11:42	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447595	1	03/20/20 13:06	03/20/20 13:14	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	10	03/20/20 12:49	03/20/20 17:02	FM	Mt. Juliet, TN

B1-2 CENTER L1201106-10 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 11:43	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447595	1	03/20/20 13:06	03/20/20 13:14	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	1	03/20/20 12:49	03/20/20 15:42	FM	Mt. Juliet, TN

B1-2 W. SIDEWALL L1201106-11 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 11:44	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447598	1	03/20/20 12:55	03/20/20 13:04	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	1	03/20/20 12:49	03/20/20 16:23	FM	Mt. Juliet, TN

B1-3 CENTER L1201106-12 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 12:15	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447598	1	03/20/20 12:55	03/20/20 13:04	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	10	03/20/20 12:49	03/20/20 17:16	FM	Mt. Juliet, TN

B2 CENTER L1201106-13 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 13:15	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447598	1	03/20/20 12:55	03/20/20 13:04	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	1	03/20/20 12:49	03/20/20 16:36	FM	Mt. Juliet, TN

B2 W. SIDEWALL L1201106-14 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 13:16	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447598	1	03/20/20 12:55	03/20/20 13:04	JWW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1447602	1	03/20/20 12:49	03/20/20 15:55	FM	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

EXT SUMP S SIDEWALL (7') L1201106-15 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 07:45	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447598	1	03/20/20 12:55	03/20/20 13:04	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1447589	1	03/20/20 12:27	03/20/20 14:11	CCE	Mt. Juliet, TN

EXT SUMP N SIDEWALL (7') L1201106-16 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 07:46	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447598	1	03/20/20 12:55	03/20/20 13:04	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1447589	1	03/20/20 12:27	03/20/20 14:14	CCE	Mt. Juliet, TN

EXT SUMP W SIDEWALL (7') L1201106-17 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 07:47	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447598	1	03/20/20 12:55	03/20/20 13:04	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1447589	1	03/20/20 12:27	03/20/20 14:16	CCE	Mt. Juliet, TN

EXT SUMP E SIDEWALL (7') L1201106-18 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 07:48	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447598	1	03/20/20 12:55	03/20/20 13:04	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1447589	1	03/20/20 12:27	03/20/20 14:25	CCE	Mt. Juliet, TN

EXT SUMP BASE (7') L1201106-19 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 07:49	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447598	1	03/20/20 12:55	03/20/20 13:04	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1447589	1	03/20/20 12:27	03/20/20 14:28	CCE	Mt. Juliet, TN

BAY 1 WEST SIDEWALL (7') L1201106-20 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 08:01	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447598	1	03/20/20 12:55	03/20/20 13:04	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1447589	1	03/20/20 12:27	03/20/20 14:31	CCE	Mt. Juliet, TN

BAY 1 S SIDEWALL (7') L1201106-21 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 08:03	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447601	1	03/20/20 12:49	03/20/20 12:54	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1447589	1	03/20/20 12:27	03/20/20 14:33	CCE	Mt. Juliet, TN

SAMPLE SUMMARY

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

BAY 1 N SIDEWALL (7') L1201106-22 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 08:02	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447601	1	03/20/20 12:49	03/20/20 12:54	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1447589	1	03/20/20 12:27	03/20/20 14:36	CCE	Mt. Juliet, TN

BAY 1 E SIDEWALL (7') L1201106-23 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 08:04	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447601	1	03/20/20 12:49	03/20/20 12:54	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1447589	1	03/20/20 12:27	03/20/20 14:38	CCE	Mt. Juliet, TN

BAY 1 SUMP BASE (7') L1201106-24 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/19/20 08:05	03/20/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1447601	1	03/20/20 12:49	03/20/20 12:54	JWW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1447589	1	03/20/20 12:27	03/20/20 14:41	CCE	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/20/2020 21:22
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1201106-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 24
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1447589, WG1447595, WG1447598, WG1447601 and WG1447602

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/20/2020 21:22
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1201106-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 24
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1447589, WG1447595, WG1447598, WG1447601 and WG1447602

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			1
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/20/2020 21:22
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1201106-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 24
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1447589, WG1447595, WG1447598, WG1447601 and WG1447602

ER #[1]	**Description**
1	6010D WG1447589 Chromium: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.1		1	03/20/2020 13:14	WG1447595

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.43	4.00	4.30	1	03/20/2020 15:35	WG1447602
Residual Range Organics (RRO)	U		3.58	10.0	10.7	1	03/20/2020 15:35	WG1447602
(S) o-Terphenyl	*70.3*				*18.0-148*		*03/20/2020 15:35*	WG1447602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.0		1	03/20/2020 13:14	WG1447595

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.48	4.00	4.44	1	03/20/2020 16:51	WG1447602
Residual Range Organics (RRO)	U		3.70	10.0	11.1	1	03/20/2020 16:51	WG1447602
(S) o-Terphenyl	*71.8*				*18.0-148*		*03/20/2020 16:51*	WG1447602

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.1		1	03/20/2020 13:14	WG1447595

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.40	4.00	4.21	1	03/20/2020 16:13	WG1447602
Residual Range Organics (RRO)	U		3.50	10.0	10.5	1	03/20/2020 16:13	WG1447602
(S) o-Terphenyl	*63.1*				*18.0-148*		*03/20/2020 16:13*	WG1447602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.7		1	03/20/2020 13:14	WG1447595

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.40	4.00	4.23	1	03/20/2020 16:26	WG1447602
Residual Range Organics (RRO)	U		3.52	10.0	10.6	1	03/20/2020 16:26	WG1447602
(S) o-Terphenyl	*73.6*				*18.0-148*		*03/20/2020 16:26*	WG1447602

BAY 3 SUMP BASE (9)

Collected date/time: 03/19/20 09:04

SAMPLE RESULTS - 05

L1201106

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.1		1	03/20/2020 13:14	WG1447595

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.41	4.00	4.25	1	03/20/2020 16:38	WG1447602
Residual Range Organics (RRO)	U		3.54	10.0	10.6	1	03/20/2020 16:38	WG1447602
(S) o-Terphenyl	*76.0*				*18.0-148*		*03/20/2020 16:38*	WG1447602

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	75.7		1	03/20/2020 13:14	WG1447595

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	U		0.0925	0.500	0.661	1	03/20/2020 13:58	WG1447589
Chromium	17.0	O1	0.185	1.00	1.32	1	03/20/2020 13:58	WG1447589

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	2.55	J	1.76	4.00	5.29	1	03/20/2020 15:14	WG1447602
Residual Range Organics (RRO)	8.52	J	4.40	10.0	13.2	1	03/20/2020 15:14	WG1447602
(S) o-Terphenyl	*48.1*				*18.0-148*		*03/20/2020 15:14*	WG1447602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.2		1	03/20/2020 13:14	WG1447595

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.46	4.00	4.39	1	03/20/2020 16:09	WG1447602
Residual Range Organics (RRO)	5.05	J	3.65	10.0	11.0	1	03/20/2020 16:09	WG1447602
(S) o-Terphenyl	*64.3*				*18.0-148*		*03/20/2020 16:09*	WG1447602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.5		1	03/20/2020 13:14	WG1447595

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.41	4.00	4.24	1	03/20/2020 15:28	WG1447602
Residual Range Organics (RRO)	U		3.53	10.0	10.6	1	03/20/2020 15:28	WG1447602
(S) o-Terphenyl	*64.0*				*18.0-148*		*03/20/2020 15:28*	WG1447602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.9		1	03/20/2020 13:14	WG1447595

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	65.2		14.5	4.00	43.5	10	03/20/2020 17:02	WG1447602
Residual Range Organics (RRO)	113		36.2	10.0	109	10	03/20/2020 17:02	WG1447602
(S) o-Terphenyl	*90.2*				*18.0-148*		*03/20/2020 17:02*	WG1447602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.4		1	03/20/2020 13:14	WG1447595

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.39	4.00	4.19	1	03/20/2020 15:42	WG1447602
Residual Range Organics (RRO)	U		3.49	10.0	10.5	1	03/20/2020 15:42	WG1447602
(S) o-Terphenyl	*68.1*				*18.0-148*		*03/20/2020 15:42*	WG1447602

B1-2 W. SIDEWALL

Collected date/time: 03/19/20 11:44

SAMPLE RESULTS - 11

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	88.4		1	03/20/2020 13:04	WG1447598

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	2.22	J	1.50	4.00	4.52	1	03/20/2020 16:23	WG1447602
Residual Range Organics (RRO)	13.5		3.77	10.0	11.3	1	03/20/2020 16:23	WG1447602
(S) o-Terphenyl	*74.3*				*18.0-148*		*03/20/2020 16:23*	WG1447602

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.0		1	03/20/2020 13:04	WG1447598

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		14.1	4.00	42.6	10	03/20/2020 17:16	WG1447602
Residual Range Organics (RRO)	82.4	J	35.4	10.0	106	10	03/20/2020 17:16	WG1447602
(S) o-Terphenyl	*85.5*				*18.0-148*		*03/20/2020 17:16*	WG1447602

Sample Narrative:

L1201106-12 WG1447602: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.0		1	03/20/2020 13:04	WG1447598

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	26.5		1.57	4.00	4.71	1	03/20/2020 16:36	WG1447602
Residual Range Organics (RRO)	46.4		3.92	10.0	11.8	1	03/20/2020 16:36	WG1447602
(S) o-Terphenyl	*65.7*				*18.0-148*		*03/20/2020 16:36*	WG1447602

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.8		1	03/20/2020 13:04	WG1447598

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.55	4.00	4.66	1	03/20/2020 15:55	WG1447602
Residual Range Organics (RRO)	U		3.88	10.0	11.7	1	03/20/2020 15:55	WG1447602
(S) o-Terphenyl	*66.8*				*18.0-148*		*03/20/2020 15:55*	WG1447602

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.1		1	03/20/2020 13:04	WG1447598

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	U		0.510	2.00	2.22	1	03/20/2020 14:11	WG1447589
Lead	1.06		0.211	0.500	0.555	1	03/20/2020 14:11	WG1447589

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.3		1	03/20/2020 13:04	WG1447598

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	U		0.504	2.00	2.19	1	03/20/2020 14:14	WG1447589
Lead	0.835		0.208	0.500	0.548	1	03/20/2020 14:14	WG1447589

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.6		1	03/20/2020 13:04	WG1447598

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	U		0.502	2.00	2.18	1	03/20/2020 14:16	WG1447589
Lead	0.565		0.207	0.500	0.546	1	03/20/2020 14:16	WG1447589

EXT SUMP E SIDEWALL (7')

Collected date/time: 03/19/20 07:48

SAMPLE RESULTS - 18

L1201106

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.7		1	03/20/2020 13:04	WG1447598

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	U		0.491	2.00	2.13	1	03/20/2020 14:25	WG1447589
Lead	1.26		0.203	0.500	0.534	1	03/20/2020 14:25	WG1447589

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.4		1	03/20/2020 13:04	WG1447598

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	U		0.532	2.00	2.31	1	03/20/2020 14:28	WG1447589
Lead	0.534	J	0.220	0.500	0.579	1	03/20/2020 14:28	WG1447589

BAY 1 WEST SIDEWALL (7')

Collected date/time: 03/19/20 08:01

SAMPLE RESULTS - 20

L1201106

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.5		1	03/20/2020 13:04	WG1447598

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	U		0.551	2.00	2.40	1	03/20/2020 14:31	WG1447589
Lead	0.815		0.228	0.500	0.599	1	03/20/2020 14:31	WG1447589

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.2		1	03/20/2020 12:54	WG1447601

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	U		0.515	2.00	2.24	1	03/20/2020 14:33	WG1447589
Lead	0.566		0.213	0.500	0.560	1	03/20/2020 14:33	WG1447589

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.1		1	03/20/2020 12:54	WG1447601

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	U		0.516	2.00	2.24	1	03/20/2020 14:36	WG1447589
Chromium	24.0		0.157	1.00	1.12	1	03/20/2020 14:36	WG1447589
Lead	9.97		0.213	0.500	0.561	1	03/20/2020 14:36	WG1447589

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.7		1	03/20/2020 12:54	WG1447601

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	U		0.525	2.00	2.28	1	03/20/2020 14:38	WG1447589
Chromium	21.4		0.160	1.00	1.14	1	03/20/2020 14:38	WG1447589
Lead	0.675		0.217	0.500	0.570	1	03/20/2020 14:38	WG1447589

BAY 1 SUMP BASE (7')

Collected date/time: 03/19/20 08:05

SAMPLE RESULTS - 24

L1201106

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	94.2		1	03/20/2020 12:54	WG1447601

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	U		0.488	2.00	2.12	1	03/20/2020 14:41	WG1447589
Chromium	16.7		0.149	1.00	1.06	1	03/20/2020 14:41	WG1447589
Lead	1.16		0.202	0.500	0.531	1	03/20/2020 14:41	WG1447589

Method Blank (MB)

(MB) R3510877-1 03/20/20 13:14

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1201106-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1201106-01 03/20/20 13:14 • (DUP) R3510877-3 03/20/20 13:14

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	93.1	93.9	1	0.848		10

Laboratory Control Sample (LCS)

(LCS) R3510877-2 03/20/20 13:14

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) R3510878-1 03/20/20 13:04

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1201106-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1201106-11 03/20/20 13:04 • (DUP) R3510878-3 03/20/20 13:04

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.4	90.8	1	2.70		10

Laboratory Control Sample (LCS)

(LCS) R3510878-2 03/20/20 13:04

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) R3510879-1 03/20/20 12:54

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1201106-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1201106-24 03/20/20 12:54 • (DUP) R3510879-3 03/20/20 12:54

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.2	88.7	1	6.00		10

Laboratory Control Sample (LCS)

(LCS) R3510879-2 03/20/20 12:54

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) R3510781-1 03/20/20 13:53

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Arsenic	U		0.460	2.00
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500

Laboratory Control Sample (LCS)

(LCS) R3510781-2 03/20/20 13:55

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	103	103	80.0-120	
Cadmium	100	103	103	80.0-120	
Chromium	100	105	105	80.0-120	
Lead	100	105	105	80.0-120	

L1201106-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1201106-06 03/20/20 13:58 • (MS) R3510781-5 03/20/20 14:06 • (MSD) R3510781-6 03/20/20 14:09

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	132	U	122	115	92.1	87.0	1	75.0-125			5.63	20
Cadmium	132	U	128	122	96.9	92.2	1	75.0-125			4.96	20
Chromium	132	17.0	141	134	93.6	88.9	1	75.0-125			4.58	20
Lead	132	4.21	139	133	102	97.4	1	75.0-125			4.64	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3510880-1 03/20/20 15:10

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	*74.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3510880-2 03/20/20 15:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	38.7	77.4	50.0-150	
(S) o-Terphenyl			*72.1*	*18.0-148*	

L1201106-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1201106-01 03/20/20 15:35 • (MS) R3510880-3 03/20/20 15:48 • (MSD) R3510880-4 03/20/20 16:00

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)	53.2	U	37.7	36.1	70.9	68.7	1	50.0-150			4.37	20
(S) o-Terphenyl					*64.5*	*64.0*		*18.0-148*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

ACCREDITATIONS & LOCATIONS

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1,6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T104704245-18-15
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.

WA
OR
ID
MT
ND
MN
WI
MI
NY
ME
SD
WY
NE
IA
IL
IN
OH
PA
NV
UT
CO
KS
MO
KY
WV
VA
CA
AZ
NM
OK
AR
TN
NC
SC
MS
AL
GA
TX
LA
FL
AK
HI

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected: Fed Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project #
TGERESHTX-8933

Collected by (print): K Barnette

Site/Facility ID #

P.O. #
~~8933~~ 8932

Collected by (signature): K Barnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

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

SDG # L1201106
C045

Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P760774**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNDSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	RCRA Pb	RCRA Cd	RCRA As	% moisture	OC Pests	RCRA Cr	Remarks	Sample # (lab only)
bay3 Sump S Sidewall (9)	Grab	SS	9	3/19/20	900	3		X	~~X~~					X				-01
Bay3Sump N Sidewall (9)	Grab	SS	9	3/19/20	901	3		X	~~X~~					X				02
Bay3 Sump W Sidewall (9)	Grab	SS	9	3/19/20	902	3		X	~~X~~					X				03
Bay3Sump E Sidewall (9)	Grab	SS	9	3/19/20	903	3		X	~~X~~					X				04
Bay3Sump Base (9)	Grab	SS	9	3/19/20	904	3		X	~~X~~					X				05
Sump Line (3)	Grab	SS	9	3/19/20	905	3		X				X		X		X		06
B1 S. Sidewall	Grab	SS	1.5	3/19/20	1140	3		X						X				07
B1-1 Center	Grab	SS	2	3/19/20	1141	3		X						X				08
B1-1 W. Sidewall	Grab	SS	1.5	3/19/20	1142	3		X						X				09
B1-2 Center	Grab	SS	2	3/19/20	1143	3		X						X				10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: ****Log as R1 same day TAT****

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 1382 4810 4049

Sample Receipt Checklist CK
COC Seal Present/Intact: Y 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) K Barnette	Date: 3/19/20	Time: 1330	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No [✓ HCL] / MeoH TBR 3
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 0.3+.1=0.4 °C Bottles Received: 72
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/20/20 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected: Fed Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project #
TGERESHTX-8933

Collected by (print): K Barnette

Site/Facility ID #

P.O. # ~~8933~~ 8932

Collected by (signature): K Barnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

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

SDG # L1201106

Table #

Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P760774**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	RCRA Pb	RCRA Cd	RCRA As	% moisture	OC Pesticides	RCRA Cr	Remarks	Sample # (lab only)
B1-2 W. Sidewall	Grab	SS	1.5	3/19/20	1144	3		X						X				-11
B1-3 Center	Grab	SS	2	3/19/20	1215	3		X						X				12
B2 Center	Grab	SS	4	3/19/20	1315	3		X						X				13
B2 W. Sidewall	Grab	SS	3	3/19/20	1316	3		X						X				14
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks:****Log as R1 same day TAT****

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
___ UPS ___ FedEx ___ Courier ________

Tracking # 1382 4810 4060

Sample Receipt Checklist
COC Seal Present/Intact: X NP ___ Y ___ N
COC Signed/Accurate: X Y ___ N
Bottles arrive intact: X Y ___ N
Correct bottles used: X Y ___ N
Sufficient volume sent: X Y ___ N
If Applicable
VOA Zero Headspace: ___ Y ___ N
Preservation Correct/Checked: ___ Y ___ N
RAD Screen <0.5 mR/hr: X Y ___ N

Relinquished by : (Signature) K Barnette	Date: 3/19/20	Time: 1330	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 3 [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 0.3+-0.4=0.7 °C Bottles Received: 72
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/20/20 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected: Fed Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project # **TGERESHTX-~~8933~~**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # ~~8933~~ 8932

Collected by (signature): K Barnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

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

SDG # L1701166

Table #

Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P760774**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	RCRA Pb	RCRA Cd	RCRA As	RCRA Cr	% moisture	OC Pesticides	Remarks	Sample # (lab only)
Ext Sump S Sidewall (7')	Grab	SS	7'	3/19/20	0745	3					X		X		X			-15
Ext Sump N Sidewall (7')	Grab	SS	7'	3/19/20	0746	3					X		X		X			16
Ext Sump W Sidewall (7')	Grab	SS	7'	3/19/20	0747	3					X		X		X			17
Ext Sump E Sidewall (7')	Grab	SS	7'	3/19/20	0748	3					X		X		X			18
Ext Sump Base (7')	Grab	SS	7'	3/19/20	0749	3					X		X		X			19
Bay1 West Sidewall (7')	Grab	SS	7'	3/19/20	0801	3					X		X		X			20
Bay1 S Sidewall (7')	Grab	SS	7'	3/19/20	0803	3					X		X		X			21
Bay1 N Sidewall (7')	Grab	SS	7'	3/19/20	0802	3					X		X	X	X			22
Bay1 E Sidewall (7')	Grab	SS	7'	3/19/20	0804	3					X		X	X	X			23
Bay1 Sump Base (7')	Grab	SS	7'	3/19/20	0805	3					X		X	X	X			24

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other________

Remarks:****Log as R1 same day TAT****

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 1382 4810 4050

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: X Y __N

Relinquished by : (Signature) K Barnette	Date: 3/19/20	Time: 1330	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No 3 [✓ HCL] / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 0.3+.1=0.4 °C AJ CK Bottles Received: 77	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/20/20 Time: 8:30	Hold: Condition: NCF / [✓ OK]

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

March 22, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1201473
Samples Received:	03/21/2020
Project Number:	
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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9 Al
10 Sc

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 07:05	03/21/20 08:45

B1-4 CENTER L1201473-01 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448260	1	03/21/20 17:44	03/21/20 17:54	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1448059	1	03/21/20 17:32	03/22/20 00:53	KME	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 07:08	03/21/20 08:45

B1 N SIDEWALL L1201473-02 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448260	1	03/21/20 17:44	03/21/20 17:54	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 21:33	EL	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1448059	1	03/21/20 17:32	03/22/20 00:40	KME	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 07:07	03/21/20 08:45

B1-5 CENTER L1201473-03 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448260	1	03/21/20 17:44	03/21/20 17:54	KDW	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1448059	10	03/21/20 17:32	03/22/20 07:59	JDG	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 07:06	03/21/20 08:45

BI NE SIDEWALL L1201473-04 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448260	1	03/21/20 17:44	03/21/20 17:54	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 21:46	EL	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1448059	20	03/21/20 17:32	03/22/20 03:37	KME	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 07:48	03/21/20 08:45

A1-1 W SIDEWALL L1201473-05 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448260	1	03/21/20 17:44	03/21/20 17:54	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 21:49	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 07:49	03/21/20 08:45

A1-1 CENTER L1201473-06 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448260	1	03/21/20 17:44	03/21/20 17:54	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 21:52	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 07:50	03/21/20 08:45

A1-2 W SIDEWALL L1201473-07 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448260	1	03/21/20 17:44	03/21/20 17:54	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 22:00	EL	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 07:55	03/21/20 08:45

A1-1 E SIDEWALL L1201473-08 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448260	1	03/21/20 17:44	03/21/20 17:54	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 22:03	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 09:20	03/21/20 08:45

A5-1 W SIDEWALL L1201473-11 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448260	1	03/21/20 17:44	03/21/20 17:54	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 22:05	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 09:21	03/21/20 08:45

A5-2 W SIDEWALL L1201473-12 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448260	1	03/21/20 17:44	03/21/20 17:54	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 22:08	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 11:45	03/21/20 08:45

A7 CENTER L1201473-13 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448261	1	03/21/20 17:58	03/21/20 18:11	KDW	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1448060	1	03/21/20 17:37	03/22/20 13:57	MTJ	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 11:46	03/21/20 08:45

A7 SIDEWALL L1201473-14 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448261	1	03/21/20 17:58	03/21/20 18:11	KDW	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1448060	1	03/21/20 17:37	03/22/20 14:11	MTJ	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 13:00	03/21/20 08:45

A6 CENTER L1201473-15 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448261	1	03/21/20 17:58	03/21/20 18:11	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 22:11	EL	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1448060	1	03/21/20 17:37	03/22/20 14:26	MTJ	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 13:15	03/21/20 08:45

A1-2 CENTER L1201473-16 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448261	1	03/21/20 17:58	03/21/20 18:11	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 22:14	EL	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 13:16	03/21/20 08:45

A1-3 CENTER L1201473-17 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448261	1	03/21/20 17:58	03/21/20 18:11	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 22:16	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 14:00	03/21/20 08:45

A4 CENTER L1201473-18 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448261	1	03/21/20 17:58	03/21/20 18:11	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 22:19	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 14:01	03/21/20 08:45

A4 SIDEWALL L1201473-19 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448261	1	03/21/20 17:58	03/21/20 18:11	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448085	1	03/21/20 12:45	03/21/20 22:22	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 00:00	03/21/20 08:45

A2-1 CENTER L1201473-20 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448261	1	03/21/20 17:58	03/21/20 18:11	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448250	1	03/21/20 17:24	03/22/20 20:46	EL	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/20/20 00:00	03/21/20 08:45

A2-2 CENTER L1201473-21 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1448261	1	03/21/20 17:58	03/21/20 18:11	KDW	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1448250	1	03/21/20 17:24	03/22/20 20:58	EL	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/22/2020 22:11
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1201473-01, 02, 03, 04, 05, 06, 07, 08, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1448059, WG1448060, WG1448085, WG1448260, WG1448261 and WG1448250

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/22/2020 22:11
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1201473-01, 02, 03, 04, 05, 06, 07, 08, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1448059, WG1448060, WG1448085, WG1448260, WG1448261 and WG1448250

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/22/2020 22:11
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1201473-01, 02, 03, 04, 05, 06, 07, 08, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1448059, WG1448060, WG1448085, WG1448260, WG1448261 and WG1448250

ER #[1]	**Description**
1	NWTPHDX-NO SGT WG1448059 o-Terphenyl L1201473-04: Percent Recovery is outside of established control limits.

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.1		1	03/21/2020 17:54	WG1448260

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	3.96	J	1.43	4.00	4.30	1	03/22/2020 00:53	WG1448059
Residual Range Organics (RRO)	14.9		3.58	10.0	10.7	1	03/22/2020 00:53	WG1448059
(S) o-Terphenyl	*67.6*				*18.0-148*		*03/22/2020 00:53*	WG1448059

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	88.9		1	03/21/2020 17:54	WG1448260

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	1.29	J	0.517	2.00	2.25	1	03/21/2020 21:33	WG1448085

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	U		1.50	4.00	4.50	1	03/22/2020 00:40	WG1448059
Residual Range Organics (RRO)	U		3.75	10.0	11.2	1	03/22/2020 00:40	WG1448059
(S) o-Terphenyl	*73.6*				*18.0-148*		*03/22/2020 00:40*	WG1448059

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SAMPLE RESULTS - 03

L1201473

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.5		1	03/21/2020 17:54	WG1448260

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	53.8		14.5	4.00	43.7	10	03/22/2020 07:59	WG1448059
Residual Range Organics (RRO)	174		36.4	10.0	109	10	03/22/2020 07:59	WG1448059
(S) o-Terphenyl	*67.7*				*18.0-148*		*03/22/2020 07:59*	WG1448059

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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SAMPLE RESULTS - 04

L1201473

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.8		1	03/21/2020 17:54	WG1448260

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	31.2		0.480	2.00	2.09	1	03/21/2020 21:46	WG1448085

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	820		27.8	4.00	83.5	20	03/22/2020 03:37	WG1448059
Residual Range Organics (RRO)	1530		69.5	10.0	209	20	03/22/2020 03:37	WG1448059
(S) o-Terphenyl	*73.5*	J7			*18.0-148*		*03/22/2020 03:37*	WG1448059

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.3		1	03/21/2020 17:54	WG1448260

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.73	J	0.488	2.00	2.12	1	03/21/2020 21:49	WG1448085

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.9		1	03/21/2020 17:54	WG1448260

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.80		0.512	2.00	2.22	1	03/21/2020 21:52	WG1448085

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.8		1	03/21/2020 17:54	WG1448260

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.27	J	0.518	2.00	2.25	1	03/21/2020 22:00	WG1448085

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SAMPLE RESULTS - 08

L1201473

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.9		1	03/21/2020 17:54	WG1448260

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.13		0.495	2.00	2.15	1	03/21/2020 22:03	WG1448085

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.6		1	03/21/2020 17:54	WG1448260

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.09	J	0.502	2.00	2.18	1	03/21/2020 22:05	WG1448085

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.9		1	03/21/2020 17:54	WG1448260

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.90		0.523	2.00	2.27	1	03/21/2020 22:08	WG1448085

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5		1	03/21/2020 18:11	WG1448261

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00144	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Alpha BHC	U		0.00145	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Beta BHC	U		0.00171	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Delta BHC	U		0.00153	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Gamma BHC	U		0.00155	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Chlordane	U		0.0417	0.200	0.214	1	03/22/2020 13:57	WG1448060
4,4-DDD	U		0.00167	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
4,4-DDE	U		0.00165	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
4,4-DDT	U		0.00214	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Dieldrin	U		0.00163	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Endosulfan I	U		0.00159	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Endosulfan II	U		0.00171	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Endosulfan sulfate	U		0.00161	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Endrin	U		0.00168	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Endrin aldehyde	U		0.00138	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Endrin ketone	U		0.00176	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Hexachlorobenzene	U		0.00133	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Heptachlor	U		0.00165	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Heptachlor epoxide	U		0.00172	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Methoxychlor	U		0.00190	0.0200	0.0214	1	03/22/2020 13:57	WG1448060
Toxaphene	U		0.0385	0.400	0.428	1	03/22/2020 13:57	WG1448060
(S) Decachlorobiphenyl	*85.1*				*10.0-135*		*03/22/2020 13:57*	WG1448060
(S) Tetrachloro-m-xylene	*81.5*				*10.0-139*		*03/22/2020 13:57*	WG1448060

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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Collected date/time: 03/20/20 11:46

SAMPLE RESULTS - 14

L1201473

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.6		1	03/21/2020 18:11	WG1448261

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00151	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Alpha BHC	U		0.00152	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Beta BHC	U		0.00179	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Delta BHC	U		0.00160	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Gamma BHC	U		0.00162	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Chlordane	U		0.0435	0.200	0.223	1	03/22/2020 14:11	WG1448060
4,4-DDD	U		0.00174	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
4,4-DDE	U		0.00172	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
4,4-DDT	U		0.00223	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Dieldrin	U		0.00170	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Endosulfan I	U		0.00166	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Endosulfan II	U		0.00179	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Endosulfan sulfate	U		0.00169	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Endrin	U		0.00175	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Endrin aldehyde	U		0.00144	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Endrin ketone	U		0.00184	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Hexachlorobenzene	U		0.00138	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Heptachlor	U		0.00172	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Heptachlor epoxide	U		0.00180	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Methoxychlor	U		0.00199	0.0200	0.0223	1	03/22/2020 14:11	WG1448060
Toxaphene	U		0.0402	0.400	0.447	1	03/22/2020 14:11	WG1448060
(S) Decachlorobiphenyl	*89.6*				*10.0-135*		*03/22/2020 14:11*	WG1448060
(S) Tetrachloro-m-xylene	*85.4*				*10.0-139*		*03/22/2020 14:11*	WG1448060

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.4		1	03/21/2020 18:11	WG1448261

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium	13.9		0.147	1.00	1.05	1	03/21/2020 22:11	WG1448085

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00141	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Alpha BHC	U		0.00142	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Beta BHC	U		0.00168	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Delta BHC	U		0.00150	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Gamma BHC	U		0.00152	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Chlordane	U		0.0409	0.200	0.210	1	03/22/2020 14:26	WG1448060
4,4-DDD	U		0.00163	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
4,4-DDE	U		0.00161	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
4,4-DDT	U		0.00210	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Dieldrin	U		0.00159	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Endosulfan I	U		0.00156	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Endosulfan II	U		0.00168	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Endosulfan sulfate	U		0.00158	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Endrin	U		0.00164	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Endrin aldehyde	U		0.00135	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Endrin ketone	U		0.00173	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Hexachlorobenzene	U		0.00130	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Heptachlor	U		0.00161	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Heptachlor epoxide	U		0.00169	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Methoxychlor	U		0.00186	0.0200	0.0210	1	03/22/2020 14:26	WG1448060
Toxaphene	U		0.0377	0.400	0.419	1	03/22/2020 14:26	WG1448060
(S) Decachlorobiphenyl	*88.6*				*10.0-135*		*03/22/2020 14:26*	WG1448060
(S) Tetrachloro-m-xylene	*85.4*				*10.0-139*		*03/22/2020 14:26*	WG1448060

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.4		1	03/21/2020 18:11	WG1448261

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.14		0.503	2.00	2.19	1	03/21/2020 22:14	WG1448085

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5		1	03/21/2020 18:11	WG1448261

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.90		0.492	2.00	2.14	1	03/21/2020 22:16	WG1448085

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.4		1	03/21/2020 18:11	WG1448261

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.22	J	0.503	2.00	2.19	1	03/21/2020 22:19	WG1448085

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.0		1	03/21/2020 18:11	WG1448261

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.73	J	0.484	2.00	2.11	1	03/21/2020 22:22	WG1448085

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.3		1	03/21/2020 18:11	WG1448261

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.03		0.510	2.00	2.22	1	03/22/2020 20:46	WG1448250

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.3		1	03/21/2020 18:11	WG1448261

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	9.58		0.493	2.00	2.14	1	03/22/2020 20:58	WG1448250

Method Blank (MB)

(MB) R3511234-1 03/21/20 17:54

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1201473-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1201473-03 03/21/20 17:54 • (DUP) R3511234-3 03/21/20 17:54

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.5	91.2	1	0.332		10

Laboratory Control Sample (LCS)

(LCS) R3511234-2 03/21/20 17:54

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3511235-1 03/21/20 18:11

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00400			

L1201473-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1201473-17 03/21/20 18:11 • (DUP) R3511235-3 03/21/20 18:11

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	93.5	93.0	1	0.526		10

Laboratory Control Sample (LCS)

(LCS) R3511235-2 03/21/20 18:11

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3511225-1 03/21/20 21:28

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Arsenic	U		0.460	2.00
Chromium	0.181	J	0.140	1.00

Laboratory Control Sample (LCS)

(LCS) R3511225-2 03/21/20 21:31

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Arsenic	100	93.9	93.9	80.0-120	
Chromium	100	94.7	94.7	80.0-120	

L1201473-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1201473-02 03/21/20 21:33 • (MS) R3511225-5 03/21/20 21:41 • (MSD) R3511225-6 03/21/20 21:44

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	112	1.29	101	97.4	88.9	85.4	1	75.0-125			3.90	20
Chromium	112	24.1	112	115	78.3	81.3	1	75.0-125			2.95	20

Method Blank (MB)

(MB) R3511242-1 03/22/20 20:41

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Arsenic	U		0.460	2.00

Laboratory Control Sample (LCS)

(LCS) R3511242-2 03/22/20 20:43

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	98.6	98.6	80.0-120	

L1201473-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1201473-20 03/22/20 20:46 • (MS) R3511242-5 03/22/20 20:53 • (MSD) R3511242-6 03/22/20 20:56

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	111	7.03	114	115	97.0	97.1	1	75.0-125			0.161	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3511060-1 03/21/20 23:12

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	*73.6*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3511060-2 03/21/20 23:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	40.5	81.0	50.0-150	
(S) o-Terphenyl			*84.1*	*18.0-148*	

L1199431-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199431-07 03/22/20 08:11 • (MS) R3511060-3 03/22/20 08:24 • (MSD) R3511060-4 03/22/20 08:37

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)	61.2	ND	53.5	47.5	87.4	77.6	10	50.0-150			11.9	20
(S) o-Terphenyl					*71.8*	*77.1*		*18.0-148*				

Sample Narrative:

OS: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3511109-1 03/22/20 09:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00135	0.0200
Alpha BHC	U		0.00136	0.0200
Beta BHC	U		0.00160	0.0200
Delta BHC	U		0.00143	0.0200
Gamma BHC	U		0.00145	0.0200
4,4-DDD	U		0.00156	0.0200
4,4-DDE	U		0.00154	0.0200
4,4-DDT	U		0.00200	0.0200
Dieldrin	U		0.00152	0.0200
Endosulfan I	U		0.00149	0.0200
Endosulfan II	U		0.00160	0.0200
Endosulfan sulfate	U		0.00151	0.0200
Endrin	U		0.00157	0.0200
Endrin aldehyde	U		0.00129	0.0200
Endrin ketone	U		0.00165	0.0200
Heptachlor	U		0.00154	0.0200
Heptachlor epoxide	U		0.00161	0.0200
Hexachlorobenzene	U		0.00124	0.0200
Methoxychlor	U		0.00178	0.0200
Chlordane	U		0.0390	0.200
Toxaphene	U		0.0360	0.400
(S) Decachlorobiphenyl	*89.0*			*10.0-135*
(S) Tetrachloro-m-xylene	*84.5*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3511109-2 03/22/20 10:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0609	91.4	34.0-136	
Alpha BHC	0.0666	0.0608	91.3	34.0-139	
Beta BHC	0.0666	0.0593	89.0	34.0-133	
Delta BHC	0.0666	0.0636	95.5	34.0-135	
Gamma BHC	0.0666	0.0630	94.6	34.0-136	
4,4-DDD	0.0666	0.0696	105	33.0-141	
4,4-DDE	0.0666	0.0633	95.0	34.0-134	
4,4-DDT	0.0666	0.0654	98.2	30.0-143	
Dieldrin	0.0666	0.0657	98.6	35.0-137	
Endosulfan I	0.0666	0.0656	98.5	34.0-134	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS)

(LCS) R3511109-2 03/22/20 10:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0591	88.7	35.0-132	
Endosulfan sulfate	0.0666	0.0627	94.1	35.0-132	
Endrin	0.0666	0.0664	99.7	34.0-137	
Endrin aldehyde	0.0666	0.0431	64.7	23.0-121	
Endrin ketone	0.0666	0.0695	104	35.0-144	
Heptachlor	0.0666	0.0679	102	36.0-141	
Heptachlor epoxide	0.0666	0.0621	93.2	36.0-134	
Hexachlorobenzene	0.0666	0.0606	91.0	33.0-129	
Methoxychlor	0.0666	0.0673	101	28.0-150	
(S) Decachlorobiphenyl			*89.2*	*10.0-135*	
(S) Tetrachloro-m-xylene			*86.0*	*10.0-139*	

L1200346-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1200346-09 03/22/20 12:13 • (MS) R3511109-3 03/22/20 12:28 • (MSD) R3511109-4 03/22/20 12:43

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aldrin	0.0666	ND	0.0547	0.0432	82.1	64.9	1	20.0-135			23.5	37
Alpha BHC	0.0666	ND	0.0609	0.0592	91.4	88.9	1	27.0-140			2.83	35
Beta BHC	0.0666	ND	0.0600	0.0590	90.1	88.6	1	23.0-141			1.68	37
Delta BHC	0.0666	ND	0.0642	0.0628	96.4	94.3	1	21.0-138			2.20	35
Gamma BHC	0.0666	ND	0.0635	0.0621	95.3	93.2	1	27.0-137			2.23	36
4,4-DDD	0.0666	ND	0.0626	0.0534	94.0	80.2	1	15.0-152			15.9	39
4,4-DDE	0.0666	ND	0.0589	0.0396	88.4	59.5	1	10.0-152			39.2	40
4,4-DDT	0.0666	ND	0.0566	0.0440	85.0	66.1	1	10.0-151			25.0	40
Dieldrin	0.0666	ND	0.0623	0.0556	93.5	83.5	1	17.0-145			11.4	37
Endosulfan I	0.0666	ND	0.0655	0.0515	98.3	77.3	1	20.0-137			23.9	36
Endosulfan II	0.0666	ND	0.0574	0.0535	86.2	80.3	1	15.0-141			7.03	37
Endosulfan sulfate	0.0666	ND	0.0623	0.0588	93.5	88.3	1	15.0-143			5.78	38
Endrin	0.0666	ND	0.0612	0.0558	91.9	83.8	1	19.0-143			9.23	37
Endrin aldehyde	0.0666	ND	0.0604	0.0575	90.7	86.3	1	10.0-139			4.92	40
Endrin ketone	0.0666	ND	0.0694	0.0665	104	99.8	1	17.0-149			4.27	38
Heptachlor	0.0666	ND	0.0631	0.0522	94.7	78.4	1	22.0-138			18.9	37
Heptachlor epoxide	0.0666	ND	0.0598	0.0530	89.8	79.6	1	22.0-138			12.1	36
Hexachlorobenzene	0.0666	ND	0.0562	0.0484	84.4	72.7	1	25.0-126			14.9	35
Methoxychlor	0.0666	ND	0.0596	0.0497	89.5	74.6	1	10.0-159			18.1	40
(S) Decachlorobiphenyl					*89.6*	*88.6*		*10.0-135*				
(S) Tetrachloro-m-xylene					*86.9*	*85.4*		*10.0-139*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCREDITATIONS & LOCATIONS

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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

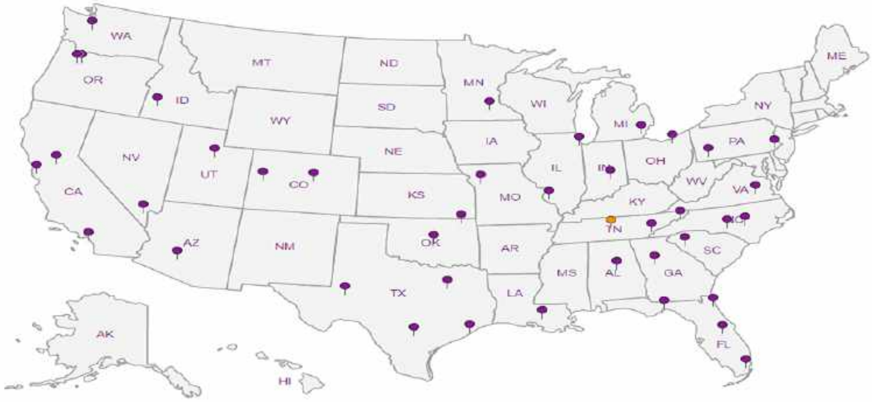
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Report to:
Kristi Barnette

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Email To: **krbarnette@tgeresources.com**

Pres Chk

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

Project Description: **Future Federal Way Emergency**

City/State Collected: Fed Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project # **TGERESHTX-8933**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # ~~8933~~ 8932

Collected by (signature): K Barnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
~~___ Two Day~~ ~~___ 10 Day (Rad Only)~~
___ Three Day

Quote #

Date Results Needed

~~Immediately~~
Packed on Ice N ___ Y X

12 01473
D230

Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P760774**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRAS 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	RCRA Pb	RCRA Cd	RCRA As	% moisture	OC Pesticides	RCRA Cr	Remarks	Sample # (lab only)
B1-4 Center	Grab	SS	2	3/20/20	705	3		X						X				01
B1 N. Sidewall	Grab	SS	5	3/20/20	708	3		X					X	X				02
B1-5 Center	Grab	SS	2	3/20/20	707	3		X						X				03
B1 NE Sidewall	Grab	SS	2	3/20/20	706	3		X					X	X				04
A1-1 W. Sidewall	Grab	SS	2	3/20/20	748	3							X	X				05
A1-1 Center	Grab	SS	2	3/20/20	749	3							X	X				06
A1-2 W. Sidewall	Grab	SS	2	3/20/20	750	3							X	X				07
A1-1 E Sidewall	Grab	SS	2	3/20/20	755	3							X	X				08
A5-1 W. Sidewall	Grab	SS	8	3/20/20	920	3							X	X				09
A5-2 W. Sidewall	Grab	SS	8	3/20/20	921	3							X	X				10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: ****Log as R1 same day TAT****

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 1674 2749 9826 / 1275 8604 0804

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 1	
K Barnette	3/20/20	1400			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C 2.6+.2=2.8	Bottles Received: 51
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3-21-20	Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Email To: **krbarnette@tgeresources.com**

Pres Chk

Report to:
Kristi Barnette

Project Description: **Future Federal Way Emergency**

City/State Collected: Fedway, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project #
TGERESHTX-8933

Collected by (print): KBarnette

Site/Facility ID #

P.O. #
~~**8933**~~ 8932

Quote #

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Immediately Packed on Ice N ___ Y X

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

SDG # 1201473

Table #

Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P760774**
PM: 134 - Mark W. Beasley
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	RCRA Pb	RCRA Cd	RCRA As	% moisture	OC Pesticides	RCRA Cr	Remarks	Sample # (lab only)
A5-1 W. Sidewall	Grab	SS	3	3/20/20	920	3							X	X				11
A5-2 W. Sidewall	Grab	SS	3	3/20/20	921	3							X	X				12
A7 Center	Grab	SS	12	3/20/20	1145	3								X	X			13
A7 Sidewall	Grab	SS	11	3/20/20	1146	3								X	X			14
A6 Center	Grab	SS	6	3/20/20	1300	3								X	X	X		15
A1-2 Center	Grab	SS	1.5	3/20/20	1315	3							X	X				16
A1-3 Center	Grab	SS	1.5	3/20/20	1316	3							X	X				17
A4 Center	Grab	SS	7	3/20/20	1400	3							X	X				18
A4 Sidewall	Grab	SS	6.5	3/20/20	1401	3							X	X				19
~~A1 N. Sidewall~~	~~Grab~~	~~SS~~	~~1.5~~	~~3/20/20~~	~~1413~~	~~3~~							~~X~~	~~X~~			KB	

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: ****Log as R1 same day TAT****

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCL / MeoH TBR
KBarnette	3/20/20	1550		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C 2.4-.4=2.0 · Bottles Received: 57
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3-21-20 · Time: 0845

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

If preservation required by Login: Date/Time

Hold:

Condition: [✓ NCF] / OK

Kelsey Stephenson

Pace Analytical®
National Center for Testing & Innovation

Login #: L1201473	**Client:TGERESHTX**	**Date:03/21**	**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 / Courie
	Insufficient sample volume.	x	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: Received A2-1 Center and A2-2 Center not listed on COC.

Client informed by:		Call		Email		Voice Mail		Date: 3/21/20	Time: 1100
TSR Initials: MB	Client Contact: Kristi Barnette								

Login Instructions:

Add to COC and run for ASICP & TS

Kelsey Stephenson

<image001.png>

Login #: L1201473	**Client:TGERESHTX**	**Date:03/21**	**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 / Courie
	Insufficient sample volume.	x	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: Received A2-1 Center and A2-2 Center not listed on COC.

A5-1 W SIDEWALL and A5-2 W SIDEWALL listed on COC twice only received one set.

Client informed by:		Call		Email		Voice Mail		Date: 3/21/20	Time: 1100
TSR Initials: MB	Client Contact: Kristi Barnette								

Login Instructions:

Add to COC and run for ASICP & TS

Disregard samples listed twice

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

March 24, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

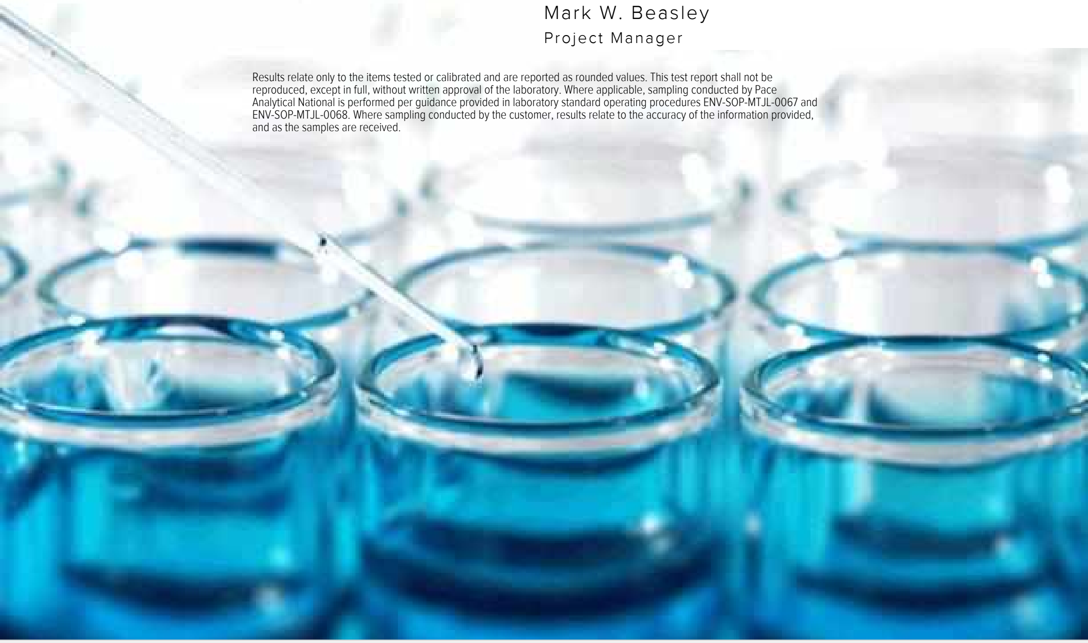
TGE Resources

Sample Delivery Group:	L1201933
Samples Received:	03/24/2020
Project Number:	
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SAMPLE SUMMARY

A1-4 CENTER L1201933-01 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 07:46	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449388	1	03/24/20 12:35	03/24/20 12:43	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449391	1	03/24/20 12:30	03/24/20 13:29	CCE	Mt. Juliet, TN

A1-2 E SIDEWALL L1201933-02 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 07:47	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449388	1	03/24/20 12:35	03/24/20 12:43	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449391	1	03/24/20 12:30	03/24/20 13:41	CCE	Mt. Juliet, TN

A1-1 M SIDEWALL L1201933-03 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 07:45	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449388	1	03/24/20 12:35	03/24/20 12:43	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449391	1	03/24/20 12:30	03/24/20 13:44	CCE	Mt. Juliet, TN

B1 NW SIDEQALL L1201933-04 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 08:40	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449388	1	03/24/20 12:35	03/24/20 12:43	MT	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1449412	1	03/24/20 13:23	03/24/20 16:23	FM	Mt. Juliet, TN

C3E SIDEWALL L1201933-05 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 10:30	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449388	1	03/24/20 12:35	03/24/20 12:43	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449391	1	03/24/20 12:30	03/24/20 13:47	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1449416	1	03/23/20 10:30	03/24/20 13:56	DWR	Mt. Juliet, TN

C3-1 CENTER L1201933-06 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 12:30	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449388	1	03/24/20 12:35	03/24/20 12:43	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449391	1	03/24/20 12:30	03/24/20 13:54	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1449416	1	03/23/20 12:30	03/24/20 14:17	DWR	Mt. Juliet, TN

C3-2 CENTER L1201933-07 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 12:31	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449388	1	03/24/20 12:35	03/24/20 12:43	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449391	1	03/24/20 12:30	03/24/20 13:57	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1449416	1	03/23/20 12:31	03/24/20 14:37	DWR	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

C3 N SIDEWALL L1201933-08 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 12:50	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449388	1	03/24/20 12:35	03/24/20 12:43	MT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449391	1	03/24/20 12:30	03/24/20 14:00	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1449416	1	03/23/20 12:50	03/24/20 15:20	DWR	Mt. Juliet, TN

C1-3 CENTER L1201933-09 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 13:00	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449388	1	03/24/20 12:35	03/24/20 12:43	MT	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1449412	20	03/24/20 13:23	03/24/20 18:30	FM	Mt. Juliet, TN

C1 N SIDEWALL L1201933-10 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 13:01	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449388	1	03/24/20 12:35	03/24/20 12:43	MT	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1449412	10	03/24/20 13:23	03/24/20 20:00	FM	Mt. Juliet, TN

C2 CENTER L1201933-11 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 13:52	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449390	1	03/24/20 12:47	03/24/20 12:56	MT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1449250	25	03/23/20 13:52	03/24/20 12:49	JHH	Mt. Juliet, TN

C2 S SIDEWALL L1201933-12 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 13:53	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449390	1	03/24/20 12:47	03/24/20 12:56	MT	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1449412	5	03/24/20 13:23	03/24/20 18:17	FM	Mt. Juliet, TN

C1-2 CENTER L1201933-13 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/23/20 14:09	03/24/20 09:25

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449390	1	03/24/20 12:47	03/24/20 12:56	MT	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1449412	1	03/24/20 13:23	03/24/20 17:26	FM	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/24/2020 21:45
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1201933-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12 and 13
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1449250, WG1449391, WG1449416, WG1449388, WG1449390 and WG1449412

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?		X			2
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			3
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/24/2020 21:45
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1201933-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12 and 13
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1449250, WG1449391, WG1449416, WG1449388, WG1449390 and WG1449412

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/24/2020 21:45
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1201933-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12 and 13
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1449250, WG1449391, WG1449416, WG1449388, WG1449390 and WG1449412

ER #[1]	**Description**
1	NWTPHDX-NO SGT WG1449412 o-Terphenyl L1201933-09: Percent Recovery is outside of established control limits.
2	8260B WG1449416 2-Butanone (MEK) L1201933-05, 06, 07 and 08: Concentration in the Blank >MQL.
3	8260B WG1449416 2,2-Dichloropropane: Percent Recovery is outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.6		1	03/24/2020 12:43	WG1449388

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.14		0.508	2.00	2.21	1	03/24/2020 13:29	WG1449391

A1-2 E SIDEWALL

Collected date/time: 03/23/20 07:47

SAMPLE RESULTS - 02

L1201933

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.9		1	03/24/2020 12:43	WG1449388

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	14.1		0.501	2.00	2.18	1	03/24/2020 13:41	WG1449391

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.0		1	03/24/2020 12:43	WG1449388

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.42		0.511	2.00	2.22	1	03/24/2020 13:44	WG1449391

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.3		1	03/24/2020 12:43	WG1449388

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.60	4.00	4.80	1	03/24/2020 16:23	WG1449412
Residual Range Organics (RRO)	U		4.00	10.0	12.0	1	03/24/2020 16:23	WG1449412
(S) o-Terphenyl	*60.4*				*18.0-148*		*03/24/2020 16:23*	WG1449412

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.3		1	03/24/2020 12:43	WG1449388

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	4.24		0.208	0.500	0.548	1	03/24/2020 13:47	WG1449391

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0150	0.0250	0.0274	1	03/24/2020 13:56	WG1449416
Acrylonitrile	U		0.00208	0.0125	0.0137	1	03/24/2020 13:56	WG1449416
Benzene	U		0.000438	0.00100	0.00110	1	03/24/2020 13:56	WG1449416
Bromobenzene	U		0.00115	0.0125	0.0137	1	03/24/2020 13:56	WG1449416
Bromodichloromethane	U		0.000863	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
Bromoform	U		0.00655	0.0250	0.0274	1	03/24/2020 13:56	WG1449416
Bromomethane	U		0.00405	0.0125	0.0137	1	03/24/2020 13:56	WG1449416
n-Butylbenzene	U		0.00421	0.0125	0.0137	1	03/24/2020 13:56	WG1449416
sec-Butylbenzene	U		0.00277	0.0125	0.0137	1	03/24/2020 13:56	WG1449416
tert-Butylbenzene	U		0.00170	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
Carbon tetrachloride	U		0.00118	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
Chlorobenzene	U		0.000628	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
Chlorodibromomethane	U		0.000493	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
Chloroethane	U		0.00118	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
Chloroform	U		0.000454	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
Chloromethane	U		0.00152	0.0125	0.0137	1	03/24/2020 13:56	WG1449416
2-Chlorotoluene	U		0.00101	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
4-Chlorotoluene	U		0.00124	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
1,2-Dibromo-3-Chloropropane	U		0.00559	0.0250	0.0274	1	03/24/2020 13:56	WG1449416
1,2-Dibromoethane	U		0.000575	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
Dibromomethane	U		0.00110	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
1,2-Dichlorobenzene	U		0.00159	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
1,3-Dichlorobenzene	U		0.00186	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
1,4-Dichlorobenzene	U		0.00216	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
Dichlorodifluoromethane	U		0.000896	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
1,1-Dichloroethane	U		0.000630	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
1,2-Dichloroethane	U		0.000520	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
1,1-Dichloroethene	U		0.000548	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
cis-1,2-Dichloroethene	U		0.000756	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
trans-1,2-Dichloroethene	U		0.00157	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
1,2-Dichloropropane	U		0.00139	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
1,1-Dichloropropene	U		0.000767	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
1,3-Dichloropropane	U		0.00192	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
cis-1,3-Dichloropropene	U		0.000742	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
trans-1,3-Dichloropropene	U		0.00168	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
2,2-Dichloropropane	U	J4	0.000868	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
Di-isopropyl ether	U		0.000383	0.00100	0.00110	1	03/24/2020 13:56	WG1449416
Ethylbenzene	U		0.000580	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
Hexachloro-1,3-butadiene	U		0.0139	0.0250	0.0274	1	03/24/2020 13:56	WG1449416
Isopropylbenzene	U		0.000945	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
p-Isopropyltoluene	0.00436	J	0.00255	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
2-Butanone (MEK)	0.0683	B	0.0137	0.0250	0.0274	1	03/24/2020 13:56	WG1449416
Methylene Chloride	U		0.00727	0.0250	0.0274	1	03/24/2020 13:56	WG1449416
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0250	0.0274	1	03/24/2020 13:56	WG1449416
Methyl tert-butyl ether	U		0.000323	0.00100	0.00110	1	03/24/2020 13:56	WG1449416

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Naphthalene	U		0.00342	0.0125	0.0137	1	03/24/2020 13:56	WG1449416
n-Propylbenzene	U		0.00129	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
Styrene	U		0.00299	0.0125	0.0137	1	03/24/2020 13:56	WG1449416
1,1,1,2-Tetrachloroethane	U		0.000548	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
1,1,2,2-Tetrachloroethane	U		0.000427	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
1,1,2-Trichlorotrifluoroethane	U		0.000739	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
Tetrachloroethene	U		0.000767	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
Toluene	U		0.00137	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
1,2,3-Trichlorobenzene	U		0.000684	0.0125	0.0137	1	03/24/2020 13:56	WG1449416
1,2,4-Trichlorobenzene	U		0.00528	0.0125	0.0137	1	03/24/2020 13:56	WG1449416
1,1,1-Trichloroethane	U		0.000301	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
1,1,2-Trichloroethane	U		0.000967	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
Trichloroethene	U		0.000438	0.00100	0.00110	1	03/24/2020 13:56	WG1449416
Trichlorofluoromethane	U		0.000548	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
1,2,3-Trichloropropane	U		0.00559	0.0125	0.0137	1	03/24/2020 13:56	WG1449416
1,2,4-Trimethylbenzene	U		0.00127	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
1,2,3-Trimethylbenzene	U		0.00126	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
1,3,5-Trimethylbenzene	U		0.00118	0.00500	0.00548	1	03/24/2020 13:56	WG1449416
Vinyl chloride	U		0.000748	0.00250	0.00274	1	03/24/2020 13:56	WG1449416
Xylenes, Total	U		0.00523	0.00650	0.00712	1	03/24/2020 13:56	WG1449416
(S) Toluene-d8	*107*				*75.0-131*		*03/24/2020 13:56*	WG1449416
(S) 4-Bromofluorobenzene	*99.8*				*67.0-138*		*03/24/2020 13:56*	WG1449416
(S) 1,2-Dichloroethane-d4	*113*				*70.0-130*		*03/24/2020 13:56*	WG1449416

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	92.3		1	03/24/2020 12:43	WG1449388

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chromium	17.0		0.152	1.00	1.08	1	03/24/2020 13:54	WG1449391
Lead	4.21		0.206	0.500	0.542	1	03/24/2020 13:54	WG1449391

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0148	0.0250	0.0271	1	03/24/2020 14:17	WG1449416
Acrylonitrile	U		0.00206	0.0125	0.0135	1	03/24/2020 14:17	WG1449416
Benzene	0.00277		0.000433	0.00100	0.00108	1	03/24/2020 14:17	WG1449416
Bromobenzene	U		0.00114	0.0125	0.0135	1	03/24/2020 14:17	WG1449416
Bromodichloromethane	U		0.000853	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
Bromoform	U		0.00648	0.0250	0.0271	1	03/24/2020 14:17	WG1449416
Bromomethane	U		0.00401	0.0125	0.0135	1	03/24/2020 14:17	WG1449416
n-Butylbenzene	U		0.00416	0.0125	0.0135	1	03/24/2020 14:17	WG1449416
sec-Butylbenzene	U		0.00274	0.0125	0.0135	1	03/24/2020 14:17	WG1449416
tert-Butylbenzene	U		0.00168	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
Carbon tetrachloride	U		0.00117	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
Chlorobenzene	U		0.000621	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
Chlorodibromomethane	U		0.000487	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
Chloroethane	U		0.00117	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
Chloroform	0.000840	J	0.000449	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
Chloromethane	U		0.00151	0.0125	0.0135	1	03/24/2020 14:17	WG1449416
2-Chlorotoluene	U		0.000996	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
4-Chlorotoluene	U		0.00122	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
1,2-Dibromo-3-Chloropropane	U		0.00552	0.0250	0.0271	1	03/24/2020 14:17	WG1449416
1,2-Dibromoethane	U		0.000569	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
Dibromomethane	U		0.00108	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
1,2-Dichlorobenzene	U		0.00157	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
1,3-Dichlorobenzene	U		0.00184	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
1,4-Dichlorobenzene	U		0.00213	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
Dichlorodifluoromethane	U		0.000886	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
1,1-Dichloroethane	U		0.000623	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
1,2-Dichloroethane	U		0.000514	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
1,1-Dichloroethene	U		0.000542	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
cis-1,2-Dichloroethene	U		0.000747	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
trans-1,2-Dichloroethene	U		0.00155	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
1,2-Dichloropropane	U		0.00138	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
1,1-Dichloropropene	U		0.000758	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
1,3-Dichloropropane	U		0.00190	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
cis-1,3-Dichloropropene	U		0.000734	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
trans-1,3-Dichloropropene	U		0.00166	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
2,2-Dichloropropane	U	J4	0.000859	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
Di-isopropyl ether	U		0.000379	0.00100	0.00108	1	03/24/2020 14:17	WG1449416
Ethylbenzene	0.00213	J	0.000574	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
Hexachloro-1,3-butadiene	U		0.0138	0.0250	0.0271	1	03/24/2020 14:17	WG1449416
Isopropylbenzene	0.00305		0.000935	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
p-Isopropyltoluene	0.0185		0.00252	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
2-Butanone (MEK)	0.0584	B	0.0135	0.0250	0.0271	1	03/24/2020 14:17	WG1449416
Methylene Chloride	U		0.00719	0.0250	0.0271	1	03/24/2020 14:17	WG1449416
4-Methyl-2-pentanone (MIBK)	U		0.0108	0.0250	0.0271	1	03/24/2020 14:17	WG1449416

C3-1 CENTER

Collected date/time: 03/23/20 12:30

SAMPLE RESULTS - 06

L1201933

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000320	0.00100	0.00108	1	03/24/2020 14:17	WG1449416
Naphthalene	U		0.00338	0.0125	0.0135	1	03/24/2020 14:17	WG1449416
n-Propylbenzene	U		0.00128	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
Styrene	U		0.00296	0.0125	0.0135	1	03/24/2020 14:17	WG1449416
1,1,1,2-Tetrachloroethane	U		0.000542	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
1,1,2,2-Tetrachloroethane	U		0.000422	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
1,1,2-Trichlorotrifluoroethane	U		0.000731	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
Tetrachloroethene	U		0.000758	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
Toluene	0.0140		0.00135	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
1,2,3-Trichlorobenzene	0.00517	J	0.000677	0.0125	0.0135	1	03/24/2020 14:17	WG1449416
1,2,4-Trichlorobenzene	U		0.00522	0.0125	0.0135	1	03/24/2020 14:17	WG1449416
1,1,1-Trichloroethane	U		0.000298	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
1,1,2-Trichloroethane	U		0.000956	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
Trichloroethene	U		0.000433	0.00100	0.00108	1	03/24/2020 14:17	WG1449416
Trichlorofluoromethane	U		0.000542	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
1,2,3-Trichloropropane	U		0.00552	0.0125	0.0135	1	03/24/2020 14:17	WG1449416
1,2,4-Trimethylbenzene	0.00127	J	0.00126	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
1,2,3-Trimethylbenzene	U		0.00125	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
1,3,5-Trimethylbenzene	U		0.00117	0.00500	0.00542	1	03/24/2020 14:17	WG1449416
Vinyl chloride	U		0.000740	0.00250	0.00271	1	03/24/2020 14:17	WG1449416
Xylenes, Total	U		0.00518	0.00650	0.00704	1	03/24/2020 14:17	WG1449416
(S) Toluene-d8	*104*				*75.0-131*		*03/24/2020 14:17*	WG1449416
(S) 4-Bromofluorobenzene	*95.1*				*67.0-138*		*03/24/2020 14:17*	WG1449416
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*03/24/2020 14:17*	WG1449416

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	74.8		1	03/24/2020 12:43	WG1449388

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Lead	26.6		0.254	0.500	0.669	1	03/24/2020 13:57	WG1449391

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0183	0.0250	0.0334	1	03/24/2020 14:37	WG1449416
Acrylonitrile	U		0.00254	0.0125	0.0167	1	03/24/2020 14:37	WG1449416
Benzene	U		0.000535	0.00100	0.00134	1	03/24/2020 14:37	WG1449416
Bromobenzene	U		0.00140	0.0125	0.0167	1	03/24/2020 14:37	WG1449416
Bromodichloromethane	U		0.00105	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
Bromoform	U		0.00800	0.0250	0.0334	1	03/24/2020 14:37	WG1449416
Bromomethane	U		0.00495	0.0125	0.0167	1	03/24/2020 14:37	WG1449416
n-Butylbenzene	U		0.00514	0.0125	0.0167	1	03/24/2020 14:37	WG1449416
sec-Butylbenzene	U		0.00338	0.0125	0.0167	1	03/24/2020 14:37	WG1449416
tert-Butylbenzene	U		0.00207	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
Carbon tetrachloride	U		0.00144	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
Chlorobenzene	U		0.000766	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
Chlorodibromomethane	U		0.000602	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
Chloroethane	U		0.00144	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
Chloroform	U		0.000555	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
Chloromethane	U		0.00186	0.0125	0.0167	1	03/24/2020 14:37	WG1449416
2-Chlorotoluene	U		0.00123	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
4-Chlorotoluene	U		0.00151	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
1,2-Dibromo-3-Chloropropane	U		0.00682	0.0250	0.0334	1	03/24/2020 14:37	WG1449416
1,2-Dibromoethane	U		0.000702	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
Dibromomethane	U		0.00134	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
1,2-Dichlorobenzene	U		0.00194	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
1,3-Dichlorobenzene	U		0.00227	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
1,4-Dichlorobenzene	U		0.00263	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
Dichlorodifluoromethane	U		0.00109	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
1,1-Dichloroethane	U		0.000769	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
1,2-Dichloroethane	U		0.000635	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
1,1-Dichloroethene	U		0.000669	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
cis-1,2-Dichloroethene	U		0.000923	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
trans-1,2-Dichloroethene	U		0.00191	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
1,2-Dichloropropane	U		0.00170	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
1,1-Dichloropropene	U		0.000936	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
1,3-Dichloropropane	U		0.00234	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
cis-1,3-Dichloropropene	U		0.000907	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
trans-1,3-Dichloropropene	U		0.00205	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
2,2-Dichloropropane	U	J4	0.00106	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
Di-isopropyl ether	U		0.000468	0.00100	0.00134	1	03/24/2020 14:37	WG1449416
Ethylbenzene	U		0.000709	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
Hexachloro-1,3-butadiene	U		0.0170	0.0250	0.0334	1	03/24/2020 14:37	WG1449416
Isopropylbenzene	U		0.00115	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
p-Isopropyltoluene	U		0.00312	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
2-Butanone (MEK)	0.0721	B	0.0167	0.0250	0.0334	1	03/24/2020 14:37	WG1449416
Methylene Chloride	U		0.00888	0.0250	0.0334	1	03/24/2020 14:37	WG1449416
4-Methyl-2-pentanone (MIBK)	U		0.0134	0.0250	0.0334	1	03/24/2020 14:37	WG1449416
Methyl tert-butyl ether	U		0.000395	0.00100	0.00134	1	03/24/2020 14:37	WG1449416

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Naphthalene	U		0.00417	0.0125	0.0167	1	03/24/2020 14:37	WG1449416
n-Propylbenzene	U		0.00158	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
Styrene	U		0.00365	0.0125	0.0167	1	03/24/2020 14:37	WG1449416
1,1,1,2-Tetrachloroethane	U		0.000669	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
1,1,2,2-Tetrachloroethane	U		0.000522	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
1,1,2-Trichlorotrifluoroethane	U		0.000903	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
Tetrachloroethene	U		0.000936	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
Toluene	U		0.00167	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
1,2,3-Trichlorobenzene	U		0.000836	0.0125	0.0167	1	03/24/2020 14:37	WG1449416
1,2,4-Trichlorobenzene	U		0.00645	0.0125	0.0167	1	03/24/2020 14:37	WG1449416
1,1,1-Trichloroethane	U		0.000368	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
1,1,2-Trichloroethane	U		0.00118	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
Trichloroethene	U		0.000535	0.00100	0.00134	1	03/24/2020 14:37	WG1449416
Trichlorofluoromethane	U		0.000669	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
1,2,3-Trichloropropane	U		0.00682	0.0125	0.0167	1	03/24/2020 14:37	WG1449416
1,2,4-Trimethylbenzene	U		0.00155	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
1,2,3-Trimethylbenzene	U		0.00154	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
1,3,5-Trimethylbenzene	U		0.00144	0.00500	0.00669	1	03/24/2020 14:37	WG1449416
Vinyl chloride	U		0.000914	0.00250	0.00334	1	03/24/2020 14:37	WG1449416
Xylenes, Total	U		0.00639	0.00650	0.00869	1	03/24/2020 14:37	WG1449416
(S) Toluene-d8	*105*				*75.0-131*		*03/24/2020 14:37*	WG1449416
(S) 4-Bromofluorobenzene	*97.1*				*67.0-138*		*03/24/2020 14:37*	WG1449416
(S) 1,2-Dichloroethane-d4	*117*				*70.0-130*		*03/24/2020 14:37*	WG1449416

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	81.3		1	03/24/2020 12:43	WG1449388

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Lead	1.62		0.234	0.500	0.615	1	03/24/2020 14:00	WG1449391

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0169	0.0250	0.0308	1	03/24/2020 15:20	WG1449416
Acrylonitrile	U		0.00234	0.0125	0.0154	1	03/24/2020 15:20	WG1449416
Benzene	U		0.000492	0.00100	0.00123	1	03/24/2020 15:20	WG1449416
Bromobenzene	U		0.00129	0.0125	0.0154	1	03/24/2020 15:20	WG1449416
Bromodichloromethane	U		0.000969	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
Bromoform	U		0.00736	0.0250	0.0308	1	03/24/2020 15:20	WG1449416
Bromomethane	U		0.00455	0.0125	0.0154	1	03/24/2020 15:20	WG1449416
n-Butylbenzene	U		0.00472	0.0125	0.0154	1	03/24/2020 15:20	WG1449416
sec-Butylbenzene	U		0.00311	0.0125	0.0154	1	03/24/2020 15:20	WG1449416
tert-Butylbenzene	U		0.00191	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
Carbon tetrachloride	U		0.00133	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
Chlorobenzene	U		0.000705	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
Chlorodibromomethane	U		0.000554	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
Chloroethane	U		0.00133	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
Chloroform	U		0.000511	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
Chloromethane	U		0.00171	0.0125	0.0154	1	03/24/2020 15:20	WG1449416
2-Chlorotoluene	U		0.00113	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
4-Chlorotoluene	U		0.00139	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
1,2-Dibromo-3-Chloropropane	U		0.00627	0.0250	0.0308	1	03/24/2020 15:20	WG1449416
1,2-Dibromoethane	U		0.000646	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
Dibromomethane	U		0.00123	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
1,2-Dichlorobenzene	U		0.00178	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
1,3-Dichlorobenzene	U		0.00209	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
1,4-Dichlorobenzene	U		0.00242	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
Dichlorodifluoromethane	U		0.00101	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
1,1-Dichloroethane	U		0.000707	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
1,2-Dichloroethane	U		0.000584	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
1,1-Dichloroethene	U		0.000615	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
cis-1,2-Dichloroethene	U		0.000849	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
trans-1,2-Dichloroethene	U		0.00176	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
1,2-Dichloropropane	U		0.00156	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
1,1-Dichloropropene	U		0.000861	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
1,3-Dichloropropane	U		0.00215	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
cis-1,3-Dichloropropene	U		0.000834	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
trans-1,3-Dichloropropene	U		0.00188	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
2,2-Dichloropropane	U	J4	0.000976	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
Di-isopropyl ether	U		0.000431	0.00100	0.00123	1	03/24/2020 15:20	WG1449416
Ethylbenzene	U		0.000652	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
Hexachloro-1,3-butadiene	U		0.0156	0.0250	0.0308	1	03/24/2020 15:20	WG1449416
Isopropylbenzene	U		0.00106	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
p-Isopropyltoluene	U		0.00287	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
2-Butanone (MEK)	0.0428	B	0.0154	0.0250	0.0308	1	03/24/2020 15:20	WG1449416
Methylene Chloride	U		0.00817	0.0250	0.0308	1	03/24/2020 15:20	WG1449416
4-Methyl-2-pentanone (MIBK)	U		0.0123	0.0250	0.0308	1	03/24/2020 15:20	WG1449416
Methyl tert-butyl ether	U		0.000363	0.00100	0.00123	1	03/24/2020 15:20	WG1449416

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Naphthalene	U		0.00384	0.0125	0.0154	1	03/24/2020 15:20	WG1449416
n-Propylbenzene	U		0.00145	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
Styrene	U		0.00336	0.0125	0.0154	1	03/24/2020 15:20	WG1449416
1,1,1,2-Tetrachloroethane	U		0.000615	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
1,1,2,2-Tetrachloroethane	U		0.000480	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
1,1,2-Trichlorotrifluoroethane	U		0.000830	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
Tetrachloroethene	U		0.000861	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
Toluene	U		0.00154	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
1,2,3-Trichlorobenzene	U		0.000769	0.0125	0.0154	1	03/24/2020 15:20	WG1449416
1,2,4-Trichlorobenzene	U		0.00593	0.0125	0.0154	1	03/24/2020 15:20	WG1449416
1,1,1-Trichloroethane	U		0.000338	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
1,1,2-Trichloroethane	U		0.00109	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
Trichloroethene	U		0.000492	0.00100	0.00123	1	03/24/2020 15:20	WG1449416
Trichlorofluoromethane	U		0.000615	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
1,2,3-Trichloropropane	U		0.00627	0.0125	0.0154	1	03/24/2020 15:20	WG1449416
1,2,4-Trimethylbenzene	U		0.00143	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
1,2,3-Trimethylbenzene	U		0.00141	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
1,3,5-Trimethylbenzene	U		0.00133	0.00500	0.00615	1	03/24/2020 15:20	WG1449416
Vinyl chloride	U		0.000840	0.00250	0.00308	1	03/24/2020 15:20	WG1449416
Xylenes, Total	U		0.00588	0.00650	0.00800	1	03/24/2020 15:20	WG1449416
(S) Toluene-d8	*103*				*75.0-131*		*03/24/2020 15:20*	WG1449416
(S) 4-Bromofluorobenzene	*93.1*				*67.0-138*		*03/24/2020 15:20*	WG1449416
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*03/24/2020 15:20*	WG1449416

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.1		1	03/24/2020 12:43	WG1449388

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	80.5	J	29.2	4.00	87.8	20	03/24/2020 18:30	WG1449412
Residual Range Organics (RRO)	258		73.1	10.0	219	20	03/24/2020 18:30	WG1449412
(S) o-Terphenyl	*66.5*	J7			*18.0-148*		*03/24/2020 18:30*	WG1449412

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.6		1	03/24/2020 12:43	WG1449388

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		14.7	4.00	44.2	10	03/24/2020 20:00	WG1449412
Residual Range Organics (RRO)	153		36.8	10.0	110	10	03/24/2020 20:00	WG1449412
(S) o-Terphenyl	*68.3*				*18.0-148*		*03/24/2020 20:00*	WG1449412

Sample Narrative:

L1201933-10 WG1449412: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.9		1	03/24/2020 12:56	WG1449390

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.61	J	0.953	0.100	2.81	25	03/24/2020 12:49	WG1449250
(S) a,a,a-Trifluorotoluene(FID)	*99.7*				*77.0-120*		*03/24/2020 12:49*	WG1449250

C2 S SIDEWALL

Collected date/time: 03/23/20 13:53

SAMPLE RESULTS - 12

L1201933

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.5		1	03/24/2020 12:56	WG1449390

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	41.7		7.96	4.00	24.0	5	03/24/2020 18:17	WG1449412
Residual Range Organics (RRO)	193		19.9	10.0	59.9	5	03/24/2020 18:17	WG1449412
(S) o-Terphenyl	*62.7*				*18.0-148*		*03/24/2020 18:17*	WG1449412

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.0		1	03/24/2020 12:56	WG1449390

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	14.3		1.51	4.00	4.54	1	03/24/2020 17:26	WG1449412
Residual Range Organics (RRO)	32.4		3.78	10.0	11.4	1	03/24/2020 17:26	WG1449412
(S) o-Terphenyl	*57.6*				*18.0-148*		*03/24/2020 17:26*	WG1449412

Method Blank (MB)

(MB) R3512049-1 03/24/20 12:43

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1201933-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1201933-01 03/24/20 12:43 • (DUP) R3512049-3 03/24/20 12:43

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	90.6	90.5	1	0.200		10

Laboratory Control Sample (LCS)

(LCS) R3512049-2 03/24/20 12:43

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) R3512051-1 03/24/20 12:56

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1201933-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1201933-13 03/24/20 12:56 • (DUP) R3512051-3 03/24/20 12:56

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.0	85.1	1	3.40		10

Laboratory Control Sample (LCS)

(LCS) R3512051-2 03/24/20 12:56

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) R3511933-1 03/24/20 13:24

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Arsenic	U		0.460	2.00
Chromium	U		0.140	1.00
Lead	U		0.190	0.500

Laboratory Control Sample (LCS)

(LCS) R3511933-2 03/24/20 13:26

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	91.6	91.6	80.0-120	
Chromium	100	104	104	80.0-120	
Lead	100	93.5	93.5	80.0-120	

L1201933-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1201933-01 03/24/20 13:29 • (MS) R3511933-5 03/24/20 13:36 • (MSD) R3511933-6 03/24/20 13:39

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	110	4.14	97.9	95.5	85.0	82.8	1	75.0-125			2.56	20
Chromium	110	28.6	129	129	91.2	91.3	1	75.0-125			0.0868	20
Lead	110	18.1	111	109	83.8	82.4	1	75.0-125			1.44	20

WG1449250

Volatile Organic Compounds (GC) by Method NWTPHGX

Method Blank (MB)

(MB) R3511886-3 03/24/20 09:17

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) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3511886-1 03/24/20 08:05 • (LCSD) R3511886-2 03/24/20 08:29

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 %
Gasoline Range Organics-NWTPH	5.50	4.91	4.43	89.3	80.5	71.0-124			10.3	20
(S) a,a,a-Trifluorotoluene(FID)				*106*	*106*	*77.0-120*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3512002-2 03/24/20 13:15

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
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 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
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
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3512002-2 03/24/20 13:15

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0545		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 chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*107*			*75.0-131*
(S) 4-Bromofluorobenzene	*96.1*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3512002-1 03/24/20 12:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.821	131	10.0-160	
Acrylonitrile	0.625	0.553	88.5	45.0-153	
Benzene	0.125	0.116	92.8	70.0-123	
Bromobenzene	0.125	0.123	98.4	73.0-121	
Bromodichloromethane	0.125	0.137	110	73.0-121	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS)

(LCS) R3512002-1 03/24/20 12:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.110	88.0	64.0-132	
Bromomethane	0.125	0.104	83.2	56.0-147	
n-Butylbenzene	0.125	0.129	103	68.0-135	
sec-Butylbenzene	0.125	0.127	102	74.0-130	
tert-Butylbenzene	0.125	0.127	102	75.0-127	
Carbon tetrachloride	0.125	0.122	97.6	66.0-128	
Chlorobenzene	0.125	0.116	92.8	76.0-128	
Chlorodibromomethane	0.125	0.125	100	74.0-127	
Chloroethane	0.125	0.0999	79.9	61.0-134	
Chloroform	0.125	0.135	108	72.0-123	
Chloromethane	0.125	0.104	83.2	51.0-138	
2-Chlorotoluene	0.125	0.117	93.6	75.0-124	
4-Chlorotoluene	0.125	0.152	122	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.118	94.4	59.0-130	
1,2-Dibromoethane	0.125	0.133	106	74.0-128	
Dibromomethane	0.125	0.126	101	75.0-122	
1,2-Dichlorobenzene	0.125	0.126	101	76.0-124	
1,3-Dichlorobenzene	0.125	0.134	107	76.0-125	
1,4-Dichlorobenzene	0.125	0.124	99.2	77.0-121	
Dichlorodifluoromethane	0.125	0.182	146	43.0-156	
1,1-Dichloroethane	0.125	0.114	91.2	70.0-127	
1,2-Dichloroethane	0.125	0.151	121	65.0-131	
1,1-Dichloroethene	0.125	0.112	89.6	65.0-131	
cis-1,2-Dichloroethene	0.125	0.115	92.0	73.0-125	
trans-1,2-Dichloroethene	0.125	0.112	89.6	71.0-125	
1,2-Dichloropropane	0.125	0.121	96.8	74.0-125	
1,1-Dichloropropene	0.125	0.112	89.6	73.0-125	
1,3-Dichloropropane	0.125	0.140	112	80.0-125	
cis-1,3-Dichloropropene	0.125	0.107	85.6	76.0-127	
trans-1,3-Dichloropropene	0.125	0.140	112	73.0-127	
2,2-Dichloropropane	0.125	0.173	138	59.0-135	J4
Di-isopropyl ether	0.125	0.117	93.6	60.0-136	
Ethylbenzene	0.125	0.111	88.8	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.122	97.6	57.0-150	
Isopropylbenzene	0.125	0.122	97.6	72.0-127	
p-Isopropyltoluene	0.125	0.141	113	72.0-133	
2-Butanone (MEK)	0.625	0.520	83.2	30.0-160	
Methylene Chloride	0.125	0.112	89.6	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.575	92.0	56.0-143	
Methyl tert-butyl ether	0.125	0.161	129	66.0-132	

Laboratory Control Sample (LCS)

(LCS) R3512002-1 03/24/20 12:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.126	101	59.0-130	
n-Propylbenzene	0.125	0.150	120	74.0-126	
Styrene	0.125	0.127	102	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.115	92.0	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.138	110	68.0-128	
Tetrachloroethene	0.125	0.107	85.6	70.0-136	
Toluene	0.125	0.103	82.4	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.0897	71.8	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.115	92.0	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.121	96.8	62.0-137	
1,1,1-Trichloroethane	0.125	0.125	100	69.0-126	
1,1,2-Trichloroethane	0.125	0.102	81.6	78.0-123	
Trichloroethene	0.125	0.113	90.4	76.0-126	
Trichlorofluoromethane	0.125	0.118	94.4	61.0-142	
1,2,3-Trichloropropane	0.125	0.119	95.2	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.132	106	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.134	107	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.140	112	73.0-127	
Vinyl chloride	0.125	0.139	111	63.0-134	
Xylenes, Total	0.375	0.333	88.8	72.0-127	
(S) Toluene-d8			*97.6*	*75.0-131*	
(S) 4-Bromofluorobenzene			*97.2*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*121*	*70.0-130*	

WG1449412 QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT L1201933-04,09,10,12,13

Method Blank (MB)

(MB) R3512071-1 03/24/20 15:57

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	*74.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3512071-2 03/24/20 16:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	41.4	82.8	50.0-150	
(S) o-Terphenyl			*72.2*	*18.0-148*	

L1201917-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1201917-01 03/24/20 16:48 • (MS) R3512071-3 03/24/20 17:01 • (MSD) R3512071-4 03/24/20 17:13

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)	70.5	ND	50.6	55.3	71.8	78.4	1	50.0-150			8.79	20
(S) o-Terphenyl					*48.9*	*48.8*		*18.0-148*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.
J4	The associated batch QC was outside the established quality control range for accuracy.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1,6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T104704245-18-15
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

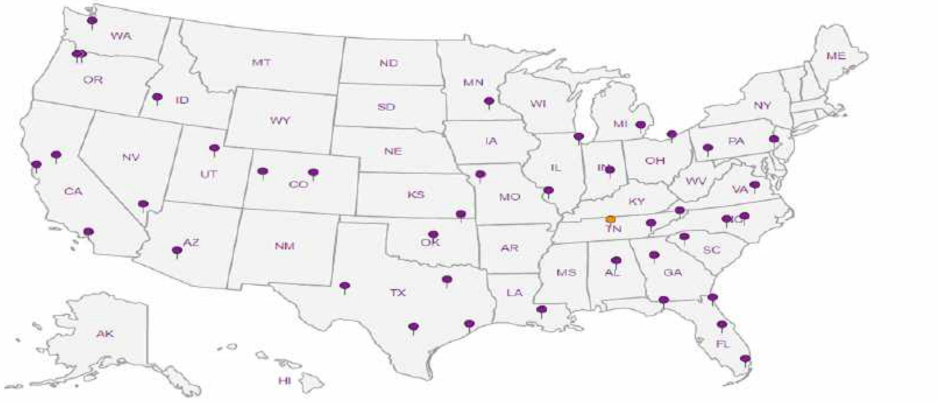
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: krbarnette@tgeresources.com

Project Description: **Future Federal Way Emergency**

City/State Collected: Fed Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project #
TGERESHTX-8933

Collected by (print): K Barnette

Site/Facility ID #

P.O. #
8933 8932

Collected by (signature): KBarnette

Immediately Packed on Ice N____ Y X

Rush? (Lab MUST Be Notified)
X 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 ___ 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

SDG # 1201933

F238

Acctnum: GERESHTX
Template: **T164105**
Prelogin: **P760774**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	RCRA Pb	RCRA Cd	RCRA As	% moisture	OC Pesticides	RCRA Cr	Remarks	Sample # (lab only)
A1-4 Center	Grab	SS	2	3/23/20	746	3							X	X				-01
A1-2 E. Sidewall	Grab	SS	1.5	3/23/20	747	3							X	X				02
A1-1 N. Sidewall	Grab	SS	1.5	3/23/20	745	3							X	X				03
B1 NE Sidewall	Grab	SS	5	3/23/20	840	3		X						X				04
C3 E Sidewall	Grab	SS	7.5	3/23/20	1030	3				X	X			X				05
C3-1 Center	Grab	SS	8	3/23/20	1230	3				X	X			X		X		06
C3-2 Center	Grab	SS	8	3/23/20	1231	3				X	X			X		~~X~~ FB		07
C3 N Sidewall	Grab	SS	7.5	3/23/20	1250	3				X	X			X				08
C1-3 Center	Grab	SS	2	3/23/20	1300	3		X						X				09
C1 N. Sidewall	Grab	SS	1.5	3/23/20	1301	3		X						X				10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: ****Log as R1 same day TAT****

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 4757 5075 2293

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) KBarnette
Date: 3/23/20
Time: 1500
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
HCL / MeoH
TBR

Relinquished by : (Signature)
Date:
Time:
Received by: (Signature)

Temp: AG °C
0.6-.2=0.4
Bottles Received: 39

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature) L Webster
Date: 3/24/20
Time: 08:30

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

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

Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected: Fed Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project # **TGERESHTX-8933**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # ~~8933~~ 8932

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

SDG # 1201933

Table

Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P760774**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	RCRA Pb	RCRA Cd	RCRA As	% moisture	OC Pesticides	RCRA Cr	Remarks	Sample # (lab only)
C2 Center	Grab	SS	4	3/23/20	1352	3			X					X				-11
C2 S. Sidewall	Grab	SS	1.5	3/23/20	1353	3		X						X				12
C1-2 Center	Grab	SS	2	3/23/20	1409	3		X						X				13
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: ****Log as R1 same day TAT****

pH ________ Temp ________
Flow ________ Other ________

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 4757 5075 2293

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) KBarnette	Date: 3/23/20	Time: 1500	Received by: (Signature)	Trip Blank Received: Yes / No [✓ HCL] / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C 0.6-.2=0.4 Bottles Received: 39
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) L. Webster	Date: 3/24/20 Time: 08:30

If preservation required by Login: Date/Time

Hold:

Condition: NCF / [✓ OK]

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

March 25, 2020

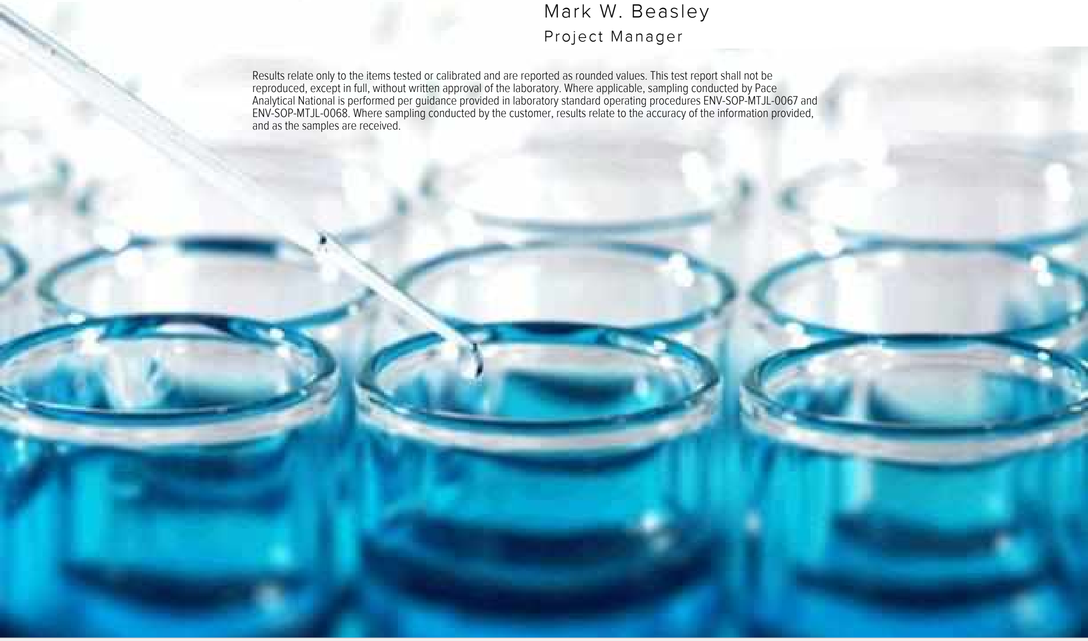
1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1202268
Samples Received:	03/24/2020
Project Number:	
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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    Total Solids by Method 2540 G-2011 10
    Metals (ICP) by Method 6010D 11
Gl: Glossary of Terms 12
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	Collected by	Collected date/time	Received date/time
B1 NW SIDEQALL L1202268-01 Solid	K Barnette	03/23/20 08:40	03/24/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449388	1	03/24/20 12:35	03/24/20 12:43	JAV	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 13:46	CCE	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/25/2020 15:54
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1202268-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1449388 and WG1449994

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/25/2020 15:54
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1202268-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1449388 and WG1449994

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/25/2020 15:54
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1202268-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1449388 and WG1449994

ER #[1]	**Description**
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.3		1	03/24/2020 12:43	WG1449388

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	U		0.552	2.00	2.40	1	03/25/2020 13:46	WG1449994

Method Blank (MB)

(MB) R3512049-1 03/24/20 12:43

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1201933-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1201933-01 03/24/20 12:43 • (DUP) R3512049-3 03/24/20 12:43

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	90.6	90.5	1	0.200		10

Laboratory Control Sample (LCS)

(LCS) R3512049-2 03/24/20 12:43

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) R3512421-1 03/25/20 13:28

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00

Laboratory Control Sample (LCS)

(LCS) R3512421-2 03/25/20 13:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	85.6	85.6	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

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

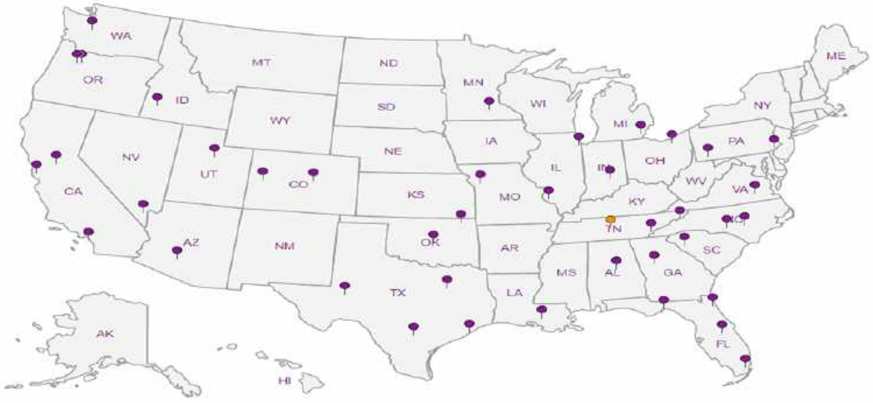
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Email To: krbarnette@tgeresources.com

Report to:
Kristi Barnette

Project Description: **Future Federal Way Emergency**

City/State Collected: Fed Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project #

Lab Project # TGERESHTX-8933

Collected by (print): K Barnette

Site/Facility ID #

P.O. # ~~8933~~ 8932

Collected by (signature): K Barnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

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

SDG # ~~1201939~~

F238
L1202268

AJ 3/25/20

Acctnum: TGERESHTX
Template: T164105
Prelogin: P760774
PM: 134 - Mark W. Beasley
PB:
Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	RCRA Pb	RCRA Cd	RCRA As	% moisture	OC Pesticides	RCRA Cr	Remarks	Sample # (lab only)
A1-4 Center	Grab	SS	2	3/23/20	746	3							X	X				~~01~~
A1-2 E. Sidewall	Grab	SS	1.5	3/23/20	747	3							X	X				~~02~~
A1-1 N. Sidewall	Grab	SS	1.5	3/23/20	745	3							X	X				~~03~~
B1 NE Sidewall	Grab	SS	5	3/23/20	840	3		X						X				~~04~~ -01
C3 E Sidewall	Grab	SS	7.5	3/23/20	1030	3				X	X			X				~~05~~
C3-1 Center	Grab	SS	8	3/23/20	1230	3				X	X			X		X		~~06~~
C3-2 Center	Grab	SS	8	3/23/20	1231	3				X	X			X		~~X~~ CB		~~07~~
C3 N Sidewall	Grab	SS	7.5	3/23/20	1250	3				X	X			X				~~08~~
C1-3 Center	Grab	SS	2	3/23/20	1300	3		X						X				~~09~~
C1 N. Sidewall	Grab	SS	1.5	3/23/20	1301	3		X						X				~~10~~

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ______

Remarks: ****Log as R1 same day TAT****

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ______

Tracking # 4757 5075 2293

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) K Barnett	Date: 3/23/20	Time: 1500	Received by: (Signature)	Trip Blank Received: [✓ Yes] / No HCL / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.6-2=0.4	Bottles Received: 39
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) L. Webster	Date: 3/24/20	Time: 08:30

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Andy Vann

From: Mark Beasley
Sent: Wednesday, March 25, 2020 8:47 AM
To: Project Service; Sample Storage; Due Metals
Subject: L1201933 *TGERESHTX* rush R1 relog

Importance: High

Categories: Same Day

Relog L1201933-04 for ASICP. Transfer TS. Log as R1 due 3/25.

Thanks
Mark

From: Kristi Barnette [mailto:krbarnette@tgeresources.com]
Sent: Tuesday, March 24, 2020 10:42 PM
To: Mark Beasley
Subject: Need arsenic analysis asap
Importance: High

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please run fastest TAT possible arsenic for the following sample...

L1201933-04 (B1 NE SIDEWALL) at 5 fbg

Kristi Barnette

Project Manager
State of Texas Licensed Geoscientist (License #: 1036)
State of Alabama Licensed Geoscientist (License #: 1229)
OSHA Authorized General Industry Trainer (License #: G0041236)

TGE Resources, Inc. | Environmental Management & Consulting Services
8048 Northcourt Road, Houston, TX 77040
Phone: (713) 744-5815 Fax: (713) 744-5888
Kristib@TGEResources.com| www.tgeresources.com

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ANALYTICAL REPORT

March 25, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1202305
Samples Received:	03/25/2020
Project Number:	
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

AREA D CENTER L1202305-01 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 07:52	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449985	1	03/25/20 11:59	03/25/20 12:07	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 13:48	CCE	Mt. Juliet, TN

AREA D N SIDEWALL L1202305-02 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 07:53	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449985	1	03/25/20 11:59	03/25/20 12:07	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 13:51	CCE	Mt. Juliet, TN

AREA D S SIDEWALL L1202305-03 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 07:54	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449985	1	03/25/20 11:59	03/25/20 12:07	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 13:59	CCE	Mt. Juliet, TN

AREA D E SIDEWALL L1202305-04 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 07:55	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449985	1	03/25/20 11:59	03/25/20 12:07	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:01	CCE	Mt. Juliet, TN

AREA D W SIDEWALL L1202305-05 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 07:56	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449985	1	03/25/20 11:59	03/25/20 12:07	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:04	CCE	Mt. Juliet, TN

C1 S SIDEWALL L1202305-06 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 08:20	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449985	1	03/25/20 11:59	03/25/20 12:07	KBC	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1450046	1	03/25/20 13:02	03/25/20 16:53	TJD	Mt. Juliet, TN

C4 CENTER L1202305-07 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 08:43	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449985	1	03/25/20 11:59	03/25/20 12:07	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:06	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1449850	25.8	03/24/20 08:43	03/25/20 12:18	JHH	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

C1-1 CENTER L1202305-08 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 08:44	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449985	1	03/25/20 11:59	03/25/20 12:07	KBC	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1450046	1	03/25/20 13:02	03/25/20 16:39	TJD	Mt. Juliet, TN

C1 W SIDEWALL L1202305-09 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 08:45	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449985	1	03/25/20 11:59	03/25/20 12:07	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:09	CCE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1450046	1	03/25/20 13:02	03/25/20 16:26	TJD	Mt. Juliet, TN

E2 E SIDEWALL L1202305-10 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 11:15	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449985	1	03/25/20 11:59	03/25/20 12:07	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:11	CCE	Mt. Juliet, TN

E2 CENTER L1202305-11 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 11:13	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449996	1	03/25/20 11:48	03/25/20 11:56	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 13:33	CCE	Mt. Juliet, TN

E2 N SIDEWALL L1202305-12 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 11:14	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449996	1	03/25/20 11:48	03/25/20 11:56	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:14	CCE	Mt. Juliet, TN

E1-3 W SIDEWALL L1202305-13 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 13:31	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449996	1	03/25/20 11:48	03/25/20 11:56	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:17	CCE	Mt. Juliet, TN

E1-2 CENTER L1202305-14 Solid

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 13:27	03/25/20 08:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449996	1	03/25/20 11:48	03/25/20 11:56	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:19	CCE	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 13:28	03/25/20 08:15

E1 CENTER L1202305-15 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449996	1	03/25/20 11:48	03/25/20 11:56	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:22	CCE	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 13:31	03/25/20 08:15

E1-2 W SIDEWALL L1202305-16 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449996	1	03/25/20 11:48	03/25/20 11:56	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:29	CCE	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 13:24	03/25/20 08:15

E1-1 W SIDEWALL L1202305-17 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449996	1	03/25/20 11:48	03/25/20 11:56	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:32	CCE	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 13:25	03/25/20 08:15

E1-2 E SIDEWALL L1202305-18 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449996	1	03/25/20 11:48	03/25/20 11:56	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:35	CCE	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 13:24	03/25/20 08:15

E1-3 E SIDEWALL L1202305-19 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449996	1	03/25/20 11:48	03/25/20 11:56	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:37	CCE	Mt. Juliet, TN

Collected by	Collected date/time	Received date/time
K Barnette	03/24/20 13:30	03/25/20 08:15

E1 E SIDEWALL L1202305-20 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1449996	1	03/25/20 11:48	03/25/20 11:56	KBC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1449994	1	03/25/20 11:48	03/25/20 14:40	CCE	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/25/2020 21:26
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1202305-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1449850, WG1449994, WG1449996, WG1449985 and WG1450046

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/25/2020 21:26
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1202305-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1449850, WG1449994, WG1449996, WG1449985 and WG1450046

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			1
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/25/2020 21:26
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1202305-01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1449850, WG1449994, WG1449996, WG1449985 and WG1450046

ER #[1]	**Description**
1	6010D WG1449994 Chromium: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.5		1	03/25/2020 12:07	WG1449985

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.89	J	0.520	2.00	2.26	1	03/25/2020 13:48	WG1449994

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.8		1	03/25/2020 12:07	WG1449985

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.64	J	0.512	2.00	2.23	1	03/25/2020 13:51	WG1449994

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.6		1	03/25/2020 12:07	WG1449985

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.98	J	0.486	2.00	2.11	1	03/25/2020 13:59	WG1449994

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.5		1	03/25/2020 12:07	WG1449985

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.35	J	0.487	2.00	2.12	1	03/25/2020 14:01	WG1449994

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.3		1	03/25/2020 12:07	WG1449985

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.13	J	0.498	2.00	2.17	1	03/25/2020 14:04	WG1449994

C1 S SIDEWALL

Collected date/time: 03/24/20 08:20

SAMPLE RESULTS - 06

L1202305

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.7		1	03/25/2020 12:07	WG1449985

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	11.2		1.57	4.00	4.72	1	03/25/2020 16:53	WG1450046
Residual Range Organics (RRO)	53.6		3.93	10.0	11.8	1	03/25/2020 16:53	WG1450046
(S) o-Terphenyl	*76.6*				*18.0-148*		*03/25/2020 16:53*	WG1450046

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.2		1	03/25/2020 12:07	WG1449985

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium	21.0		0.149	1.00	1.06	1	03/25/2020 14:06	WG1449994

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.928	0.100	2.74	25.8	03/25/2020 12:18	WG1449850
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*03/25/2020 12:18*	WG1449850

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	94.7		1	03/25/2020 12:07	WG1449985

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Diesel Range Organics (DRO)	4.31		1.40	4.00	4.22	1	03/25/2020 16:39	WG1450046
Residual Range Organics (RRO)	40.6		3.52	10.0	10.6	1	03/25/2020 16:39	WG1450046
(S) o-Terphenyl	*94.0*				*18.0-148*		*03/25/2020 16:39*	WG1450046

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.3		1	03/25/2020 12:07	WG1449985

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium	22.0		0.152	1.00	1.08	1	03/25/2020 14:09	WG1449994

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	25.8		1.44	4.00	4.34	1	03/25/2020 16:26	WG1450046
Residual Range Organics (RRO)	28.5		3.61	10.0	10.8	1	03/25/2020 16:26	WG1450046
(S) o-Terphenyl	*79.3*				*18.0-148*		*03/25/2020 16:26*	WG1450046

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.1		1	03/25/2020 12:07	WG1449985

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.249	J	0.0813	0.500	0.581	1	03/25/2020 14:11	WG1449994
Lead	38.9		0.221	0.500	0.581	1	03/25/2020 14:11	WG1449994

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.1		1	03/25/2020 11:56	WG1449996

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.246	J	0.0885	0.500	0.632	1	03/25/2020 13:33	WG1449994
Lead	2.80	B	0.240	0.500	0.632	1	03/25/2020 13:33	WG1449994

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.5		1	03/25/2020 11:56	WG1449996

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.141	J	0.0800	0.500	0.572	1	03/25/2020 14:14	WG1449994
Lead	59.4		0.217	0.500	0.572	1	03/25/2020 14:14	WG1449994

E1-3 W SIDEWALL

Collected date/time: 03/24/20 13:31

SAMPLE RESULTS - 13

L1202305

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.7		1	03/25/2020 11:56	WG1449996

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.514	J	0.0798	0.500	0.570	1	03/25/2020 14:17	WG1449994
Lead	118		0.217	0.500	0.570	1	03/25/2020 14:17	WG1449994

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.4		1	03/25/2020 11:56	WG1449996

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.102	J	0.0792	0.500	0.566	1	03/25/2020 14:19	WG1449994
Lead	5.78		0.215	0.500	0.566	1	03/25/2020 14:19	WG1449994

E1 CENTER

Collected date/time: 03/24/20 13:28

SAMPLE RESULTS - 15

L1202305

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.3		1	03/25/2020 11:56	WG1449996

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.398	J	0.0883	0.500	0.631	1	03/25/2020 14:22	WG1449994
Lead	59.8		0.240	0.500	0.631	1	03/25/2020 14:22	WG1449994

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.8		1	03/25/2020 11:56	WG1449996

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.324	J	0.0845	0.500	0.604	1	03/25/2020 14:29	WG1449994
Lead	79.0		0.229	0.500	0.604	1	03/25/2020 14:29	WG1449994

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.2		1	03/25/2020 11:56	WG1449996

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.358	J	0.0831	0.500	0.593	1	03/25/2020 14:32	WG1449994
Lead	66.1		0.226	0.500	0.593	1	03/25/2020 14:32	WG1449994

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.4		1	03/25/2020 11:56	WG1449996

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.138	J	0.0839	0.500	0.599	1	03/25/2020 14:35	WG1449994
Lead	40.0		0.228	0.500	0.599	1	03/25/2020 14:35	WG1449994

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	77.4		1	03/25/2020 11:56	WG1449996

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.221	J	0.0904	0.500	0.646	1	03/25/2020 14:37	WG1449994
Lead	19.5		0.246	0.500	0.646	1	03/25/2020 14:37	WG1449994

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.1		1	03/25/2020 11:56	WG1449996

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Cadmium	0.383	J	0.0785	0.500	0.561	1	03/25/2020 14:40	WG1449994
Lead	146		0.213	0.500	0.561	1	03/25/2020 14:40	WG1449994

Method Blank (MB)

(MB) R3512474-1 03/25/20 12:07

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1202305-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1202305-01 03/25/20 12:07 • (DUP) R3512474-3 03/25/20 12:07

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.5	88.6	1	0.125		10

Laboratory Control Sample (LCS)

(LCS) R3512474-2 03/25/20 12:07

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) R3512469-1 03/25/20 11:56

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1202305-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1202305-11 03/25/20 11:56 • (DUP) R3512469-3 03/25/20 11:56

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	79.1	79.6	1	0.619		10

Laboratory Control Sample (LCS)

(LCS) R3512469-2 03/25/20 11:56

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

WG1449994

Metals (ICP) by Method 6010D

QUALITY CONTROL SUMMARY

L1202305-01,02,03,04,05,07,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) R3512421-1 03/25/20 13:28

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	0.228	J	0.190	0.500

Laboratory Control Sample (LCS)

(LCS) R3512421-2 03/25/20 13:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	85.6	85.6	80.0-120	
Cadmium	100	88.8	88.8	80.0-120	
Chromium	100	91.8	91.8	80.0-120	
Lead	100	86.4	86.4	80.0-120	

L1202305-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1202305-11 03/25/20 13:33 • (MS) R3512421-5 03/25/20 13:41 • (MSD) R3512421-6 03/25/20 13:43

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	126	2.83	104	110	79.7	85.0	1	75.0-125			6.24	20
Cadmium	126	0.246	106	113	83.9	89.0	1	75.0-125			5.92	20
Chromium	126	31.6	138	158	83.8	99.9	1	75.0-125			13.8	20

Method Blank (MB)

(MB) R3512335-2 03/25/20 11:27

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)	*102*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3512335-1 03/25/20 10:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.79	105	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*111*	*77.0-120*	

Method Blank (MB)

(MB) R3512499-1 03/25/20 16:00

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	*84.1*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3512499-2 03/25/20 16:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	47.7	95.4	50.0-150	
(S) o-Terphenyl			*21.0*	*18.0-148*	

L1202305-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1202305-06 03/25/20 16:53 • (MS) R3512499-3 03/25/20 17:06 • (MSD) R3512499-4 03/25/20 17:19

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	11.2	68.5	71.6	97.0	103	1	50.0-150			4.38	20
(S) o-Terphenyl					*80.5*	*96.5*		*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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.

ACCREDITATIONS & LOCATIONS

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.

WA
OR
ID
MT
ND
MN
WI
MI
NY
ME
SD
WY
NV
UT
CO
NE
IA
IL
IN
OH
PA
CA
KS
MO
KY
WV
VA
TN
NC
AZ
NM
OK
AR
SC
MS
AL
GA
TX
LA
FL
AK
HI

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected: Fed Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project # **TGERESHTX-8933**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # ~~**8933**~~ 8932

Collected by (signature): K Barnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

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

SDG # 1202305

G080

Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P760774**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	RCRAPb	RCRACd	RCRAAs	% moisture	OC Pesticides	RCRACr	Remarks	Sample # (lab only)
Area D Center	Grab	SS	2	3/24/20	752	3							X	X				-01
Area D N. Sidewall	Grab	SS	1.5	3/24/20	753	3							X	X				02
Area D S. Sidewall	Grab	SS	1.5	3/24/20	754	3							X	X				03
Area D E. Sidewall	Grab	SS	1.5	3/24/20	755	3							X	X				04
Area D W. Sidewall	Grab	SS	1.5	3/24/20	756	3							X	X				05
C1 S. Sidewall	Grab	SS	1.5	3/24/20	820	3		X						X				06
C4 Center	Grab	SS	15	3/24/20	843	3			X					X		X		07
C1-1 Center	Grab	SS	2	3/24/20	844	3		X						X				08
C1 W. Sidewall	Grab	SS	1.5	3/24/20	845	3		X						X		X		09
E2 E. Sidewall	Grab	SS	13	3/24/20	1115	3					X	X		X				10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: ****Log as R1 same day TAT****

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 1676 2749 8337/8348

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

Trip Blank Received: Yes / [✓ No]
HCL / MeoH
TBR

Relinquished by : (Signature) K Barnette	Date: 3/24/20	Time: 1430	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Carol Kemp

Temp: 1.3-0.3=1.0 °C Bottles Received: 60

If preservation required by Login: Date/Time

Date: 3/25/20 Time: 8:15

Hold:

Condition: NCF / [✓ OK]

TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Email To: **krbarnette@tgeresources.com**

Report to:
Kristi Barnette

Project Description: **Future Federal Way Emergency**

City/State Collected: Fed Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #

Lab Project #
TGERESHTX-8933

Collected by (print): KBarnette

Site/Facility ID #

P.O. #
~~**8933**~~ 8932

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
X Same Day
___ Five Day
___ ~~Next Day~~
___ ~~5 Day (Rad Only)~~
___ Two Day
___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 1202305

Table #

Acctnum: **TGERESHTX**
Template: **T164105**
Prelogin: **P760774**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs CK	MRCRA8 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	V8260 40mlAmb/MeOH5ml/Syr	RCRA Pb	RCRA Cd	RCRA As	do moisture	OC Pesticides	RCRA Cr	Remarks	Sample # (lab only)
E2 Center	Grab	SS	14	3/24/20	1113	3					X	X		X				11
E2 N. Sidewall	Grab	SS	13	3/24/20	1114	3					X	X		X				12
E1-3 W. Sidewall	Grab	SS	10.5	3/24/20	1331	3					X	X		X				13
E1-2 Center	Grab	SS	11	3/24/20	1327	3					X	X		X				14
E1 Center	Grab	SS	11	3/24/20	1328	3					X	X		X				15
E1-2 W. Sidewall	Grab	SS	10.5	3/24/20	1331	3					X	X		X				16
E1-1 W Sidewall	Grab	SS	10.5	3/24/20	1324	3					X	X		X				17
E1-2 E. Sidewall	Grab	SS	10.5	3/24/20	1325	1					X	X		X				18
E1-3 E. Sidewall	Grab	SS	10.5	3/24/20	1324	1					X	X		X				19
E1 E Sidewall	Grab	SS	10.5	3/24/20	1330	1					X	X		X				20

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: ****Log as R1 same day 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) KBarnette	Date: 3/24/20	Time: 1430	Received by: (Signature)	Trip Blank Received: Yes / [✓ No] HCL / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.3-0.3=1.0 °C Bottles Received: 60	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/25/20 Time: 8:15	Hold:

Condition: NCF / [✓ OK]

ANALYTICAL REPORT

March 26, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1202732
Samples Received:	03/26/2020
Project Number:	R13411.06
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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	Collected by	Collected date/time	Received date/time
SEPTIC BASE (9') L1202732-01 Solid	K. Barnette	03/25/20 10:00	03/26/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1450635	1	03/26/20 10:00	03/26/20 10:04	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1450702	1	03/26/20 11:32	03/26/20 12:37	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1450660	1	03/26/20 10:34	03/26/20 11:40	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1450607	26	03/25/20 10:00	03/26/20 12:22	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1450528	1	03/25/20 10:00	03/26/20 11:49	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1450912	1	03/26/20 13:09	03/26/20 14:37	KME	Mt. Juliet, TN

CASE NARRATIVE

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,
b. dilution factors,
c. preparation methods,
d. cleanup methods, and
e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and
b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,
b. Calculated %R for each analyte, and
c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,
b. MS/MSD spiking amounts,
c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
d. Calculated %Rs and relative percent differences (RPDs), and
e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,
b. The calculated RPD, and
c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

RG-366/TRRP-13
Revised May 2010

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 03/26/2020 16:33
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1202732-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1450702, WG1450607, WG1450528, WG1450660, WG1450635 and WG1450912

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?		X			1
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 03/26/2020 16:33
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1202732-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1450702, WG1450607, WG1450528, WG1450660, WG1450635 and WG1450912

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 03/26/2020 16:33
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1202732-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1450702, WG1450607, WG1450528, WG1450660, WG1450635 and WG1450912

ER #[1]	**Description**
1	8260B WG1450528 2-Butanone (MEK) L1202732-01: Concentration in the Blank >MQL.

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.3		1	03/26/2020 10:04	WG1450635

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0114	J	0.00317	0.0300	0.0340	1	03/26/2020 12:37	WG1450702

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	U		0.521	2.00	2.27	1	03/26/2020 11:40	WG1450660
Barium	25.3		0.193	0.500	0.566	1	03/26/2020 11:40	WG1450660
Cadmium	0.134	J	0.0793	0.500	0.566	1	03/26/2020 11:40	WG1450660
Chromium	14.3		0.159	1.00	1.13	1	03/26/2020 11:40	WG1450660
Lead	1.25		0.215	0.500	0.566	1	03/26/2020 11:40	WG1450660
Selenium	U		0.702	2.00	2.27	1	03/26/2020 11:40	WG1450660
Silver	U		0.136	1.00	1.13	1	03/26/2020 11:40	WG1450660

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2.95	J	0.999	0.100	2.95	26	03/26/2020 12:22	WG1450607
(S) a,a,a-Trifluorotoluene(FID)	*94.9*				*77.0-120*		*03/26/2020 12:22*	WG1450607

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0155	0.0250	0.0283	1	03/26/2020 11:49	WG1450528
Acrylonitrile	U		0.00215	0.0125	0.0142	1	03/26/2020 11:49	WG1450528
Benzene	U		0.000453	0.00100	0.00113	1	03/26/2020 11:49	WG1450528
Bromobenzene	U		0.00119	0.0125	0.0142	1	03/26/2020 11:49	WG1450528
Bromodichloromethane	U		0.000893	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
Bromoform	U		0.00677	0.0250	0.0283	1	03/26/2020 11:49	WG1450528
Bromomethane	U		0.00419	0.0125	0.0142	1	03/26/2020 11:49	WG1450528
n-Butylbenzene	U		0.00435	0.0125	0.0142	1	03/26/2020 11:49	WG1450528
sec-Butylbenzene	U		0.00287	0.0125	0.0142	1	03/26/2020 11:49	WG1450528
tert-Butylbenzene	U		0.00176	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
Carbon tetrachloride	U		0.00122	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
Chlorobenzene	U		0.000649	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
Chlorodibromomethane	U		0.000510	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
Chloroethane	U		0.00122	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
Chloroform	U		0.000470	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
Chloromethane	U		0.00157	0.0125	0.0142	1	03/26/2020 11:49	WG1450528
2-Chlorotoluene	U		0.00104	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
4-Chlorotoluene	U		0.00128	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
1,2-Dibromo-3-Chloropropane	U		0.00578	0.0250	0.0283	1	03/26/2020 11:49	WG1450528
1,2-Dibromoethane	U		0.000595	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
Dibromomethane	U		0.00113	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
1,2-Dichlorobenzene	U		0.00164	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
1,3-Dichlorobenzene	U		0.00193	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
1,4-Dichlorobenzene	U		0.00223	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
Dichlorodifluoromethane	U		0.000927	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
1,1-Dichloroethane	U		0.000651	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
1,2-Dichloroethane	U		0.000538	0.00250	0.00283	1	03/26/2020 11:49	WG1450528

SEPTIC BASE (9')

Collected date/time: 03/25/20 10:00

SAMPLE RESULTS - 01

L1202732

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000566	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
cis-1,2-Dichloroethene	U		0.000782	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
trans-1,2-Dichloroethene	U		0.00162	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
1,2-Dichloropropane	U		0.00144	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
1,1-Dichloropropene	U		0.000793	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
1,3-Dichloropropane	U		0.00198	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
cis-1,3-Dichloropropene	U		0.000768	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
trans-1,3-Dichloropropene	U		0.00173	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
2,2-Dichloropropane	U		0.000898	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
Di-isopropyl ether	U		0.000397	0.00100	0.00113	1	03/26/2020 11:49	WG1450528
Ethylbenzene	U		0.000600	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
Hexachloro-1,3-butadiene	U		0.0144	0.0250	0.0283	1	03/26/2020 11:49	WG1450528
Isopropylbenzene	U		0.000978	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
p-Isopropyltoluene	U		0.00264	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
2-Butanone (MEK)	0.0216	B J	0.0142	0.0250	0.0283	1	03/26/2020 11:49	WG1450528
Methylene Chloride	U		0.00752	0.0250	0.0283	1	03/26/2020 11:49	WG1450528
4-Methyl-2-pentanone (MIBK)	U		0.0113	0.0250	0.0283	1	03/26/2020 11:49	WG1450528
Methyl tert-butyl ether	U		0.000334	0.00100	0.00113	1	03/26/2020 11:49	WG1450528
Naphthalene	U		0.00353	0.0125	0.0142	1	03/26/2020 11:49	WG1450528
n-Propylbenzene	U		0.00134	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
Styrene	U		0.00309	0.0125	0.0142	1	03/26/2020 11:49	WG1450528
1,1,1,2-Tetrachloroethane	U		0.000566	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
1,1,2,2-Tetrachloroethane	U		0.000442	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
1,1,2-Trichlorotrifluoroethane	U		0.000765	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
Tetrachloroethene	U		0.000793	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
Toluene	U		0.00142	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
1,2,3-Trichlorobenzene	U		0.000708	0.0125	0.0142	1	03/26/2020 11:49	WG1450528
1,2,4-Trichlorobenzene	U		0.00546	0.0125	0.0142	1	03/26/2020 11:49	WG1450528
1,1,1-Trichloroethane	U		0.000312	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
1,1,2-Trichloroethane	U		0.00100	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
Trichloroethene	U		0.000453	0.00100	0.00113	1	03/26/2020 11:49	WG1450528
Trichlorofluoromethane	U		0.000566	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
1,2,3-Trichloropropane	U		0.00578	0.0125	0.0142	1	03/26/2020 11:49	WG1450528
1,2,4-Trimethylbenzene	U		0.00131	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
1,2,3-Trimethylbenzene	U		0.00130	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
1,3,5-Trimethylbenzene	U		0.00122	0.00500	0.00566	1	03/26/2020 11:49	WG1450528
Vinyl chloride	U		0.000774	0.00250	0.00283	1	03/26/2020 11:49	WG1450528
Xylenes, Total	U		0.00542	0.00650	0.00736	1	03/26/2020 11:49	WG1450528
(S) Toluene-d8	*110*				*75.0-131*		*03/26/2020 11:49*	WG1450528
(S) 4-Bromofluorobenzene	*105*				*67.0-138*		*03/26/2020 11:49*	WG1450528
(S) 1,2-Dichloroethane-d4	*103*				*70.0-130*		*03/26/2020 11:49*	WG1450528

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.51	4.00	4.53	1	03/26/2020 14:37	WG1450912
Residual Range Organics (RRO)	U		3.77	10.0	11.3	1	03/26/2020 14:37	WG1450912
(S) o-Terphenyl	*79.4*				*18.0-148*		*03/26/2020 14:37*	WG1450912

WG1450635

Total Solids by Method 2540 G-2011

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3512885-1 03/26/20 10:04

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1202732-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1202732-01 03/26/20 10:04 • (DUP) R3512885-3 03/26/20 10:04

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.3	90.7	1	2.71		10

Laboratory Control Sample (LCS)

(LCS) R3512885-2 03/26/20 10:04

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) R3512743-1 03/26/20 12:32

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.00280	0.0300

Laboratory Control Sample (LCS)

(LCS) R3512743-2 03/26/20 12:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.500	0.565	113	80.0-120	

L1202732-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1202732-01 03/26/20 12:37 • (MS) R3512743-3 03/26/20 12:40 • (MSD) R3512743-4 03/26/20 12:42

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 %
Mercury	0.566	0.0114	0.542	0.613	93.7	106	1	75.0-125			12.3	20

Method Blank (MB)

(MB) R3512781-1 03/26/20 11:35

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Lead	U		0.190	0.500
Selenium	U		0.620	2.00
Silver	U		0.120	1.00

Laboratory Control Sample (LCS)

(LCS) R3512781-2 03/26/20 11:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	90.0	90.0	80.0-120	
Barium	100	92.8	92.8	80.0-120	
Cadmium	100	91.6	91.6	80.0-120	
Chromium	100	94.2	94.2	80.0-120	
Lead	100	91.0	91.0	80.0-120	
Selenium	100	97.2	97.2	80.0-120	
Silver	20.0	17.0	85.1	80.0-120	

L1202732-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1202732-01 03/26/20 11:40 • (MS) R3512781-5 03/26/20 11:48 • (MSD) R3512781-6 03/26/20 11:50

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 %
Arsenic	113	U	93.4	97.8	82.5	86.3	1	75.0-125			4.55	20
Barium	113	25.3	133	125	95.1	88.2	1	75.0-125			6.07	20
Cadmium	113	0.134	96.7	101	85.3	89.3	1	75.0-125			4.64	20
Chromium	113	14.3	113	122	86.9	95.2	1	75.0-125			8.09	20
Lead	113	1.25	99.1	104	86.4	90.3	1	75.0-125			4.41	20
Selenium	113	U	103	107	91.1	94.0	1	75.0-125			3.11	20
Silver	22.7	U	17.9	19.0	78.9	83.6	1	75.0-125			5.80	20

Method Blank (MB)

(MB) R3512745-3 03/26/20 11:14

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)	*94.7*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3512745-2 03/26/20 10:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.56	101	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*108*	*77.0-120*	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3512760-2 03/26/20 06:40

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
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
n-Butylbenzene	0.00465	J	0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tert-Butylbenzene	0.00158	J	0.00155	0.00500
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
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
Ethylbenzene	0.000625	J	0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3512760-2 03/26/20 06:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	0.00295	J	0.00233	0.00500
2-Butanone (MEK)	0.0299		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	0.00130	J	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	0.00575	J	0.000625	0.0125
1,2,4-Trichlorobenzene	0.00633	J	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	0.00232	J	0.00116	0.00500
1,3,5-Trimethylbenzene	0.00125	J	0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*111*			*75.0-131*
(S) 4-Bromofluorobenzene	*106*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3512760-1 03/26/20 05:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.473	75.7	10.0-160	
Acrylonitrile	0.625	0.627	100	45.0-153	
Benzene	0.125	0.101	80.8	70.0-123	
Bromobenzene	0.125	0.119	95.2	73.0-121	
Bromodichloromethane	0.125	0.127	102	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3512760-1 03/26/20 05:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.118	94.4	64.0-132	
Bromomethane	0.125	0.0997	79.8	56.0-147	
n-Butylbenzene	0.125	0.126	101	68.0-135	
sec-Butylbenzene	0.125	0.109	87.2	74.0-130	
tert-Butylbenzene	0.125	0.121	96.8	75.0-127	
Carbon tetrachloride	0.125	0.121	96.8	66.0-128	
Chlorobenzene	0.125	0.139	111	76.0-128	
Chlorodibromomethane	0.125	0.133	106	74.0-127	
Chloroethane	0.125	0.130	104	61.0-134	
Chloroform	0.125	0.116	92.8	72.0-123	
Chloromethane	0.125	0.118	94.4	51.0-138	
2-Chlorotoluene	0.125	0.113	90.4	75.0-124	
4-Chlorotoluene	0.125	0.119	95.2	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.0932	74.6	59.0-130	
1,2-Dibromoethane	0.125	0.135	108	74.0-128	
Dibromomethane	0.125	0.123	98.4	75.0-122	
1,2-Dichlorobenzene	0.125	0.108	86.4	76.0-124	
1,3-Dichlorobenzene	0.125	0.147	118	76.0-125	
1,4-Dichlorobenzene	0.125	0.123	98.4	77.0-121	
Dichlorodifluoromethane	0.125	0.195	156	43.0-156	
1,1-Dichloroethane	0.125	0.133	106	70.0-127	
1,2-Dichloroethane	0.125	0.115	92.0	65.0-131	
1,1-Dichloroethene	0.125	0.122	97.6	65.0-131	
cis-1,2-Dichloroethene	0.125	0.120	96.0	73.0-125	
trans-1,2-Dichloroethene	0.125	0.111	88.8	71.0-125	
1,2-Dichloropropane	0.125	0.124	99.2	74.0-125	
1,1-Dichloropropene	0.125	0.120	96.0	73.0-125	
1,3-Dichloropropane	0.125	0.124	99.2	80.0-125	
cis-1,3-Dichloropropene	0.125	0.122	97.6	76.0-127	
trans-1,3-Dichloropropene	0.125	0.154	123	73.0-127	
2,2-Dichloropropane	0.125	0.114	91.2	59.0-135	
Di-isopropyl ether	0.125	0.128	102	60.0-136	
Ethylbenzene	0.125	0.142	114	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.114	91.2	57.0-150	
Isopropylbenzene	0.125	0.121	96.8	72.0-127	
p-Isopropyltoluene	0.125	0.122	97.6	72.0-133	
2-Butanone (MEK)	0.625	0.534	85.4	30.0-160	
Methylene Chloride	0.125	0.0941	75.3	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.529	84.6	56.0-143	
Methyl tert-butyl ether	0.125	0.0970	77.6	66.0-132	

Laboratory Control Sample (LCS)

(LCS) R3512760-1 03/26/20 05:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.115	92.0	59.0-130	
n-Propylbenzene	0.125	0.114	91.2	74.0-126	
Styrene	0.125	0.125	100	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.114	91.2	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.111	88.8	68.0-128	
Tetrachloroethene	0.125	0.125	100	70.0-136	
Toluene	0.125	0.115	92.0	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.167	134	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.126	101	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.131	105	62.0-137	
1,1,1-Trichloroethane	0.125	0.130	104	69.0-126	
1,1,2-Trichloroethane	0.125	0.122	97.6	78.0-123	
Trichloroethene	0.125	0.115	92.0	76.0-126	
Trichlorofluoromethane	0.125	0.144	115	61.0-142	
1,2,3-Trichloropropane	0.125	0.115	92.0	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.115	92.0	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.138	110	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.114	91.2	73.0-127	
Vinyl chloride	0.125	0.130	104	63.0-134	
Xylenes, Total	0.375	0.397	106	72.0-127	
(S) Toluene-d8			*111*	*75.0-131*	
(S) 4-Bromofluorobenzene			*106*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*99.9*	*70.0-130*	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3512914-1 03/26/20 14:10

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	*71.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3512914-2 03/26/20 14:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	40.3	80.6	50.0-150	
(S) o-Terphenyl			*89.6*	*18.0-148*	

L1202732-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1202732-01 03/26/20 14:37 • (MS) R3512914-3 03/26/20 14:50 • (MSD) R3512914-4 03/26/20 15:05

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)	56.6	U	42.6	51.8	75.2	91.4	1	50.0-150			19.4	20
(S) o-Terphenyl					*89.8*	*109*		*18.0-148*				

GLOSSARY OF TERMS

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1, 6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1, 4]	2006
Texas	T104704245-18-15
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

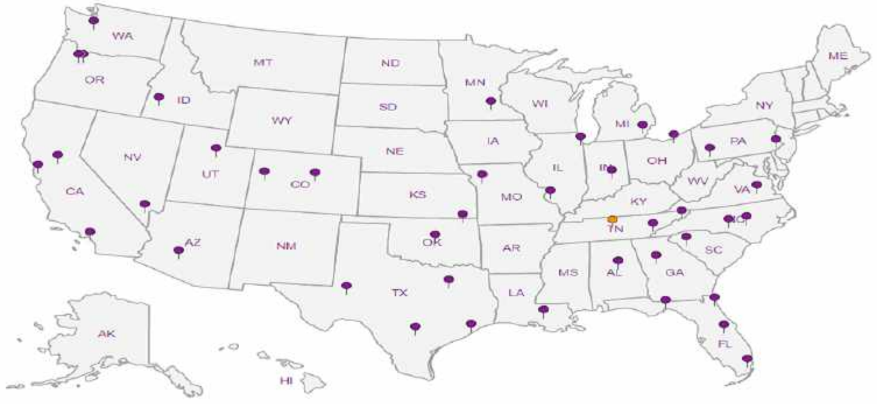
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to: **Kristi Barnette**

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected: Federal Way, WA

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project #: R13411.06

Lab Project #: **TGERESHTX-8932**

Collected by (print): K Barnette

Site/Facility ID #:

P.O. #: **8932**

Collected by (signature): K Barnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #:

Date Results Needed:

Immediately Packed on Ice N ___ Y X

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

SDG # 1202732
G131

Acctnum: **TGERESHTX**
Template: **T164103**
Prelogin: **P760772**
PM: **134 - Mark W. Beasley**
PB:
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	As, Cd, Pb 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	RCRA Metals					Remarks	Sample # (lab only)
Septic Base (9')	Grab	SS	9	3/25/20	1000	3		X	X		X	X						01
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																
		SS																

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: ****Log as R1 same day TAT****

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 4757 5075 2308

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) KBarnette
Date: 3/25/20
Time: 1430
Received by: (Signature)

Trip Blank Received: [✓ Yes] / No
[✓ HCl] / MeoH
TBR

Relinquished by : (Signature)
Date:
Time:
Received by: (Signature)

Temp: 1.8+0.2= °C
Bottles Received: 3

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature) Carol Kemp

Date: 3/26/20
Time: 8:30

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

June 05, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

TGE Resources

Sample Delivery Group:	L1225705
Samples Received:	06/05/2020
Project Number:	R1341106
Description:	Future Federal Way Emergency Center
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SEWER SEC BASE (7.5) L1225705-01 Solid

Collected by	Collected date/time	Received date/time
K Barnette	06/04/20 13:50	06/05/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1487701	1	06/05/20 10:21	06/05/20 10:30	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1487771	1	06/05/20 11:58	06/05/20 13:12	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1487779	1	06/05/20 12:07	06/05/20 13:59	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1487780	25	06/04/20 13:50	06/05/20 13:57	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1487490	1	06/04/20 13:50	06/05/20 10:57	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1487837	1	06/05/20 10:28	06/05/20 14:37	CLG	Mt. Juliet, TN

SEWER SEC S. SIDE (4') L1225705-02 Solid

Collected by	Collected date/time	Received date/time
K Barnette	06/04/20 13:55	06/05/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1487701	1	06/05/20 10:21	06/05/20 10:30	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1487771	1	06/05/20 11:58	06/05/20 13:36	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1487779	1	06/05/20 12:07	06/05/20 13:47	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1487780	25	06/04/20 13:55	06/05/20 14:17	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1487490	1	06/04/20 13:55	06/05/20 11:17	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1487837	100	06/05/20 10:28	06/05/20 15:29	CLG	Mt. Juliet, TN

SEWER SEC N. SIDE (4') L1225705-03 Solid

Collected by	Collected date/time	Received date/time
K Barnette	06/04/20 14:00	06/05/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1487701	1	06/05/20 10:21	06/05/20 10:30	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1487771	1	06/05/20 11:58	06/05/20 13:15	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1487779	1	06/05/20 12:07	06/05/20 14:02	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1487780	25	06/04/20 14:00	06/05/20 14:38	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1487490	1.13	06/04/20 14:00	06/05/20 11:36	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1487837	2	06/05/20 10:28	06/05/20 14:50	CLG	Mt. Juliet, TN

SEWER SEC W SIDE (4') L1225705-04 Solid

Collected by	Collected date/time	Received date/time
K Barnette	06/04/20 14:05	06/05/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1487701	1	06/05/20 10:21	06/05/20 10:30	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1487771	1	06/05/20 11:58	06/05/20 13:18	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1487779	1	06/05/20 12:07	06/05/20 14:04	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1487780	25	06/04/20 14:05	06/05/20 14:59	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1487490	1	06/04/20 14:05	06/05/20 11:56	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1487837	20	06/05/20 10:28	06/05/20 15:16	CLG	Mt. Juliet, TN

SEWER SEC E SIDE (4') L1225705-05 Solid

Collected by	Collected date/time	Received date/time
K Barnette	06/04/20 14:10	06/05/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1487701	1	06/05/20 10:21	06/05/20 10:30	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1487771	1	06/05/20 11:58	06/05/20 13:20	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1487779	1	06/05/20 12:07	06/05/20 13:34	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1487780	25	06/04/20 14:10	06/05/20 15:19	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1487490	1	06/04/20 14:10	06/05/20 12:16	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1487837	2	06/05/20 10:28	06/05/20 15:03	CLG	Mt. Juliet, TN

CASE NARRATIVE

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 06/05/2020 17:46
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1225705-01, 02, 03, 04 and 05
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1487490, WG1487771, WG1487779, WG1487837, WG1487780 and WG1487701

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 06/05/2020 17:46
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1225705-01, 02, 03, 04 and 05
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1487490, WG1487771, WG1487779, WG1487837, WG1487780 and WG1487701

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 06/05/2020 17:46
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1225705-01, 02, 03, 04 and 05
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1487490, WG1487771, WG1487779, WG1487837, WG1487780 and WG1487701

ER #[1]	**Description**
1	NWTPHDX-NO SGT WG1487837 o-Terphenyl L1225705-02 and 04: Percent Recovery is outside of established control limits.
2	6010D WG1487779 Lead: Percent Recovery is outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	74.7		1	06/05/2020 10:30	WG1487701

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.103		0.0241	0.0400	0.0535	1	06/05/2020 13:12	WG1487771

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	11.5		0.616	2.00	2.68	1	06/05/2020 13:59	WG1487779
Barium	114		0.321	0.500	0.669	1	06/05/2020 13:59	WG1487779
Cadmium	0.592	J	0.108	0.500	0.669	1	06/05/2020 13:59	WG1487779
Chromium	21.1		0.335	1.00	1.34	1	06/05/2020 13:59	WG1487779
Lead	45.9		0.278	0.500	0.669	1	06/05/2020 13:59	WG1487779
Selenium	U		0.826	2.00	2.68	1	06/05/2020 13:59	WG1487779
Silver	U		0.305	1.00	1.34	1	06/05/2020 13:59	WG1487779

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.13	0.100	3.35	25	06/05/2020 13:57	WG1487780
(S) a,a,a-Trifluorotoluene(FID)	*92.5*				*77.0-120*		*06/05/2020 13:57*	WG1487780

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0489	0.0500	0.0669	1	06/05/2020 10:57	WG1487490
Acrylonitrile	U		0.00483	0.0125	0.0167	1	06/05/2020 10:57	WG1487490
Benzene	U		0.000625	0.00100	0.00134	1	06/05/2020 10:57	WG1487490
Bromobenzene	U		0.00120	0.0125	0.0167	1	06/05/2020 10:57	WG1487490
Bromodichloromethane	U		0.000970	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
Bromoform	U		0.00157	0.0250	0.0335	1	06/05/2020 10:57	WG1487490
Bromomethane	U		0.00264	0.0125	0.0167	1	06/05/2020 10:57	WG1487490
n-Butylbenzene	U		0.00703	0.0125	0.0167	1	06/05/2020 10:57	WG1487490
sec-Butylbenzene	U		0.00385	0.0125	0.0167	1	06/05/2020 10:57	WG1487490
tert-Butylbenzene	U		0.00261	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
Carbon tetrachloride	U		0.00120	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
Chlorobenzene	U		0.000281	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
Chlorodibromomethane	U		0.000819	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
Chloroethane	U		0.00228	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
Chloroform	U		0.00138	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
Chloromethane	U		0.00582	0.0125	0.0167	1	06/05/2020 10:57	WG1487490
2-Chlorotoluene	U		0.00116	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
4-Chlorotoluene	U		0.000602	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
1,2-Dibromo-3-Chloropropane	U		0.00522	0.0250	0.0335	1	06/05/2020 10:57	WG1487490
1,2-Dibromoethane	U		0.000867	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
Dibromomethane	U		0.00100	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
1,2-Dichlorobenzene	U		0.000569	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
1,3-Dichlorobenzene	U		0.000803	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
1,4-Dichlorobenzene	U		0.000937	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
Dichlorodifluoromethane	U		0.00216	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
1,1-Dichloroethane	U		0.000657	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
1,2-Dichloroethane	U		0.000869	0.00250	0.00335	1	06/05/2020 10:57	WG1487490

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000811	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
cis-1,2-Dichloroethene	U		0.000982	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
trans-1,2-Dichloroethene	U		0.00139	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
1,2-Dichloropropane	U		0.00190	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
1,1-Dichloropropene	U		0.00108	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
1,3-Dichloropropane	U		0.000671	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
cis-1,3-Dichloropropene	U		0.00101	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
trans-1,3-Dichloropropene	U		0.00153	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
2,2-Dichloropropane	U		0.00185	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
Di-isopropyl ether	U		0.000549	0.00100	0.00134	1	06/05/2020 10:57	WG1487490
Ethylbenzene	U		0.000986	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
Hexachloro-1,3-butadiene	U		0.00803	0.0250	0.0335	1	06/05/2020 10:57	WG1487490
Isopropylbenzene	U		0.000569	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
p-Isopropyltoluene	U		0.00341	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
2-Butanone (MEK)	U		0.0850	0.100	0.134	1	06/05/2020 10:57	WG1487490
Methylene Chloride	U		0.00889	0.0250	0.0335	1	06/05/2020 10:57	WG1487490
4-Methyl-2-pentanone (MIBK)	U		0.00305	0.0250	0.0335	1	06/05/2020 10:57	WG1487490
Methyl tert-butyl ether	U		0.000468	0.00100	0.00134	1	06/05/2020 10:57	WG1487490
Naphthalene	U		0.00653	0.0125	0.0167	1	06/05/2020 10:57	WG1487490
n-Propylbenzene	U		0.00127	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
Styrene	0.000534	J	0.000307	0.0125	0.0167	1	06/05/2020 10:57	WG1487490
1,1,1,2-Tetrachloroethane	U		0.00127	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
1,1,2,2-Tetrachloroethane	U		0.000930	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
1,1,2-Trichlorotrifluoroethane	U		0.00101	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
Tetrachloroethene	0.00270	J	0.00120	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
Toluene	U		0.00174	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
1,2,3-Trichlorobenzene	U		0.00981	0.0125	0.0167	1	06/05/2020 10:57	WG1487490
1,2,4-Trichlorobenzene	U		0.00589	0.0125	0.0167	1	06/05/2020 10:57	WG1487490
1,1,1-Trichloroethane	U		0.00124	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
1,1,2-Trichloroethane	U		0.000799	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
Trichloroethene	U		0.000782	0.00100	0.00134	1	06/05/2020 10:57	WG1487490
Trichlorofluoromethane	U		0.00111	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
1,2,3-Trichloropropane	U		0.00217	0.0125	0.0167	1	06/05/2020 10:57	WG1487490
1,2,4-Trimethylbenzene	U		0.00211	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
1,2,3-Trimethylbenzene	U		0.00211	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
1,3,5-Trimethylbenzene	U		0.00268	0.00500	0.00669	1	06/05/2020 10:57	WG1487490
Vinyl chloride	U		0.00155	0.00250	0.00335	1	06/05/2020 10:57	WG1487490
Xylenes, Total	U		0.00118	0.00650	0.00870	1	06/05/2020 10:57	WG1487490
(S) Toluene-d8	*117*				*75.0-131*		*06/05/2020 10:57*	WG1487490
(S) 4-Bromofluorobenzene	*102*				*67.0-138*		*06/05/2020 10:57*	WG1487490
(S) 1,2-Dichloroethane-d4	*102*				*70.0-130*		*06/05/2020 10:57*	WG1487490

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	13.8		1.78	4.00	5.35	1	06/05/2020 14:37	WG1487837
Residual Range Organics (RRO)	44.8		4.46	10.0	13.4	1	06/05/2020 14:37	WG1487837
(S) o-Terphenyl	*45.5*				*18.0-148*		*06/05/2020 14:37*	WG1487837

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.4		1	06/05/2020 10:30	WG1487701

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0588		0.0201	0.0400	0.0448	1	06/05/2020 13:36	WG1487771

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	12.4		0.515	2.00	2.24	1	06/05/2020 13:47	WG1487779
Barium	85.9		0.269	0.500	0.559	1	06/05/2020 13:47	WG1487779
Cadmium	1.13		0.0906	0.500	0.559	1	06/05/2020 13:47	WG1487779
Chromium	21.1		0.280	1.00	1.12	1	06/05/2020 13:47	WG1487779
Lead	211	J6	0.233	0.500	0.559	1	06/05/2020 13:47	WG1487779
Selenium	U		0.690	2.00	2.24	1	06/05/2020 13:47	WG1487779
Silver	U		0.255	1.00	1.12	1	06/05/2020 13:47	WG1487779

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.06	J	0.948	0.100	2.80	25	06/05/2020 14:17	WG1487780
(S) a,a,a-Trifluorotoluene(FID)	*92.4*				*77.0-120*		*06/05/2020 14:17*	WG1487780

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0408	0.0500	0.0559	1	06/05/2020 11:17	WG1487490
Acrylonitrile	U		0.00404	0.0125	0.0140	1	06/05/2020 11:17	WG1487490
Benzene	U		0.000522	0.00100	0.00112	1	06/05/2020 11:17	WG1487490
Bromobenzene	U		0.00101	0.0125	0.0140	1	06/05/2020 11:17	WG1487490
Bromodichloromethane	U		0.000811	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
Bromoform	U		0.00131	0.0250	0.0280	1	06/05/2020 11:17	WG1487490
Bromomethane	U		0.00220	0.0125	0.0140	1	06/05/2020 11:17	WG1487490
n-Butylbenzene	U		0.00587	0.0125	0.0140	1	06/05/2020 11:17	WG1487490
sec-Butylbenzene	U		0.00322	0.0125	0.0140	1	06/05/2020 11:17	WG1487490
tert-Butylbenzene	U		0.00218	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
Carbon tetrachloride	U		0.00100	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
Chlorobenzene	U		0.000235	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
Chlorodibromomethane	U		0.000685	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
Chloroethane	U		0.00190	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
Chloroform	U		0.00115	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
Chloromethane	U		0.00487	0.0125	0.0140	1	06/05/2020 11:17	WG1487490
2-Chlorotoluene	U		0.000968	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
4-Chlorotoluene	U		0.000503	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
1,2-Dibromo-3-Chloropropane	U		0.00436	0.0250	0.0280	1	06/05/2020 11:17	WG1487490
1,2-Dibromoethane	U		0.000725	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
Dibromomethane	U		0.000839	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
1,2-Dichlorobenzene	U		0.000475	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
1,3-Dichlorobenzene	U		0.000671	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
1,4-Dichlorobenzene	U		0.000783	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
Dichlorodifluoromethane	U		0.00180	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
1,1-Dichloroethane	U		0.000549	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
1,2-Dichloroethane	U		0.000726	0.00250	0.00280	1	06/05/2020 11:17	WG1487490

SEWER SEC S. SIDE (4')

Collected date/time: 06/04/20 13:55

SAMPLE RESULTS - 02

L1225705

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000678	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
cis-1,2-Dichloroethene	U		0.000821	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
trans-1,2-Dichloroethene	U		0.00116	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
1,2-Dichloropropane	U		0.00159	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
1,1-Dichloropropene	U		0.000905	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
1,3-Dichloropropane	U		0.000561	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
cis-1,3-Dichloropropene	U		0.000847	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
trans-1,3-Dichloropropene	U		0.00128	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
2,2-Dichloropropane	U		0.00154	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
Di-isopropyl ether	U		0.000459	0.00100	0.00112	1	06/05/2020 11:17	WG1487490
Ethylbenzene	U		0.000825	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
Hexachloro-1,3-butadiene	U		0.00671	0.0250	0.0280	1	06/05/2020 11:17	WG1487490
Isopropylbenzene	U		0.000475	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
p-Isopropyltoluene	U		0.00285	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
2-Butanone (MEK)	U		0.0710	0.100	0.112	1	06/05/2020 11:17	WG1487490
Methylene Chloride	U		0.00743	0.0250	0.0280	1	06/05/2020 11:17	WG1487490
4-Methyl-2-pentanone (MIBK)	U		0.00255	0.0250	0.0280	1	06/05/2020 11:17	WG1487490
Methyl tert-butyl ether	U		0.000392	0.00100	0.00112	1	06/05/2020 11:17	WG1487490
Naphthalene	U		0.00546	0.0125	0.0140	1	06/05/2020 11:17	WG1487490
n-Propylbenzene	U		0.00106	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
Styrene	U		0.000256	0.0125	0.0140	1	06/05/2020 11:17	WG1487490
1,1,1,2-Tetrachloroethane	U		0.00106	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
1,1,2,2-Tetrachloroethane	U		0.000778	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
1,1,2-Trichlorotrifluoroethane	U		0.000844	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
Tetrachloroethene	0.00199	J	0.00100	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
Toluene	U		0.00145	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
1,2,3-Trichlorobenzene	U		0.00820	0.0125	0.0140	1	06/05/2020 11:17	WG1487490
1,2,4-Trichlorobenzene	U		0.00492	0.0125	0.0140	1	06/05/2020 11:17	WG1487490
1,1,1-Trichloroethane	U		0.00103	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
1,1,2-Trichloroethane	U		0.000668	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
Trichloroethene	U		0.000653	0.00100	0.00112	1	06/05/2020 11:17	WG1487490
Trichlorofluoromethane	U		0.000925	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
1,2,3-Trichloropropane	U		0.00181	0.0125	0.0140	1	06/05/2020 11:17	WG1487490
1,2,4-Trimethylbenzene	U		0.00177	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
1,2,3-Trimethylbenzene	U		0.00177	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
1,3,5-Trimethylbenzene	U		0.00224	0.00500	0.00559	1	06/05/2020 11:17	WG1487490
Vinyl chloride	U		0.00130	0.00250	0.00280	1	06/05/2020 11:17	WG1487490
Xylenes, Total	U		0.000985	0.00650	0.00727	1	06/05/2020 11:17	WG1487490
(S) Toluene-d8	*116*				*75.0-131*		*06/05/2020 11:17*	WG1487490
(S) 4-Bromofluorobenzene	*99.1*				*67.0-138*		*06/05/2020 11:17*	WG1487490
(S) 1,2-Dichloroethane-d4	*91.4*				*70.0-130*		*06/05/2020 11:17*	WG1487490

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		149	4.00	448	100	06/05/2020 15:29	WG1487837
Residual Range Organics (RRO)	1130		373	10.0	1120	100	06/05/2020 15:29	WG1487837
(S) o-Terphenyl	*105*	J7			*18.0-148*		*06/05/2020 15:29*	WG1487837

Sample Narrative:

L1225705-02 WG1487837: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.0		1	06/05/2020 10:30	WG1487701

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0763		0.0212	0.0400	0.0470	1	06/05/2020 13:15	WG1487771

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.55		0.541	2.00	2.35	1	06/05/2020 14:02	WG1487779
Barium	82.0		0.282	0.500	0.588	1	06/05/2020 14:02	WG1487779
Cadmium	0.693		0.0952	0.500	0.588	1	06/05/2020 14:02	WG1487779
Chromium	21.8		0.294	1.00	1.18	1	06/05/2020 14:02	WG1487779
Lead	28.6		0.245	0.500	0.588	1	06/05/2020 14:02	WG1487779
Selenium	U		0.725	2.00	2.35	1	06/05/2020 14:02	WG1487779
Silver	U		0.268	1.00	1.18	1	06/05/2020 14:02	WG1487779

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.05	J	0.996	0.100	2.94	25	06/05/2020 14:38	WG1487780
(S) a,a,a-Trifluorotoluene(FID)	*92.7*				*77.0-120*		*06/05/2020 14:38*	WG1487780

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0702		0.0485	0.0500	0.0664	1.13	06/05/2020 11:36	WG1487490
Acrylonitrile	U		0.00480	0.0125	0.0166	1.13	06/05/2020 11:36	WG1487490
Benzene	U		0.000620	0.00100	0.00133	1.13	06/05/2020 11:36	WG1487490
Bromobenzene	U		0.00120	0.0125	0.0166	1.13	06/05/2020 11:36	WG1487490
Bromodichloromethane	U		0.000963	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
Bromoform	U		0.00155	0.0250	0.0333	1.13	06/05/2020 11:36	WG1487490
Bromomethane	U		0.00262	0.0125	0.0166	1.13	06/05/2020 11:36	WG1487490
n-Butylbenzene	U		0.00698	0.0125	0.0166	1.13	06/05/2020 11:36	WG1487490
sec-Butylbenzene	U		0.00383	0.0125	0.0166	1.13	06/05/2020 11:36	WG1487490
tert-Butylbenzene	U		0.00259	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
Carbon tetrachloride	U		0.00119	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
Chlorobenzene	U		0.000279	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
Chlorodibromomethane	U		0.000813	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
Chloroethane	U		0.00226	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
Chloroform	U		0.00137	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
Chloromethane	U		0.00578	0.0125	0.0166	1.13	06/05/2020 11:36	WG1487490
2-Chlorotoluene	U		0.00115	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
4-Chlorotoluene	U		0.000598	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
1,2-Dibromo-3-Chloropropane	U		0.00518	0.0250	0.0333	1.13	06/05/2020 11:36	WG1487490
1,2-Dibromoethane	U		0.000861	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
Dibromomethane	U		0.000996	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
1,2-Dichlorobenzene	U		0.000565	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
1,3-Dichlorobenzene	U		0.000797	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
1,4-Dichlorobenzene	U		0.000930	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
Dichlorodifluoromethane	U		0.00214	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
1,1-Dichloroethane	U		0.000652	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
1,2-Dichloroethane	U		0.000862	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000805	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
cis-1,2-Dichloroethene	U		0.000975	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
trans-1,2-Dichloroethene	U		0.00138	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
1,2-Dichloropropane	U		0.00189	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
1,1-Dichloropropene	U		0.00107	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
1,3-Dichloropropane	U		0.000666	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
cis-1,3-Dichloropropene	U		0.00101	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
trans-1,3-Dichloropropene	U		0.00151	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
2,2-Dichloropropane	U		0.00183	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
Di-isopropyl ether	U		0.000545	0.00100	0.00133	1.13	06/05/2020 11:36	WG1487490
Ethylbenzene	U		0.000979	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
Hexachloro-1,3-butadiene	U		0.00797	0.0250	0.0333	1.13	06/05/2020 11:36	WG1487490
Isopropylbenzene	U		0.000565	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
p-Isopropyltoluene	U		0.00339	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
2-Butanone (MEK)	U		0.0844	0.100	0.133	1.13	06/05/2020 11:36	WG1487490
Methylene Chloride	U		0.00882	0.0250	0.0333	1.13	06/05/2020 11:36	WG1487490
4-Methyl-2-pentanone (MIBK)	U		0.00303	0.0250	0.0333	1.13	06/05/2020 11:36	WG1487490
Methyl tert-butyl ether	U		0.000465	0.00100	0.00133	1.13	06/05/2020 11:36	WG1487490
Naphthalene	U		0.00648	0.0125	0.0166	1.13	06/05/2020 11:36	WG1487490
n-Propylbenzene	0.00219	J	0.00126	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
Styrene	0.000797	J	0.000304	0.0125	0.0166	1.13	06/05/2020 11:36	WG1487490
1,1,1,2-Tetrachloroethane	U		0.00126	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
1,1,2,2-Tetrachloroethane	U		0.000923	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
1,1,2-Trichlorotrifluoroethane	U		0.00100	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
Tetrachloroethene	0.00528		0.00119	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
Toluene	0.00539	J	0.00173	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
1,2,3-Trichlorobenzene	U		0.00974	0.0125	0.0166	1.13	06/05/2020 11:36	WG1487490
1,2,4-Trichlorobenzene	U		0.00585	0.0125	0.0166	1.13	06/05/2020 11:36	WG1487490
1,1,1-Trichloroethane	U		0.00123	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
1,1,2-Trichloroethane	U		0.000793	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
Trichloroethene	U		0.000776	0.00100	0.00133	1.13	06/05/2020 11:36	WG1487490
Trichlorofluoromethane	U		0.00110	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
1,2,3-Trichloropropane	U		0.00215	0.0125	0.0166	1.13	06/05/2020 11:36	WG1487490
1,2,4-Trimethylbenzene	U		0.00210	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
1,2,3-Trimethylbenzene	U		0.00210	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
1,3,5-Trimethylbenzene	U		0.00266	0.00500	0.00664	1.13	06/05/2020 11:36	WG1487490
Vinyl chloride	U		0.00154	0.00250	0.00333	1.13	06/05/2020 11:36	WG1487490
Xylenes, Total	0.00644	J	0.00117	0.00650	0.00864	1.13	06/05/2020 11:36	WG1487490
(S) Toluene-d8	*115*				*75.0-131*		*06/05/2020 11:36*	WG1487490
(S) 4-Bromofluorobenzene	*98.9*				*67.0-138*		*06/05/2020 11:36*	WG1487490
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*06/05/2020 11:36*	WG1487490

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	7.18	J	3.13	4.00	9.41	2	06/05/2020 14:50	WG1487837
Residual Range Organics (RRO)	62.7		7.83	10.0	23.5	2	06/05/2020 14:50	WG1487837
(S) o-Terphenyl	*69.9*				*18.0-148*		*06/05/2020 14:50*	WG1487837

Sample Narrative:

L1225705-03 WG1487837: Dilution due to matrix impact during extract concentration procedure

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	87.9		1	06/05/2020 10:30	WG1487701

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0420	J	0.0205	0.0400	0.0455	1	06/05/2020 13:18	WG1487771

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	9.06		0.523	2.00	2.27	1	06/05/2020 14:04	WG1487779
Barium	57.8		0.273	0.500	0.569	1	06/05/2020 14:04	WG1487779
Cadmium	0.331	J	0.0921	0.500	0.569	1	06/05/2020 14:04	WG1487779
Chromium	16.9		0.284	1.00	1.14	1	06/05/2020 14:04	WG1487779
Lead	72.5		0.237	0.500	0.569	1	06/05/2020 14:04	WG1487779
Selenium	U		0.702	2.00	2.27	1	06/05/2020 14:04	WG1487779
Silver	U		0.259	1.00	1.14	1	06/05/2020 14:04	WG1487779

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	1.10	J	0.964	0.100	2.84	25	06/05/2020 14:59	WG1487780
(S) a,a,a-Trifluorotoluene(FID)	*92.1*				*77.0-120*		*06/05/2020 14:59*	WG1487780

Volatile Organic Compounds (GC/MS) by Method 8260B

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0415	0.0500	0.0569	1	06/05/2020 11:56	WG1487490
Acrylonitrile	U		0.00411	0.0125	0.0142	1	06/05/2020 11:56	WG1487490
Benzene	U		0.000531	0.00100	0.00114	1	06/05/2020 11:56	WG1487490
Bromobenzene	U		0.00102	0.0125	0.0142	1	06/05/2020 11:56	WG1487490
Bromodichloromethane	U		0.000825	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
Bromoform	U		0.00133	0.0250	0.0284	1	06/05/2020 11:56	WG1487490
Bromomethane	U		0.00224	0.0125	0.0142	1	06/05/2020 11:56	WG1487490
n-Butylbenzene	U		0.00597	0.0125	0.0142	1	06/05/2020 11:56	WG1487490
sec-Butylbenzene	U		0.00328	0.0125	0.0142	1	06/05/2020 11:56	WG1487490
tert-Butylbenzene	U		0.00222	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
Carbon tetrachloride	U		0.00102	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
Chlorobenzene	U		0.000239	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
Chlorodibromomethane	U		0.000696	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
Chloroethane	U		0.00193	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
Chloroform	U		0.00117	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
Chloromethane	U		0.00495	0.0125	0.0142	1	06/05/2020 11:56	WG1487490
2-Chlorotoluene	U		0.000984	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
4-Chlorotoluene	U		0.000512	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
1,2-Dibromo-3-Chloropropane	U		0.00444	0.0250	0.0284	1	06/05/2020 11:56	WG1487490
1,2-Dibromoethane	U		0.000737	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
Dibromomethane	U		0.000853	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
1,2-Dichlorobenzene	U		0.000483	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
1,3-Dichlorobenzene	U		0.000682	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
1,4-Dichlorobenzene	U		0.000796	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
Dichlorodifluoromethane	U		0.00183	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
1,1-Dichloroethane	U		0.000559	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
1,2-Dichloroethane	U		0.000738	0.00250	0.00284	1	06/05/2020 11:56	WG1487490

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000689	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
cis-1,2-Dichloroethene	U		0.000835	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
trans-1,2-Dichloroethene	U		0.00118	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
1,2-Dichloropropane	U		0.00162	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
1,1-Dichloropropene	U		0.000920	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
1,3-Dichloropropane	U		0.000570	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
cis-1,3-Dichloropropene	U		0.000861	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
trans-1,3-Dichloropropene	U		0.00130	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
2,2-Dichloropropane	U		0.00157	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
Di-isopropyl ether	U		0.000466	0.00100	0.00114	1	06/05/2020 11:56	WG1487490
Ethylbenzene	U		0.000838	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
Hexachloro-1,3-butadiene	U		0.00682	0.0250	0.0284	1	06/05/2020 11:56	WG1487490
Isopropylbenzene	U		0.000483	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
p-Isopropyltoluene	0.00726		0.00290	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
2-Butanone (MEK)	U		0.0722	0.100	0.114	1	06/05/2020 11:56	WG1487490
Methylene Chloride	U		0.00755	0.0250	0.0284	1	06/05/2020 11:56	WG1487490
4-Methyl-2-pentanone (MIBK)	U		0.00259	0.0250	0.0284	1	06/05/2020 11:56	WG1487490
Methyl tert-butyl ether	U		0.000398	0.00100	0.00114	1	06/05/2020 11:56	WG1487490
Naphthalene	U		0.00555	0.0125	0.0142	1	06/05/2020 11:56	WG1487490
n-Propylbenzene	0.00138	J	0.00108	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
Styrene	U		0.000260	0.0125	0.0142	1	06/05/2020 11:56	WG1487490
1,1,1,2-Tetrachloroethane	U		0.00108	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
1,1,2,2-Tetrachloroethane	U		0.000791	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
1,1,2-Trichlorotrifluoroethane	U		0.000858	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
Tetrachloroethene	U		0.00102	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
Toluene	U		0.00148	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
1,2,3-Trichlorobenzene	U		0.00834	0.0125	0.0142	1	06/05/2020 11:56	WG1487490
1,2,4-Trichlorobenzene	U		0.00500	0.0125	0.0142	1	06/05/2020 11:56	WG1487490
1,1,1-Trichloroethane	U		0.00105	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
1,1,2-Trichloroethane	U		0.000679	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
Trichloroethene	U		0.000664	0.00100	0.00114	1	06/05/2020 11:56	WG1487490
Trichlorofluoromethane	U		0.000941	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
1,2,3-Trichloropropane	U		0.00184	0.0125	0.0142	1	06/05/2020 11:56	WG1487490
1,2,4-Trimethylbenzene	U		0.00180	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
1,2,3-Trimethylbenzene	U		0.00180	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
1,3,5-Trimethylbenzene	U		0.00227	0.00500	0.00569	1	06/05/2020 11:56	WG1487490
Vinyl chloride	U		0.00132	0.00250	0.00284	1	06/05/2020 11:56	WG1487490
Xylenes, Total	U		0.00100	0.00650	0.00739	1	06/05/2020 11:56	WG1487490
(S) Toluene-d8	*116*				*75.0-131*		*06/05/2020 11:56*	WG1487490
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*06/05/2020 11:56*	WG1487490
(S) 1,2-Dichloroethane-d4	*98.8*				*70.0-130*		*06/05/2020 11:56*	WG1487490

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		30.3	4.00	91.0	20	06/05/2020 15:16	WG1487837
Residual Range Organics (RRO)	217	J	75.8	10.0	227	20	06/05/2020 15:16	WG1487837
(S) o-Terphenyl	*94.3*	J7			*18.0-148*		*06/05/2020 15:16*	WG1487837

Sample Narrative:

L1225705-04 WG1487837: Cannot run at lower dilution due to viscosity of extract

SEWER SEC E SIDE (4')
Collected date/time: 06/04/20 14:10

SAMPLE RESULTS - 05

L1225705

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.2		1	06/05/2020 10:30	WG1487701

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0520		0.0195	0.0400	0.0434	1	06/05/2020 13:20	WG1487771

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	15.5		0.499	2.00	2.17	1	06/05/2020 13:34	WG1487779
Barium	88.0		0.260	0.500	0.542	1	06/05/2020 13:34	WG1487779
Cadmium	0.343	J	0.0878	0.500	0.542	1	06/05/2020 13:34	WG1487779
Chromium	37.5		0.271	1.00	1.08	1	06/05/2020 13:34	WG1487779
Lead	155		0.226	0.500	0.542	1	06/05/2020 13:34	WG1487779
Selenium	U		0.669	2.00	2.17	1	06/05/2020 13:34	WG1487779
Silver	U		0.247	1.00	1.08	1	06/05/2020 13:34	WG1487779

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	0.967	J	0.919	0.100	2.71	25	06/05/2020 15:19	WG1487780
(S) a,a,a-Trifluorotoluene(FID)	*92.5*				*77.0-120*		*06/05/2020 15:19*	WG1487780

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0396	0.0500	0.0542	1	06/05/2020 12:16	WG1487490
Acrylonitrile	U		0.00391	0.0125	0.0136	1	06/05/2020 12:16	WG1487490
Benzene	U		0.000506	0.00100	0.00108	1	06/05/2020 12:16	WG1487490
Bromobenzene	U		0.000976	0.0125	0.0136	1	06/05/2020 12:16	WG1487490
Bromodichloromethane	U		0.000786	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
Bromoform	U		0.00127	0.0250	0.0271	1	06/05/2020 12:16	WG1487490
Bromomethane	U		0.00214	0.0125	0.0136	1	06/05/2020 12:16	WG1487490
n-Butylbenzene	U		0.00569	0.0125	0.0136	1	06/05/2020 12:16	WG1487490
sec-Butylbenzene	U		0.00312	0.0125	0.0136	1	06/05/2020 12:16	WG1487490
tert-Butylbenzene	U		0.00211	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
Carbon tetrachloride	U		0.000974	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
Chlorobenzene	U		0.000228	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
Chlorodibromomethane	U		0.000664	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
Chloroethane	U		0.00184	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
Chloroform	U		0.00112	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
Chloromethane	U		0.00472	0.0125	0.0136	1	06/05/2020 12:16	WG1487490
2-Chlorotoluene	U		0.000938	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
4-Chlorotoluene	U		0.000488	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
1,2-Dibromo-3-Chloropropane	U		0.00423	0.0250	0.0271	1	06/05/2020 12:16	WG1487490
1,2-Dibromoethane	U		0.000703	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
Dibromomethane	U		0.000813	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
1,2-Dichlorobenzene	U		0.000461	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
1,3-Dichlorobenzene	U		0.000651	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
1,4-Dichlorobenzene	U		0.000759	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
Dichlorodifluoromethane	U		0.00175	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
1,1-Dichloroethane	U		0.000532	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
1,2-Dichloroethane	U		0.000704	0.00250	0.00271	1	06/05/2020 12:16	WG1487490

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000657	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
cis-1,2-Dichloroethene	U		0.000796	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
trans-1,2-Dichloroethene	U		0.00113	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
1,2-Dichloropropane	U		0.00154	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
1,1-Dichloropropene	U		0.000877	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
1,3-Dichloropropane	U		0.000543	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
cis-1,3-Dichloropropene	U		0.000821	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
trans-1,3-Dichloropropene	U		0.00124	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
2,2-Dichloropropane	U		0.00150	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
Di-isopropyl ether	U		0.000445	0.00100	0.00108	1	06/05/2020 12:16	WG1487490
Ethylbenzene	U		0.000799	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
Hexachloro-1,3-butadiene	U		0.00651	0.0250	0.0271	1	06/05/2020 12:16	WG1487490
Isopropylbenzene	U		0.000461	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
p-Isopropyltoluene	U		0.00277	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
2-Butanone (MEK)	U		0.0689	0.100	0.108	1	06/05/2020 12:16	WG1487490
Methylene Chloride	U		0.00720	0.0250	0.0271	1	06/05/2020 12:16	WG1487490
4-Methyl-2-pentanone (MIBK)	U		0.00247	0.0250	0.0271	1	06/05/2020 12:16	WG1487490
Methyl tert-butyl ether	U		0.000380	0.00100	0.00108	1	06/05/2020 12:16	WG1487490
Naphthalene	U		0.00529	0.0125	0.0136	1	06/05/2020 12:16	WG1487490
n-Propylbenzene	U		0.00103	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
Styrene	U		0.000248	0.0125	0.0136	1	06/05/2020 12:16	WG1487490
1,1,1,2-Tetrachloroethane	U		0.00103	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
1,1,2,2-Tetrachloroethane	U		0.000754	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
1,1,2-Trichlorotrifluoroethane	U		0.000818	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
Tetrachloroethene	U		0.000972	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
Toluene	U		0.00141	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
1,2,3-Trichlorobenzene	U		0.00795	0.0125	0.0136	1	06/05/2020 12:16	WG1487490
1,2,4-Trichlorobenzene	U		0.00477	0.0125	0.0136	1	06/05/2020 12:16	WG1487490
1,1,1-Trichloroethane	U		0.00100	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
1,1,2-Trichloroethane	U		0.000647	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
Trichloroethene	U		0.000633	0.00100	0.00108	1	06/05/2020 12:16	WG1487490
Trichlorofluoromethane	U		0.000897	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
1,2,3-Trichloropropane	U		0.00176	0.0125	0.0136	1	06/05/2020 12:16	WG1487490
1,2,4-Trimethylbenzene	U		0.00171	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
1,2,3-Trimethylbenzene	U		0.00171	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
1,3,5-Trimethylbenzene	U		0.00217	0.00500	0.00542	1	06/05/2020 12:16	WG1487490
Vinyl chloride	U		0.00126	0.00250	0.00271	1	06/05/2020 12:16	WG1487490
Xylenes, Total	U		0.000954	0.00650	0.00705	1	06/05/2020 12:16	WG1487490
(S) Toluene-d8	*116*				*75.0-131*		*06/05/2020 12:16*	WG1487490
(S) 4-Bromofluorobenzene	*99.2*				*67.0-138*		*06/05/2020 12:16*	WG1487490
(S) 1,2-Dichloroethane-d4	*92.9*				*70.0-130*		*06/05/2020 12:16*	WG1487490

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	10.8		2.88	4.00	8.68	2	06/05/2020 15:03	WG1487837
Residual Range Organics (RRO)	83.9		7.22	10.0	21.7	2	06/05/2020 15:03	WG1487837
(S) o-Terphenyl	*95.6*				*18.0-148*		*06/05/2020 15:03*	WG1487837

WG1487701

Total Solids by Method 2540 G-2011

Method Blank (MB)

(MB) R3535607-1 06/05/20 10:30

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1225705-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1225705-02 06/05/20 10:30 • (DUP) R3535607-3 06/05/20 10:30

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.4	89.5	1	0.184		10

Laboratory Control Sample (LCS)

(LCS) R3535607-2 06/05/20 10:30

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3535477-1 06/05/20 12:55

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3535477-2 06/05/20 12:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.500	0.533	107	80.0-120	

L1225705-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1225705-02 06/05/20 13:36 • (MS) R3535477-3 06/05/20 13:02 • (MSD) R3535477-4 06/05/20 13:10

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 %
Mercury	0.559	0.0588	0.623	0.641	101	104	1	75.0-125			2.88	20

Method Blank (MB)

(MB) R3535505-1 06/05/20 13:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.240	0.500
Cadmium	U		0.0810	0.500
Chromium	U		0.250	1.00
Lead	U		0.208	0.500
Selenium	U		0.617	2.00
Silver	U		0.228	1.00

Laboratory Control Sample (LCS)

(LCS) R3535505-2 06/05/20 13:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	106	106	80.0-120	
Barium	100	112	112	80.0-120	
Cadmium	100	106	106	80.0-120	
Chromium	100	110	110	80.0-120	
Lead	100	108	108	80.0-120	
Selenium	100	106	106	80.0-120	
Silver	20.0	21.7	108	80.0-120	

L1225705-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1225705-02 06/05/20 13:47 • (MS) R3535505-5 06/05/20 13:54 • (MSD) R3535505-6 06/05/20 13:57

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 %
Arsenic	112	12.4	114	108	90.6	85.5	1	75.0-125			5.18	20
Barium	112	85.9	180	175	84.5	79.2	1	75.0-125			3.34	20
Cadmium	112	1.13	106	103	94.0	91.1	1	75.0-125			3.12	20
Chromium	112	21.1	130	124	97.2	91.9	1	75.0-125			4.68	20
Lead	112	211	297	244	77.1	30.0	1	75.0-125		J6	19.5	20
Selenium	112	U	105	102	94.1	91.3	1	75.0-125			2.98	20
Silver	22.4	U	21.4	20.8	95.6	93.0	1	75.0-125			2.77	20

QUALITY CONTROL SUMMARY

L1225705-01,02,03,04,05

Method Blank (MB)

(MB) R3535585-2 06/05/20 13:06

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)	*92.0*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3535585-1 06/05/20 12:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.24	95.3	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*107*	*77.0-120*	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3535464-3 06/05/20 04:29

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Di-isopropyl ether	U		0.000410	0.00100
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
Isopropylbenzene	U		0.000425	0.00250

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3535464-3 06/05/20 04:29

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*115*			*75.0-131*
(S) 4-Bromofluorobenzene	*103*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3535464-1 06/05/20 03:08 • (LCSD) R3535464-2 06/05/20 03:28

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	0.771	0.657	123	105	10.0-160			16.0	31
Acrylonitrile	0.625	0.543	0.565	86.9	90.4	45.0-153			3.97	22
Benzene	0.125	0.0998	0.0999	79.8	79.9	70.0-123			0.100	20
Bromobenzene	0.125	0.142	0.141	114	113	73.0-121			0.707	20
Bromodichloromethane	0.125	0.108	0.115	86.4	92.0	73.0-121			6.28	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3535464-1 06/05/20 03:08 • (LCSD) R3535464-2 06/05/20 03:28

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 %
Bromoform	0.125	0.133	0.142	106	114	64.0-132			6.55	20
Bromomethane	0.125	0.0969	0.0969	77.5	77.5	56.0-147			0.000	20
n-Butylbenzene	0.125	0.0997	0.0978	79.8	78.2	68.0-135			1.92	20
sec-Butylbenzene	0.125	0.120	0.117	96.0	93.6	74.0-130			2.53	20
tert-Butylbenzene	0.125	0.127	0.128	102	102	75.0-127			0.784	20
Carbon tetrachloride	0.125	0.119	0.126	95.2	101	66.0-128			5.71	20
Chlorobenzene	0.125	0.126	0.128	101	102	76.0-128			1.57	20
Chlorodibromomethane	0.125	0.113	0.116	90.4	92.8	74.0-127			2.62	20
Chloroethane	0.125	0.0931	0.0984	74.5	78.7	61.0-134			5.54	20
Chloroform	0.125	0.105	0.106	84.0	84.8	72.0-123			0.948	20
Chloromethane	0.125	0.127	0.126	102	101	51.0-138			0.791	20
2-Chlorotoluene	0.125	0.129	0.130	103	104	75.0-124			0.772	20
4-Chlorotoluene	0.125	0.121	0.120	96.8	96.0	75.0-124			0.830	20
1,2-Dibromo-3-Chloropropane	0.125	0.126	0.126	101	101	59.0-130			0.000	20
1,2-Dibromoethane	0.125	0.142	0.146	114	117	74.0-128			2.78	20
Dibromomethane	0.125	0.110	0.114	88.0	91.2	75.0-122			3.57	20
1,2-Dichlorobenzene	0.125	0.122	0.126	97.6	101	76.0-124			3.23	20
1,3-Dichlorobenzene	0.125	0.120	0.122	96.0	97.6	76.0-125			1.65	20
1,4-Dichlorobenzene	0.125	0.112	0.115	89.6	92.0	77.0-121			2.64	20
Dichlorodifluoromethane	0.125	0.119	0.119	95.2	95.2	43.0-156			0.000	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	0.0947	0.0951	75.8	76.1	65.0-131			0.421	20
1,1-Dichloroethene	0.125	0.136	0.133	109	106	65.0-131			2.23	20
cis-1,2-Dichloroethene	0.125	0.127	0.134	102	107	73.0-125			5.36	20
trans-1,2-Dichloroethene	0.125	0.117	0.118	93.6	94.4	71.0-125			0.851	20
1,2-Dichloropropane	0.125	0.111	0.114	88.8	91.2	74.0-125			2.67	20
1,1-Dichloropropene	0.125	0.116	0.119	92.8	95.2	73.0-125			2.55	20
1,3-Dichloropropane	0.125	0.102	0.108	81.6	86.4	80.0-125			5.71	20
cis-1,3-Dichloropropene	0.125	0.0956	0.0992	76.5	79.4	76.0-127			3.70	20
trans-1,3-Dichloropropene	0.125	0.116	0.119	92.8	95.2	73.0-127			2.55	20
2,2-Dichloropropane	0.125	0.0843	0.0907	67.4	72.6	59.0-135			7.31	20
Di-isopropyl ether	0.125	0.0941	0.0980	75.3	78.4	60.0-136			4.06	20
Ethylbenzene	0.125	0.138	0.141	110	113	74.0-126			2.15	20
Hexachloro-1,3-butadiene	0.125	0.118	0.122	94.4	97.6	57.0-150			3.33	20
Isopropylbenzene	0.125	0.108	0.111	86.4	88.8	72.0-127			2.74	20
p-Isopropyltoluene	0.125	0.134	0.133	107	106	72.0-133			0.749	20
2-Butanone (MEK)	0.625	0.590	0.582	94.4	93.1	30.0-160			1.37	24
Methylene Chloride	0.125	0.0904	0.0950	72.3	76.0	68.0-123			4.96	20
4-Methyl-2-pentanone (MIBK)	0.625	0.646	0.679	103	109	56.0-143			4.98	20
Methyl tert-butyl ether	0.125	0.0983	0.103	78.6	82.4	66.0-132			4.67	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3535464-1 06/05/20 03:08 • (LCSD) R3535464-2 06/05/20 03:28

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Naphthalene	0.125	0.134	0.137	107	110	59.0-130			2.21	20
n-Propylbenzene	0.125	0.125	0.125	100	100	74.0-126			0.000	20
Styrene	0.125	0.110	0.118	88.0	94.4	72.0-127			7.02	20
1,1,1,2-Tetrachloroethane	0.125	0.110	0.114	88.0	91.2	74.0-129			3.57	20
1,1,2,2-Tetrachloroethane	0.125	0.0891	0.0920	71.3	73.6	68.0-128			3.20	20
Tetrachloroethene	0.125	0.138	0.140	110	112	70.0-136			1.44	20
Toluene	0.125	0.108	0.109	86.4	87.2	75.0-121			0.922	20
1,1,2-Trichlorotrifluoroethane	0.125	0.118	0.121	94.4	96.8	61.0-139			2.51	20
1,2,3-Trichlorobenzene	0.125	0.128	0.130	102	104	59.0-139			1.55	20
1,2,4-Trichlorobenzene	0.125	0.134	0.139	107	111	62.0-137			3.66	20
1,1,1-Trichloroethane	0.125	0.0906	0.0946	72.5	75.7	69.0-126			4.32	20
1,1,2-Trichloroethane	0.125	0.119	0.123	95.2	98.4	78.0-123			3.31	20
Trichloroethene	0.125	0.136	0.137	109	110	76.0-126			0.733	20
Trichlorofluoromethane	0.125	0.137	0.136	110	109	61.0-142			0.733	20
1,2,3-Trichloropropane	0.125	0.112	0.113	89.6	90.4	67.0-129			0.889	20
1,2,3-Trimethylbenzene	0.125	0.115	0.118	92.0	94.4	74.0-124			2.58	20
1,2,4-Trimethylbenzene	0.125	0.105	0.109	84.0	87.2	70.0-126			3.74	20
1,3,5-Trimethylbenzene	0.125	0.0966	0.0966	77.3	77.3	73.0-127			0.000	20
Vinyl chloride	0.125	0.109	0.113	87.2	90.4	63.0-134			3.60	20
Xylenes, Total	0.375	0.363	0.374	96.8	99.7	72.0-127			2.99	20
(S) Toluene-d8				*113*	*112*	*75.0-131*				
(S) 4-Bromofluorobenzene				*102*	*102*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*101*	*103*	*70.0-130*				

Method Blank (MB)

(MB) R3535573-1 06/05/20 14:11

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	*89.9*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3535573-2 06/05/20 14:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	44.7	89.4	50.0-150	
(S) o-Terphenyl			*99.1*	*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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCREDITATIONS & LOCATIONS

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

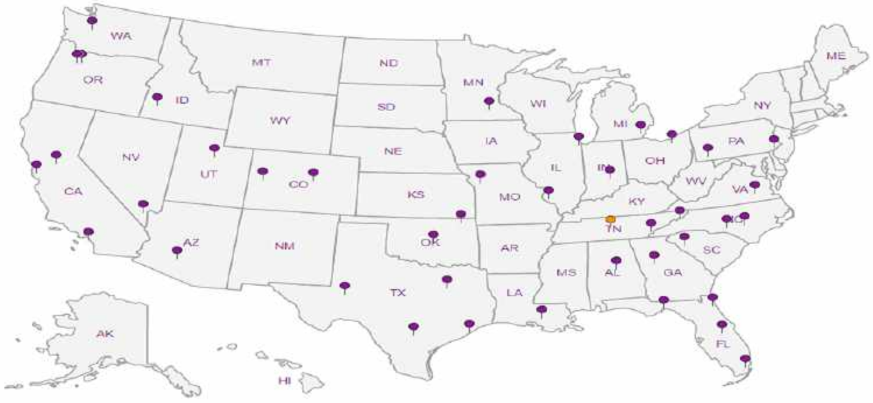
Third Party Federal Accreditations

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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:
Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Report to:
Kristi Barnette

Email To: **krbarnette@tgeresources.com**

Project Description: **Future Federal Way Emergency**

City/State Collected:

Please Circle: [✓ PT] MT CT ET

Phone: **713-744-5800**
Fax: **713-744-5888**

Client Project # R1341106

Lab Project # **TGERESHTX-8932**

Collected by (print): K Barnette

Site/Facility ID #

P.O. # ~~8932~~

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	As, Cd, Pb 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	RCRA8 (totals)	RCRA8+4 (TCLP)				Remarks	Sample # (lab only)
Sewer SEC Base (7.5')	Grab	SS	7.5	6/4/20	13:50	3		X	X		X	X	X					-01
Sewer SEC S. Side (4')	Grab	SS	4	6/4/20	13:55	3		X	X		X	X	X					-02
Sewer SEC N. Side (4')	Grab	SS	4	6/4/20	14:00	3		X	X		X	X	X					-03
Sewer SEC W Side (4')	Grab	SS	4	6/4/20	14:05	3		X	X		X	X	X					-04
Sewer SEC E Side (4')	Grab	SS	4	6/4/20	14:10	3		X	X		X	X	X					-05
		SS																
		SS																
		SS																
		SS																
		SS																

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

SDG # L1225705

A230

T

Acctnum: **TGERESHTX**
Template: **T164103**
Prelogin: **P760772**
PM: **134 - Mark W. Beasley**
PB:

Shipped Via: **FedEX Ground**

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks:**Log as R1 same day TAT******

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ______

Tracking # 393548686576

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) KBarnette
Date: 6/4/20
Time: 1500
Received by: (Signature)

Trip Blank Received: Yes / [✓ No]
HCL / MeoH
TBR

Relinquished by : (Signature)
Date:
Time:
Received by: (Signature)

Temp: [illegible]/13 °C 5+1=.6
Bottles Received: 15

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature) Sandy Yossef
Date: 6/5/20
Time: 8:45

Hold:

Condition: NCF / [✓ OK]

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

June 08, 2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

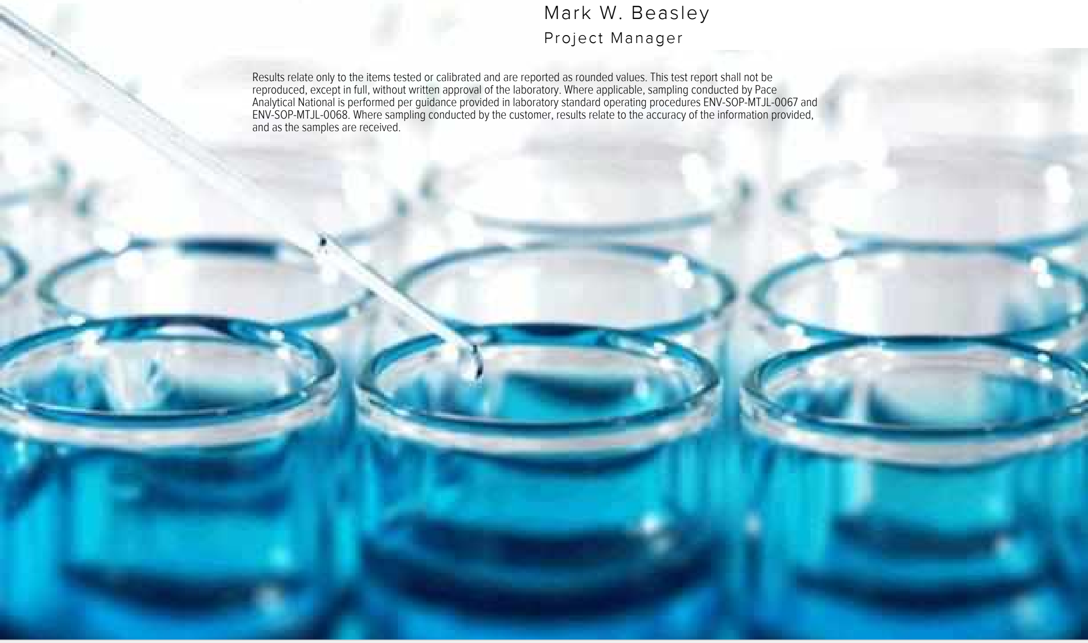
TGE Resources

Sample Delivery Group:	L1225712
Samples Received:	06/05/2020
Project Number:	R1341106
Description:	Future Federal Way Emergency Center

Report To:
Kristi Barnette
8048 Northcourt Road
Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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SAMPLE SUMMARY

SEWER SEC BASE (7.5) L1225712-01 Waste

Collected by	Collected date/time	Received date/time
K Barnette	06/04/20 13:50	06/05/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1488598	1	06/07/20 17:24	06/07/20 17:24	CGD	Mt. Juliet, TN
Mercury by Method 7470A	WG1488886	1	06/08/20 13:27	06/08/20 16:52	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1488900	1	06/08/20 13:40	06/08/20 15:11	EL	Mt. Juliet, TN

SEWER SEC S. SIDE (4') L1225712-02 Waste

Collected by	Collected date/time	Received date/time
K Barnette	06/04/20 13:55	06/05/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1488598	1	06/07/20 17:24	06/07/20 17:24	CGD	Mt. Juliet, TN
Mercury by Method 7470A	WG1488886	1	06/08/20 13:27	06/08/20 16:54	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1488900	1	06/08/20 13:40	06/08/20 15:37	EL	Mt. Juliet, TN

SEWER SEC N. SIDE (4') L1225712-03 Waste

Collected by	Collected date/time	Received date/time
K Barnette	06/04/20 14:00	06/05/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1488598	1	06/07/20 17:24	06/07/20 17:24	CGD	Mt. Juliet, TN
Mercury by Method 7470A	WG1488886	1	06/08/20 13:27	06/08/20 16:56	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1488900	1	06/08/20 13:40	06/08/20 15:40	EL	Mt. Juliet, TN

SEWER SEC W SIDE (4) L1225712-04 Waste

Collected by	Collected date/time	Received date/time
K Barnette	06/04/20 14:05	06/05/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1488598	1	06/07/20 17:24	06/07/20 17:24	CGD	Mt. Juliet, TN
Mercury by Method 7470A	WG1488886	1	06/08/20 13:27	06/08/20 16:58	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1488900	1	06/08/20 13:40	06/08/20 15:43	EL	Mt. Juliet, TN

SEWER SEC E SIDE (4') L1225712-05 Waste

Collected by	Collected date/time	Received date/time
K Barnette	06/04/20 14:10	06/05/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1488598	1	06/07/20 17:24	06/07/20 17:24	CGD	Mt. Juliet, TN
Mercury by Method 7470A	WG1488886	1	06/08/20 13:27	06/08/20 17:00	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1488900	1	06/08/20 13:40	06/08/20 15:51	EL	Mt. Juliet, TN

CASE NARRATIVE

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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 06/08/2020 19:28
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1225712-01, 02, 03, 04 and 05
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1488900, WG1488886 and WG1488598

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 06/08/2020 19:28
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1225712-01, 02, 03, 04 and 05
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1488900, WG1488886 and WG1488598

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?			X		
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 06/08/2020 19:28
Project Name: Future Federal Way Emergency Center	Laboratory Job Number: L1225712-01, 02, 03, 04 and 05
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1488900, WG1488886 and WG1488598

ER #[1]	Description
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.	

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2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		6/7/2020 5:24:49 PM	WG1488598
Fluid	1		6/7/2020 5:24:49 PM	WG1488598
Initial pH	6.66		6/7/2020 5:24:49 PM	WG1488598
Final pH	5.07		6/7/2020 5:24:49 PM	WG1488598

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	06/08/2020 16:52	WG1488886

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Antimony	ND		0.100		1	06/08/2020 15:11	WG1488900
Arsenic	ND		0.100	5	1	06/08/2020 15:11	WG1488900
Barium	0.452		0.100	100	1	06/08/2020 15:11	WG1488900
Beryllium	ND		0.0200		1	06/08/2020 15:11	WG1488900
Cadmium	ND		0.100	1	1	06/08/2020 15:11	WG1488900
Chromium	ND		0.100	5	1	06/08/2020 15:11	WG1488900
Lead	ND		0.100	5	1	06/08/2020 15:11	WG1488900
Nickel	ND		0.100		1	06/08/2020 15:11	WG1488900
Selenium	ND		0.100	1	1	06/08/2020 15:11	WG1488900
Silver	ND		0.100	5	1	06/08/2020 15:11	WG1488900
Vanadium	ND		0.200		1	06/08/2020 15:11	WG1488900

SEWER SEC S. SIDE (4')

Collected date/time: 06/04/20 13:55

SAMPLE RESULTS - 02

L1225712

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		6/7/2020 5:24:49 PM	WG1488598
Fluid	1		6/7/2020 5:24:49 PM	WG1488598
Initial pH	6.93		6/7/2020 5:24:49 PM	WG1488598
Final pH	5.02		6/7/2020 5:24:49 PM	WG1488598

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	06/08/2020 16:54	WG1488886

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Antimony	ND		0.100		1	06/08/2020 15:37	WG1488900
Arsenic	ND		0.100	5	1	06/08/2020 15:37	WG1488900
Barium	0.482		0.100	100	1	06/08/2020 15:37	WG1488900
Beryllium	ND		0.0200		1	06/08/2020 15:37	WG1488900
Cadmium	ND		0.100	1	1	06/08/2020 15:37	WG1488900
Chromium	ND		0.100	5	1	06/08/2020 15:37	WG1488900
Lead	0.165		0.100	5	1	06/08/2020 15:37	WG1488900
Nickel	ND		0.100		1	06/08/2020 15:37	WG1488900
Selenium	ND		0.100	1	1	06/08/2020 15:37	WG1488900
Silver	ND		0.100	5	1	06/08/2020 15:37	WG1488900
Vanadium	ND		0.200		1	06/08/2020 15:37	WG1488900

SEWER SEC N. SIDE (4')
Collected date/time: 06/04/20 14:00

SAMPLE RESULTS - 03

L1225712

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		6/7/2020 5:24:49 PM	WG1488598
Fluid	1		6/7/2020 5:24:49 PM	WG1488598
Initial pH	7.25		6/7/2020 5:24:49 PM	WG1488598
Final pH	5.02		6/7/2020 5:24:49 PM	WG1488598

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	06/08/2020 16:56	WG1488886

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Antimony	ND		0.100		1	06/08/2020 15:40	WG1488900
Arsenic	ND		0.100	5	1	06/08/2020 15:40	WG1488900
Barium	0.857		0.100	100	1	06/08/2020 15:40	WG1488900
Beryllium	ND		0.0200		1	06/08/2020 15:40	WG1488900
Cadmium	ND		0.100	1	1	06/08/2020 15:40	WG1488900
Chromium	ND		0.100	5	1	06/08/2020 15:40	WG1488900
Lead	ND		0.100	5	1	06/08/2020 15:40	WG1488900
Nickel	ND		0.100		1	06/08/2020 15:40	WG1488900
Selenium	ND		0.100	1	1	06/08/2020 15:40	WG1488900
Silver	ND		0.100	5	1	06/08/2020 15:40	WG1488900
Vanadium	ND		0.200		1	06/08/2020 15:40	WG1488900

SEWER SEC W SIDE (4)

Collected date/time: 06/04/20 14:05

SAMPLE RESULTS - 04

L1225712

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		6/7/2020 5:24:49 PM	WG1488598
Fluid	1		6/7/2020 5:24:49 PM	WG1488598
Initial pH	7.04		6/7/2020 5:24:49 PM	WG1488598
Final pH	5.06		6/7/2020 5:24:49 PM	WG1488598

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	06/08/2020 16:58	WG1488886

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MQL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Antimony	ND		0.100		1	06/08/2020 15:43	WG1488900
Arsenic	ND		0.100	5	1	06/08/2020 15:43	WG1488900
Barium	0.540		0.100	100	1	06/08/2020 15:43	WG1488900
Beryllium	ND		0.0200		1	06/08/2020 15:43	WG1488900
Cadmium	ND		0.100	1	1	06/08/2020 15:43	WG1488900
Chromium	ND		0.100	5	1	06/08/2020 15:43	WG1488900
Lead	0.119		0.100	5	1	06/08/2020 15:43	WG1488900
Nickel	ND		0.100		1	06/08/2020 15:43	WG1488900
Selenium	ND		0.100	1	1	06/08/2020 15:43	WG1488900
Silver	ND		0.100	5	1	06/08/2020 15:43	WG1488900
Vanadium	ND		0.200		1	06/08/2020 15:43	WG1488900

SEWER SEC E SIDE (4')

Collected date/time: 06/04/20 14:10

SAMPLE RESULTS - 05

L1225712

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		6/7/2020 5:24:49 PM	WG1488598
Fluid	1		6/7/2020 5:24:49 PM	WG1488598
Initial pH	6.80		6/7/2020 5:24:49 PM	WG1488598
Final pH	5.03		6/7/2020 5:24:49 PM	WG1488598

Mercury by Method 7470A

	Result	Qualifier	MQL	Limit	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l		date / time	
Mercury	ND		0.0100	0.20	1	06/08/2020 17:00	WG1488886

Metals (ICP) by Method 6010D

	Result	Qualifier	MQL	Limit	Dilution	Analysis	Batch
Analyte	mg/l		mg/l	mg/l		date / time	
Antimony	ND		0.100		1	06/08/2020 15:51	WG1488900
Arsenic	ND		0.100	5	1	06/08/2020 15:51	WG1488900
Barium	0.518		0.100	100	1	06/08/2020 15:51	WG1488900
Beryllium	ND		0.0200		1	06/08/2020 15:51	WG1488900
Cadmium	ND		0.100	1	1	06/08/2020 15:51	WG1488900
Chromium	ND		0.100	5	1	06/08/2020 15:51	WG1488900
Lead	ND		0.100	5	1	06/08/2020 15:51	WG1488900
Nickel	ND		0.100		1	06/08/2020 15:51	WG1488900
Selenium	ND		0.100	1	1	06/08/2020 15:51	WG1488900
Silver	ND		0.100	5	1	06/08/2020 15:51	WG1488900
Vanadium	ND		0.200		1	06/08/2020 15:51	WG1488900

Method Blank (MB)

(MB) R3536317-1 06/08/20 16:42

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.00330	0.0100

Laboratory Control Sample (LCS)

(LCS) R3536317-2 06/08/20 16:44

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Mercury	0.0300	0.0289	96.4	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

WG1488900

Metals (ICP) by Method 6010D

Method Blank (MB)

(MB) R3536272-1 06/08/20 15:06

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Antimony	U		0.0333	0.100
Arsenic	U		0.0333	0.100
Barium	U		0.0333	0.100
Beryllium	U		0.00667	0.0200
Cadmium	U		0.0333	0.100
Chromium	U		0.0333	0.100
Lead	U		0.0333	0.100
Nickel	U		0.0333	0.100
Selenium	U		0.0333	0.100
Silver	U		0.0333	0.100
Vanadium	U		0.0667	0.200

Laboratory Control Sample (LCS)

(LCS) R3536272-2 06/08/20 15:08

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Antimony	10.0	9.56	95.6	80.0-120	
Arsenic	10.0	9.62	96.2	80.0-120	
Barium	10.0	10.1	101	80.0-120	
Beryllium	10.0	9.83	98.3	80.0-120	
Cadmium	10.0	9.68	96.8	80.0-120	
Chromium	10.0	9.73	97.3	80.0-120	
Lead	10.0	9.77	97.7	80.0-120	
Nickel	10.0	10.0	100	80.0-120	
Selenium	10.0	10.1	101	80.0-120	
Silver	2.00	1.90	94.8	80.0-120	
Vanadium	10.0	9.95	99.5	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Sample Detection Limit.
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.

ACCREDITATIONS & LOCATIONS

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
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1,6]	90010
Kentucky [2]	16
Louisiana	AI30792
Louisiana [1]	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico [1]	n/a
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [3]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LAO00356
South Carolina	84004
South Dakota	n/a
Tennessee [1,4]	2006
Texas	T104704245-18-15
Texas [5]	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

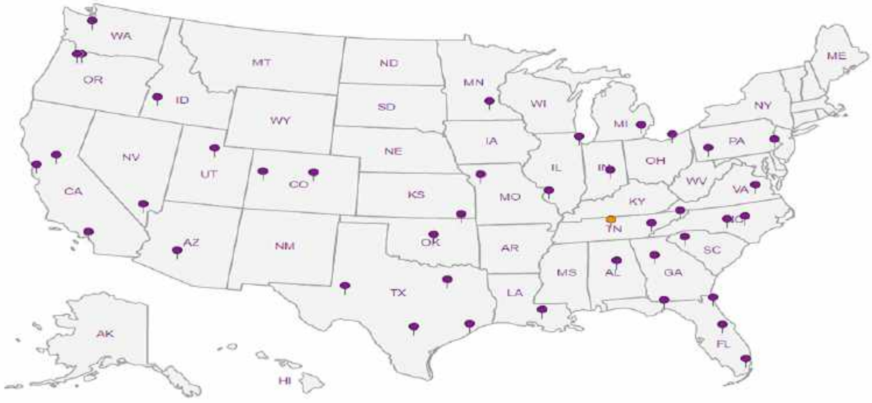
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

[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.



TGE Resources

8048 Northcourt Road
Houston, TX 77040

Billing Information:

Kim Pham
8048 Northcourt Road
Houston, TX 77040

Pres Chk

Email To: krbarnette@tgeresources.com

Report to:
Kristi Barnette

Project Description: **Future Federal Way Emergency**

City/State Collected:

Please Circle: [✓ PT] MT CT ET

Phone: 713-744-5800
Fax: 713-744-5888

Client Project # R134106

Lab Project # TGERESHTX-8932

Collected by (print): K Barnette

Site/Facility ID #

P.O. # ~~8932~~

Collected by (signature): KBarnette

Rush? (Lab MUST Be Notified)
X Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y X

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

SDG # ~~L1225705~~ A230 L1225712

Acctnum: **TGERESHTX**

Template: **T164103**

Prelogin: **P760772**

PM: 134 - Mark W. Beasley

PB:

Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	As, Cd, Pb 8ozClr-NoPres	NWTPHDXNOSGT 8ozClr-NoPres	NWTPHGX 40mlAmb/MeOH5ml/Syr	SV8081 8ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	RCRA8 (totals)	RCRA8+4 (TCLP)					Remarks	Sample # (lab only)
Sewer SEC Base(7.5)	Grab	SS	7.5	6/4/20	13:50	3		X	X		X	X	X						-01
Sewer SEC S. Side(4')	Grab	SS	4	6/4/20	13:55	3		X	X		X	X	X						-02
Sewer SEC N. Side(4')	Grab	SS	4	6/4/20	14:00	3		X	X		X	X	X						-03
ewer SEC W Side(4)	Grab	SS	4	6/4/20	14:05	3		X	X		X	X	X						-04
ewer SEC E Side(4')	Grab	SS	4	6/4/20	14:10	3		X	X		X	X	X						-05
		SS																	
		SS																	
		SS																	
		SS																	
		SS																	

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ________

Remarks: ****Log as R1 same day TAT****

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ______

Tracking # 3935 4868 65~~7~~6

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) KBarnette
Date: 6/4/20
Time: 1500
Received by: (Signature)

Trip Blank Received: Yes [✓ No]
HCL / MeOH
TBR

Relinquished by : (Signature)
Date:
Time:
Received by: (Signature)

Temp NP/TB °C 5+.1=.6
Bottles Received: 15

If preservation required by Login: Date/Time

Relinquished by : (Signature)
Date:
Time:
Received for lab by: (Signature) Sandy Yossef
Date: 6/5/20
Time: 8:45

Hold:

Condition: NCF / [✓ OK]

ANALYTICAL REPORT

June 17, 2020

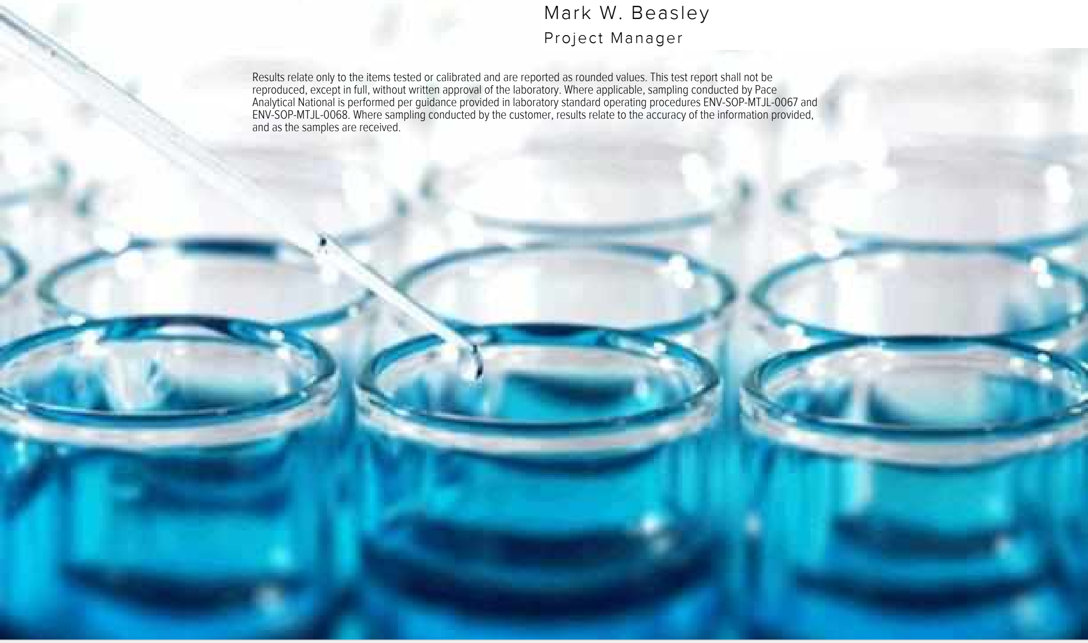
TGE Resources

Sample Delivery Group:	L1229368
Samples Received:	06/16/2020
Project Number:	R13411.06
Description:	
Report To:	Kristi Barnette 8048 Northcourt Road Houston, TX 77040

Entire Report Reviewed By:

Mark W. Beasley
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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EXCAVATION W SIDE (11') L1229368-01 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	06/13/20 11:45	06/16/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1493338	1	06/16/20 11:41	06/16/20 11:52	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1493384	1	06/16/20 11:29	06/16/20 12:47	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1493381	1	06/16/20 12:45	06/16/20 13:22	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1493368	31.3	06/13/20 11:45	06/16/20 12:52	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1493245	1	06/13/20 11:45	06/16/20 12:13	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1493392	1	06/16/20 12:22	06/16/20 16:57	FM	Mt. Juliet, TN

EXCAVATION E SIDE (10') L1229368-02 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	06/13/20 11:42	06/16/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1493338	1	06/16/20 11:41	06/16/20 11:52	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1493384	1	06/16/20 11:29	06/16/20 12:40	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1493381	1	06/16/20 12:45	06/16/20 13:10	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1493368	25	06/13/20 11:42	06/16/20 13:13	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1493245	1.1	06/13/20 11:42	06/16/20 12:32	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1493392	1	06/16/20 12:22	06/16/20 16:45	FM	Mt. Juliet, TN

STOCKPILE COMP L1229368-03 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	06/13/20 09:40	06/16/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1493338	1	06/16/20 11:41	06/16/20 11:52	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1493384	1	06/16/20 11:29	06/16/20 12:50	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1493381	1	06/16/20 12:45	06/16/20 13:25	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1493368	42	06/13/20 09:40	06/16/20 13:34	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1493245	1.26	06/13/20 09:40	06/16/20 12:51	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1493392	1	06/16/20 12:22	06/16/20 18:01	FM	Mt. Juliet, TN

EXCAVATION BASE L1229368-04 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	06/13/20 11:30	06/16/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1493338	1	06/16/20 11:41	06/16/20 11:52	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1493384	1	06/16/20 11:29	06/16/20 12:57	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1493381	1	06/16/20 12:45	06/16/20 13:27	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1493368	25	06/13/20 11:30	06/16/20 13:54	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1493245	1	06/13/20 11:30	06/16/20 13:09	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1493392	1	06/16/20 12:22	06/16/20 16:32	FM	Mt. Juliet, TN

EXCAVATION N SIDE (10') L1229368-05 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	06/13/20 11:41	06/16/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1493338	1	06/16/20 11:41	06/16/20 11:52	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1493384	1	06/16/20 11:29	06/16/20 13:00	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1493381	1	06/16/20 12:45	06/16/20 13:35	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1493368	25	06/13/20 11:41	06/16/20 14:15	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1493245	1	06/13/20 11:41	06/16/20 13:29	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1493392	50	06/16/20 12:22	06/16/20 19:26	FM	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

EXCAVATION S SIDE (10') L1229368-06 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	06/13/20 11:40	06/16/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1493338	1	06/16/20 11:41	06/16/20 11:52	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1493384	1	06/16/20 11:29	06/16/20 13:03	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1493381	1	06/16/20 12:45	06/16/20 13:38	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1493368	25	06/13/20 11:40	06/16/20 14:36	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1493245	1	06/13/20 11:40	06/16/20 13:48	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1493392	1	06/16/20 12:22	06/16/20 17:35	FM	Mt. Juliet, TN

EXCAVATION W SIDE (10') L1229368-07 Solid

Collected by	Collected date/time	Received date/time
K. Barnette	06/13/20 11:42	06/16/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1493338	1	06/16/20 11:41	06/16/20 11:52	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1493384	1	06/16/20 11:29	06/16/20 13:05	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1493381	1	06/16/20 12:45	06/16/20 13:40	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1493368	25	06/13/20 11:42	06/16/20 14:56	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1493245	1.2	06/13/20 11:42	06/16/20 14:07	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1493392	1	06/16/20 12:22	06/16/20 17:48	FM	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.

Mark W. Beasley
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

- a. Items consistent with NELAC Chapter 5,
- b. dilution factors,
- c. preparation methods,
- d. cleanup methods, and
- e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

- a. Calculated recovery (%R), and
- b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

- a. LCS spiking amounts,
- b. Calculated %R for each analyte, and
- c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a. Samples associated with the MS/MSD clearly identified,
- b. MS/MSD spiking amounts,
- c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d. Calculated %Rs and relative percent differences (RPDs), and
- e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

- a. The amount of analyte measured in the duplicate,
- b. The calculated RPD, and
- c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 06/17/2020 09:42
Project Name:	Laboratory Job Number: L1229368-01, 02, 03, 04, 05, 06 and 07
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1493384, WG1493381, WG1493245, WG1493368, WG1493338 and WG1493392

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 06/17/2020 09:42
Project Name:	Laboratory Job Number: L1229368-01, 02, 03, 04, 05, 06 and 07
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1493384, WG1493381, WG1493245, WG1493368, WG1493338 and WG1493392

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst’s competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 06/17/2020 09:42
Project Name:	Laboratory Job Number: L1229368-01, 02, 03, 04, 05, 06 and 07
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1493384, WG1493381, WG1493245, WG1493368, WG1493338 and WG1493392

ER #[1]	**Description**
1	NWTPHDX-NO SGT WG1493392 o-Terphenyl L1229368-05: Percent Recovery is outside of established control limits.
2	6010D WG1493381 Barium, Chromium: Percent Recovery is outside of established control limits.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	81.3		1	06/16/2020 11:52	WG1493338

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0429	J	0.0221	0.0400	0.0492	1	06/16/2020 12:47	WG1493384

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.25		0.566	2.00	2.46	1	06/16/2020 13:22	WG1493381
Barium	75.0		0.295	0.500	0.615	1	06/16/2020 13:22	WG1493381
Cadmium	0.311	J	0.0996	0.500	0.615	1	06/16/2020 13:22	WG1493381
Chromium	12.2		0.307	1.00	1.23	1	06/16/2020 13:22	WG1493381
Lead	20.3		0.256	0.500	0.615	1	06/16/2020 13:22	WG1493381
Selenium	U		0.759	2.00	2.46	1	06/16/2020 13:22	WG1493381
Silver	U		0.280	1.00	1.23	1	06/16/2020 13:22	WG1493381

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	6.89		1.30	0.100	3.85	31.3	06/16/2020 12:52	WG1493368
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*06/16/2020 12:52*	WG1493368

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0449	0.0500	0.0615	1	06/16/2020 12:13	WG1493245
Acrylonitrile	U		0.00444	0.0125	0.0154	1	06/16/2020 12:13	WG1493245
Benzene	0.00184		0.000574	0.00100	0.00123	1	06/16/2020 12:13	WG1493245
Bromobenzene	U		0.00111	0.0125	0.0154	1	06/16/2020 12:13	WG1493245
Bromodichloromethane	U		0.000891	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
Bromoform	U		0.00144	0.0250	0.0307	1	06/16/2020 12:13	WG1493245
Bromomethane	U		0.00242	0.0125	0.0154	1	06/16/2020 12:13	WG1493245
n-Butylbenzene	U		0.00646	0.0125	0.0154	1	06/16/2020 12:13	WG1493245
sec-Butylbenzene	U		0.00354	0.0125	0.0154	1	06/16/2020 12:13	WG1493245
tert-Butylbenzene	U		0.00240	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
Carbon tetrachloride	U		0.00110	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
Chlorobenzene	U		0.000258	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
Chlorodibromomethane	U		0.000753	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
Chloroethane	U		0.00209	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
Chloroform	U		0.00127	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
Chloromethane	U		0.00535	0.0125	0.0154	1	06/16/2020 12:13	WG1493245
2-Chlorotoluene	U		0.00106	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
4-Chlorotoluene	U		0.000553	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
1,2-Dibromo-3-Chloropropane	U		0.00480	0.0250	0.0307	1	06/16/2020 12:13	WG1493245
1,2-Dibromoethane	U		0.000797	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
Dibromomethane	U		0.000922	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
1,2-Dichlorobenzene	U		0.000523	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
1,3-Dichlorobenzene	U		0.000738	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
1,4-Dichlorobenzene	U		0.000861	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
Dichlorodifluoromethane	U		0.00198	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
1,1-Dichloroethane	U		0.000604	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
1,2-Dichloroethane	U		0.000798	0.00250	0.00307	1	06/16/2020 12:13	WG1493245

EXCAVATION W SIDE (11')

Collected date/time: 06/13/20 11:45

SAMPLE RESULTS - 01

L1229368

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000745	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
cis-1,2-Dichloroethene	U		0.000903	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
trans-1,2-Dichloroethene	U		0.00128	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
1,2-Dichloropropane	U		0.00175	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
1,1-Dichloropropene	U		0.000995	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
1,3-Dichloropropane	U		0.000616	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
cis-1,3-Dichloropropene	U		0.000931	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
trans-1,3-Dichloropropene	U		0.00140	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
2,2-Dichloropropane	U		0.00170	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
Di-isopropyl ether	U		0.000504	0.00100	0.00123	1	06/16/2020 12:13	WG1493245
Ethylbenzene	0.00219	J	0.000906	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
Hexachloro-1,3-butadiene	U		0.00738	0.0250	0.0307	1	06/16/2020 12:13	WG1493245
Isopropylbenzene	0.00108	J	0.000523	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
p-Isopropyltoluene	0.00882		0.00314	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
2-Butanone (MEK)	U		0.0781	0.100	0.123	1	06/16/2020 12:13	WG1493245
Methylene Chloride	U		0.00816	0.0250	0.0307	1	06/16/2020 12:13	WG1493245
4-Methyl-2-pentanone (MIBK)	U		0.00280	0.0250	0.0307	1	06/16/2020 12:13	WG1493245
Methyl tert-butyl ether	U		0.000430	0.00100	0.00123	1	06/16/2020 12:13	WG1493245
Naphthalene	U		0.00600	0.0125	0.0154	1	06/16/2020 12:13	WG1493245
n-Propylbenzene	U		0.00117	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
Styrene	U		0.000282	0.0125	0.0154	1	06/16/2020 12:13	WG1493245
1,1,1,2-Tetrachloroethane	U		0.00117	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
1,1,2,2-Tetrachloroethane	U		0.000855	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
1,1,2-Trichlorotrifluoroethane	U		0.000927	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
Tetrachloroethene	U		0.00110	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
Toluene	0.00245	J	0.00160	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
1,2,3-Trichlorobenzene	U		0.00901	0.0125	0.0154	1	06/16/2020 12:13	WG1493245
1,2,4-Trichlorobenzene	U		0.00541	0.0125	0.0154	1	06/16/2020 12:13	WG1493245
1,1,1-Trichloroethane	U		0.00113	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
1,1,2-Trichloroethane	U		0.000734	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
Trichloroethene	U		0.000718	0.00100	0.00123	1	06/16/2020 12:13	WG1493245
Trichlorofluoromethane	U		0.00102	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
1,2,3-Trichloropropane	U		0.00199	0.0125	0.0154	1	06/16/2020 12:13	WG1493245
1,2,4-Trimethylbenzene	0.00353	J	0.00194	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
1,2,3-Trimethylbenzene	0.00482	J	0.00194	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
Vinyl chloride	U		0.00143	0.00250	0.00307	1	06/16/2020 12:13	WG1493245
1,3,5-Trimethylbenzene	0.00293	J	0.00246	0.00500	0.00615	1	06/16/2020 12:13	WG1493245
Xylenes, Total	0.0107		0.00108	0.00650	0.00799	1	06/16/2020 12:13	WG1493245
(S) Toluene-d8	*107*				*75.0-131*		*06/16/2020 12:13*	WG1493245
(S) 4-Bromofluorobenzene	*102*				*67.0-138*		*06/16/2020 12:13*	WG1493245
(S) 1,2-Dichloroethane-d4	*93.3*				*70.0-130*		*06/16/2020 12:13*	WG1493245

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	8.69		1.64	4.00	4.92	1	06/16/2020 16:57	WG1493392
Residual Range Organics (RRO)	51.4		4.09	10.0	12.3	1	06/16/2020 16:57	WG1493392
(S) o-Terphenyl	*60.2*				*18.0-148*		*06/16/2020 16:57*	WG1493392

EXCAVATION E SIDE (10')

Collected date/time: 06/13/20 11:42

SAMPLE RESULTS - 02

L1229368

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	74.3		1	06/16/2020 11:52	WG1493338

Mercury by Method 7471A

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Mercury	0.0586		0.0242	0.0400	0.0539	1	06/16/2020 12:40	WG1493384

Metals (ICP) by Method 6010D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Arsenic	8.68		0.620	2.00	2.69	1	06/16/2020 13:10	WG1493381
Barium	134	J6	0.323	0.500	0.673	1	06/16/2020 13:10	WG1493381
Cadmium	0.298	J	0.109	0.500	0.673	1	06/16/2020 13:10	WG1493381
Chromium	40.8	J6	0.337	1.00	1.35	1	06/16/2020 13:10	WG1493381
Lead	12.1		0.280	0.500	0.673	1	06/16/2020 13:10	WG1493381
Selenium	U		0.831	2.00	2.69	1	06/16/2020 13:10	WG1493381
Silver	U		0.307	1.00	1.35	1	06/16/2020 13:10	WG1493381

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.14	0.100	3.37	25	06/16/2020 13:13	WG1493368
(S) a,a,a-Trifluorotoluene(FID)	*106*				*77.0-120*		*06/16/2020 13:13*	WG1493368

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Acetone	U		0.0541	0.0500	0.0741	1.1	06/16/2020 12:32	WG1493245
Acrylonitrile	U		0.00535	0.0125	0.0186	1.1	06/16/2020 12:32	WG1493245
Benzene	U		0.000692	0.00100	0.00148	1.1	06/16/2020 12:32	WG1493245
Bromobenzene	U		0.00133	0.0125	0.0186	1.1	06/16/2020 12:32	WG1493245
Bromodichloromethane	U		0.00107	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
Bromoform	U		0.00173	0.0250	0.0370	1.1	06/16/2020 12:32	WG1493245
Bromomethane	U		0.00292	0.0125	0.0186	1.1	06/16/2020 12:32	WG1493245
n-Butylbenzene	U		0.00778	0.0125	0.0186	1.1	06/16/2020 12:32	WG1493245
sec-Butylbenzene	U		0.00427	0.0125	0.0186	1.1	06/16/2020 12:32	WG1493245
tert-Butylbenzene	U		0.00289	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
Carbon tetrachloride	U		0.00133	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
Chlorobenzene	U		0.000311	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
Chlorodibromomethane	U		0.000907	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
Chloroethane	U		0.00252	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
Chloroform	U		0.00153	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
Chloromethane	U		0.00644	0.0125	0.0186	1.1	06/16/2020 12:32	WG1493245
2-Chlorotoluene	U		0.00128	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
4-Chlorotoluene	U		0.000667	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
1,2-Dibromo-3-Chloropropane	U		0.00578	0.0250	0.0370	1.1	06/16/2020 12:32	WG1493245
1,2-Dibromoethane	U		0.000960	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
Dibromomethane	U		0.00111	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
1,2-Dichlorobenzene	U		0.000630	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
1,3-Dichlorobenzene	U		0.000889	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
1,4-Dichlorobenzene	U		0.00104	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
Dichlorodifluoromethane	U		0.00239	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
1,1-Dichloroethane	U		0.000727	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
1,2-Dichloroethane	U		0.000961	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245

EXCAVATION E SIDE (10')

Collected date/time: 06/13/20 11:42

SAMPLE RESULTS - 02

L1229368

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000898	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
cis-1,2-Dichloroethene	U		0.00109	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
trans-1,2-Dichloroethene	U		0.00154	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
1,2-Dichloropropane	U		0.00210	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
1,1-Dichloropropene	U		0.00120	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
1,3-Dichloropropane	U		0.000742	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
cis-1,3-Dichloropropene	U		0.00112	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
trans-1,3-Dichloropropene	U		0.00169	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
2,2-Dichloropropane	U		0.00204	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
Di-isopropyl ether	U		0.000607	0.00100	0.00148	1.1	06/16/2020 12:32	WG1493245
Ethylbenzene	0.00152	J	0.00109	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
Hexachloro-1,3-butadiene	U		0.00889	0.0250	0.0370	1.1	06/16/2020 12:32	WG1493245
Isopropylbenzene	0.00111	J	0.000630	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
p-Isopropyltoluene	0.0110		0.00378	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
2-Butanone (MEK)	0.109	J	0.0941	0.100	0.148	1.1	06/16/2020 12:32	WG1493245
Methylene Chloride	U		0.00984	0.0250	0.0370	1.1	06/16/2020 12:32	WG1493245
4-Methyl-2-pentanone (MIBK)	U		0.00338	0.0250	0.0370	1.1	06/16/2020 12:32	WG1493245
Methyl tert-butyl ether	U		0.000519	0.00100	0.00148	1.1	06/16/2020 12:32	WG1493245
Naphthalene	U		0.00723	0.0125	0.0186	1.1	06/16/2020 12:32	WG1493245
n-Propylbenzene	U		0.00141	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
Styrene	U		0.000339	0.0125	0.0186	1.1	06/16/2020 12:32	WG1493245
1,1,1,2-Tetrachloroethane	U		0.00140	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
1,1,2,2-Tetrachloroethane	U		0.00103	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
1,1,2-Trichlorotrifluoroethane	U		0.00112	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
Tetrachloroethene	U		0.00133	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
Toluene	0.00330	J	0.00193	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
1,2,3-Trichlorobenzene	U		0.0109	0.0125	0.0186	1.1	06/16/2020 12:32	WG1493245
1,2,4-Trichlorobenzene	U		0.00652	0.0125	0.0186	1.1	06/16/2020 12:32	WG1493245
1,1,1-Trichloroethane	U		0.00137	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
1,1,2-Trichloroethane	U		0.000884	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
Trichloroethene	U		0.000865	0.00100	0.00148	1.1	06/16/2020 12:32	WG1493245
Trichlorofluoromethane	U		0.00123	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
1,2,3-Trichloropropane	U		0.00240	0.0125	0.0186	1.1	06/16/2020 12:32	WG1493245
1,2,4-Trimethylbenzene	U		0.00234	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
1,2,3-Trimethylbenzene	0.00277	J	0.00234	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
Vinyl chloride	U		0.00172	0.00250	0.00370	1.1	06/16/2020 12:32	WG1493245
1,3,5-Trimethylbenzene	U		0.00296	0.00500	0.00741	1.1	06/16/2020 12:32	WG1493245
Xylenes, Total	0.00745	J	0.00130	0.00650	0.00963	1.1	06/16/2020 12:32	WG1493245
(S) Toluene-d8	*107*				*75.0-131*		*06/16/2020 12:32*	WG1493245
(S) 4-Bromofluorobenzene	*98.1*				*67.0-138*		*06/16/2020 12:32*	WG1493245
(S) 1,2-Dichloroethane-d4	*93.3*				*70.0-130*		*06/16/2020 12:32*	WG1493245

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	13.2		1.79	4.00	5.39	1	06/16/2020 16:45	WG1493392
Residual Range Organics (RRO)	35.2		4.48	10.0	13.5	1	06/16/2020 16:45	WG1493392
(S) o-Terphenyl	*49.5*				*18.0-148*		*06/16/2020 16:45*	WG1493392

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	65.2		1	06/16/2020 11:52	WG1493338

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.149		0.0276	0.0400	0.0613	1	06/16/2020 12:50	WG1493384

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.57		0.705	2.00	3.07	1	06/16/2020 13:25	WG1493381
Barium	74.4		0.368	0.500	0.766	1	06/16/2020 13:25	WG1493381
Cadmium	0.297	J	0.124	0.500	0.766	1	06/16/2020 13:25	WG1493381
Chromium	9.43		0.383	1.00	1.53	1	06/16/2020 13:25	WG1493381
Lead	24.8		0.319	0.500	0.766	1	06/16/2020 13:25	WG1493381
Selenium	U		0.946	2.00	3.07	1	06/16/2020 13:25	WG1493381
Silver	U		0.349	1.00	1.53	1	06/16/2020 13:25	WG1493381

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	8.69		2.18	0.100	6.44	42	06/16/2020 13:34	WG1493368
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*06/16/2020 13:34*	WG1493368

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.261		0.0705	0.0500	0.0966	1.26	06/16/2020 12:51	WG1493245
Acrylonitrile	U		0.00697	0.0125	0.0242	1.26	06/16/2020 12:51	WG1493245
Benzene	0.00179	J	0.000902	0.00100	0.00193	1.26	06/16/2020 12:51	WG1493245
Bromobenzene	U		0.00174	0.0125	0.0242	1.26	06/16/2020 12:51	WG1493245
Bromodichloromethane	U		0.00140	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
Bromoform	U		0.00226	0.0250	0.0483	1.26	06/16/2020 12:51	WG1493245
Bromomethane	U		0.00380	0.0125	0.0242	1.26	06/16/2020 12:51	WG1493245
n-Butylbenzene	U		0.0101	0.0125	0.0242	1.26	06/16/2020 12:51	WG1493245
sec-Butylbenzene	U		0.00556	0.0125	0.0242	1.26	06/16/2020 12:51	WG1493245
tert-Butylbenzene	U		0.00377	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
Carbon tetrachloride	U		0.00173	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
Chlorobenzene	U		0.000406	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
Chlorodibromomethane	U		0.00118	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
Chloroethane	U		0.00328	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
Chloroform	U		0.00199	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
Chloromethane	U		0.00840	0.0125	0.0242	1.26	06/16/2020 12:51	WG1493245
2-Chlorotoluene	U		0.00167	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
4-Chlorotoluene	U		0.000869	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
1,2-Dibromo-3-Chloropropane	U		0.00753	0.0250	0.0483	1.26	06/16/2020 12:51	WG1493245
1,2-Dibromoethane	U		0.00125	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
Dibromomethane	U		0.00145	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
1,2-Dichlorobenzene	U		0.000821	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
1,3-Dichlorobenzene	U		0.00116	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
1,4-Dichlorobenzene	U		0.00135	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
Dichlorodifluoromethane	U		0.00311	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
1,1-Dichloroethane	U		0.000948	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
1,2-Dichloroethane	U		0.00125	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.00117	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
cis-1,2-Dichloroethene	U		0.00142	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
trans-1,2-Dichloroethene	U		0.00201	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
1,2-Dichloropropane	U		0.00274	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
1,1-Dichloropropene	U		0.00156	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
1,3-Dichloropropane	U		0.000968	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
cis-1,3-Dichloropropene	U		0.00146	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
trans-1,3-Dichloropropene	U		0.00220	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
2,2-Dichloropropane	U		0.00267	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
Di-isopropyl ether	U		0.000792	0.00100	0.00193	1.26	06/16/2020 12:51	WG1493245
Ethylbenzene	0.00314	J	0.00142	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
Hexachloro-1,3-butadiene	U		0.0116	0.0250	0.0483	1.26	06/16/2020 12:51	WG1493245
Isopropylbenzene	0.00303	J	0.000821	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
p-Isopropyltoluene	0.0148		0.00492	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
2-Butanone (MEK)	0.164	J	0.123	0.100	0.193	1.26	06/16/2020 12:51	WG1493245
Methylene Chloride	U		0.0128	0.0250	0.0483	1.26	06/16/2020 12:51	WG1493245
4-Methyl-2-pentanone (MIBK)	U		0.00440	0.0250	0.0483	1.26	06/16/2020 12:51	WG1493245
Methyl tert-butyl ether	U		0.000676	0.00100	0.00193	1.26	06/16/2020 12:51	WG1493245
Naphthalene	U		0.00942	0.0125	0.0242	1.26	06/16/2020 12:51	WG1493245
n-Propylbenzene	U		0.00183	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
Styrene	U		0.000442	0.0125	0.0242	1.26	06/16/2020 12:51	WG1493245
1,1,1,2-Tetrachloroethane	U		0.00183	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
1,1,2,2-Tetrachloroethane	U		0.00134	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
1,1,2-Trichlorotrifluoroethane	U		0.00146	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
Tetrachloroethene	U		0.00173	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
Toluene	0.0179		0.00251	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
1,2,3-Trichlorobenzene	U		0.0142	0.0125	0.0242	1.26	06/16/2020 12:51	WG1493245
1,2,4-Trichlorobenzene	U		0.00850	0.0125	0.0242	1.26	06/16/2020 12:51	WG1493245
1,1,1-Trichloroethane	U		0.00178	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
1,1,2-Trichloroethane	U		0.00115	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
Trichloroethene	U		0.00113	0.00100	0.00193	1.26	06/16/2020 12:51	WG1493245
Trichlorofluoromethane	U		0.00160	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
1,2,3-Trichloropropane	U		0.00313	0.0125	0.0242	1.26	06/16/2020 12:51	WG1493245
1,2,4-Trimethylbenzene	0.00883	J	0.00305	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
1,2,3-Trimethylbenzene	0.00811	J	0.00305	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
Vinyl chloride	U		0.00224	0.00250	0.00483	1.26	06/16/2020 12:51	WG1493245
1,3,5-Trimethylbenzene	0.00608	J	0.00386	0.00500	0.00966	1.26	06/16/2020 12:51	WG1493245
Xylenes, Total	0.0290		0.00170	0.00650	0.0126	1.26	06/16/2020 12:51	WG1493245
(S) Toluene-d8	*103*				*75.0-131*		*06/16/2020 12:51*	WG1493245
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*06/16/2020 12:51*	WG1493245
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*06/16/2020 12:51*	WG1493245

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	28.4		2.04	4.00	6.13	1	06/16/2020 18:01	WG1493392
Residual Range Organics (RRO)	74.6		5.10	10.0	15.3	1	06/16/2020 18:01	WG1493392
(S) o-Terphenyl	*47.1*				*18.0-148*		*06/16/2020 18:01*	WG1493392

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	77.7		1	06/16/2020 11:52	WG1493338

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0299	J	0.0232	0.0400	0.0515	1	06/16/2020 12:57	WG1493384

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.47	J	0.592	2.00	2.57	1	06/16/2020 13:27	WG1493381
Barium	93.8		0.309	0.500	0.643	1	06/16/2020 13:27	WG1493381
Cadmium	U		0.104	0.500	0.643	1	06/16/2020 13:27	WG1493381
Chromium	19.6		0.322	1.00	1.29	1	06/16/2020 13:27	WG1493381
Lead	2.13		0.268	0.500	0.643	1	06/16/2020 13:27	WG1493381
Selenium	U		0.794	2.00	2.57	1	06/16/2020 13:27	WG1493381
Silver	U		0.293	1.00	1.29	1	06/16/2020 13:27	WG1493381

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.09	0.100	3.22	25	06/16/2020 13:54	WG1493368
(S) a,a,a-Trifluorotoluene(FID)	*107*				*77.0-120*		*06/16/2020 13:54*	WG1493368

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0470	0.0500	0.0643	1	06/16/2020 13:09	WG1493245
Acrylonitrile	U		0.00464	0.0125	0.0161	1	06/16/2020 13:09	WG1493245
Benzene	U		0.000601	0.00100	0.00129	1	06/16/2020 13:09	WG1493245
Bromobenzene	U		0.00116	0.0125	0.0161	1	06/16/2020 13:09	WG1493245
Bromodichloromethane	U		0.000933	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
Bromoform	U		0.00151	0.0250	0.0322	1	06/16/2020 13:09	WG1493245
Bromomethane	U		0.00253	0.0125	0.0161	1	06/16/2020 13:09	WG1493245
n-Butylbenzene	U		0.00675	0.0125	0.0161	1	06/16/2020 13:09	WG1493245
sec-Butylbenzene	U		0.00370	0.0125	0.0161	1	06/16/2020 13:09	WG1493245
tert-Butylbenzene	U		0.00251	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
Carbon tetrachloride	U		0.00116	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
Chlorobenzene	U		0.000270	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
Chlorodibromomethane	U		0.000787	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
Chloroethane	U		0.00219	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
Chloroform	U		0.00132	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
Chloromethane	U		0.00560	0.0125	0.0161	1	06/16/2020 13:09	WG1493245
2-Chlorotoluene	U		0.00111	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
4-Chlorotoluene	U		0.000579	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
1,2-Dibromo-3-Chloropropane	U		0.00502	0.0250	0.0322	1	06/16/2020 13:09	WG1493245
1,2-Dibromoethane	U		0.000834	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
Dibromomethane	U		0.000965	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
1,2-Dichlorobenzene	U		0.000547	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
1,3-Dichlorobenzene	U		0.000772	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
1,4-Dichlorobenzene	U		0.000900	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
Dichlorodifluoromethane	U		0.00207	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
1,1-Dichloroethane	U		0.000632	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
1,2-Dichloroethane	U		0.000835	0.00250	0.00322	1	06/16/2020 13:09	WG1493245

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000780	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
cis-1,2-Dichloroethene	U		0.000944	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
trans-1,2-Dichloroethene	U		0.00134	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
1,2-Dichloropropane	U		0.00183	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
1,1-Dichloropropene	U		0.00104	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
1,3-Dichloropropane	U		0.000644	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
cis-1,3-Dichloropropene	U		0.000974	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
trans-1,3-Dichloropropene	U		0.00147	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
2,2-Dichloropropane	U		0.00178	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
Di-isopropyl ether	U		0.000527	0.00100	0.00129	1	06/16/2020 13:09	WG1493245
Ethylbenzene	U		0.000948	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
Hexachloro-1,3-butadiene	U		0.00772	0.0250	0.0322	1	06/16/2020 13:09	WG1493245
Isopropylbenzene	U		0.000547	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
p-Isopropyltoluene	U		0.00328	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
2-Butanone (MEK)	U		0.0817	0.100	0.129	1	06/16/2020 13:09	WG1493245
Methylene Chloride	U		0.00854	0.0250	0.0322	1	06/16/2020 13:09	WG1493245
4-Methyl-2-pentanone (MIBK)	U		0.00293	0.0250	0.0322	1	06/16/2020 13:09	WG1493245
Methyl tert-butyl ether	U		0.000450	0.00100	0.00129	1	06/16/2020 13:09	WG1493245
Naphthalene	U		0.00628	0.0125	0.0161	1	06/16/2020 13:09	WG1493245
n-Propylbenzene	U		0.00122	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
Styrene	U		0.000295	0.0125	0.0161	1	06/16/2020 13:09	WG1493245
1,1,1,2-Tetrachloroethane	U		0.00122	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
1,1,2,2-Tetrachloroethane	U		0.000894	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
1,1,2-Trichlorotrifluoroethane	U		0.000970	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
Tetrachloroethene	U		0.00115	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
Toluene	U		0.00167	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
1,2,3-Trichlorobenzene	U		0.00943	0.0125	0.0161	1	06/16/2020 13:09	WG1493245
1,2,4-Trichlorobenzene	U		0.00566	0.0125	0.0161	1	06/16/2020 13:09	WG1493245
1,1,1-Trichloroethane	U		0.00119	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
1,1,2-Trichloroethane	U		0.000768	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
Trichloroethene	U		0.000751	0.00100	0.00129	1	06/16/2020 13:09	WG1493245
Trichlorofluoromethane	U		0.00106	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
1,2,3-Trichloropropane	U		0.00208	0.0125	0.0161	1	06/16/2020 13:09	WG1493245
1,2,4-Trimethylbenzene	U		0.00203	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
1,2,3-Trimethylbenzene	U		0.00203	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
Vinyl chloride	U		0.00149	0.00250	0.00322	1	06/16/2020 13:09	WG1493245
1,3,5-Trimethylbenzene	U		0.00257	0.00500	0.00643	1	06/16/2020 13:09	WG1493245
Xylenes, Total	U		0.00113	0.00650	0.00836	1	06/16/2020 13:09	WG1493245
(S) Toluene-d8	*105*				*75.0-131*		*06/16/2020 13:09*	WG1493245
(S) 4-Bromofluorobenzene	*98.5*				*67.0-138*		*06/16/2020 13:09*	WG1493245
(S) 1,2-Dichloroethane-d4	*97.0*				*70.0-130*		*06/16/2020 13:09*	WG1493245

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		1.71	4.00	5.15	1	06/16/2020 16:32	WG1493392
Residual Range Organics (RRO)	U		4.28	10.0	12.9	1	06/16/2020 16:32	WG1493392
(S) o-Terphenyl	*68.7*				*18.0-148*		*06/16/2020 16:32*	WG1493392

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.8		1	06/16/2020 11:52	WG1493338

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	U		0.0212	0.0400	0.0472	1	06/16/2020 13:00	WG1493384

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.53	J	0.542	2.00	2.36	1	06/16/2020 13:35	WG1493381
Barium	46.5		0.283	0.500	0.589	1	06/16/2020 13:35	WG1493381
Cadmium	U		0.0955	0.500	0.589	1	06/16/2020 13:35	WG1493381
Chromium	16.5		0.295	1.00	1.18	1	06/16/2020 13:35	WG1493381
Lead	2.75		0.245	0.500	0.589	1	06/16/2020 13:35	WG1493381
Selenium	U		0.727	2.00	2.36	1	06/16/2020 13:35	WG1493381
Silver	U		0.269	1.00	1.18	1	06/16/2020 13:35	WG1493381

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.78	J	0.999	0.100	2.95	25	06/16/2020 14:15	WG1493368
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*06/16/2020 14:15*	WG1493368

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0430	0.0500	0.0589	1	06/16/2020 13:29	WG1493245
Acrylonitrile	U		0.00426	0.0125	0.0147	1	06/16/2020 13:29	WG1493245
Benzene	U		0.000551	0.00100	0.00118	1	06/16/2020 13:29	WG1493245
Bromobenzene	U		0.00106	0.0125	0.0147	1	06/16/2020 13:29	WG1493245
Bromodichloromethane	U		0.000855	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
Bromoform	U		0.00138	0.0250	0.0295	1	06/16/2020 13:29	WG1493245
Bromomethane	U		0.00232	0.0125	0.0147	1	06/16/2020 13:29	WG1493245
n-Butylbenzene	U		0.00619	0.0125	0.0147	1	06/16/2020 13:29	WG1493245
sec-Butylbenzene	U		0.00340	0.0125	0.0147	1	06/16/2020 13:29	WG1493245
tert-Butylbenzene	U		0.00230	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
Carbon tetrachloride	U		0.00106	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
Chlorobenzene	U		0.000248	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
Chlorodibromomethane	U		0.000721	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
Chloroethane	U		0.00200	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
Chloroform	U		0.00121	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
Chloromethane	U		0.00513	0.0125	0.0147	1	06/16/2020 13:29	WG1493245
2-Chlorotoluene	U		0.00102	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
4-Chlorotoluene	U		0.000530	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
1,2-Dibromo-3-Chloropropane	U		0.00460	0.0250	0.0295	1	06/16/2020 13:29	WG1493245
1,2-Dibromoethane	U		0.000764	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
Dibromomethane	U		0.000884	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
1,2-Dichlorobenzene	U		0.000501	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
1,3-Dichlorobenzene	U		0.000707	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
1,4-Dichlorobenzene	U		0.000825	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
Dichlorodifluoromethane	U		0.00190	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
1,1-Dichloroethane	U		0.000579	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
1,2-Dichloroethane	U		0.000765	0.00250	0.00295	1	06/16/2020 13:29	WG1493245

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000714	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
cis-1,2-Dichloroethene	U		0.000865	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
trans-1,2-Dichloroethene	U		0.00123	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
1,2-Dichloropropane	U		0.00167	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
1,1-Dichloropropene	U		0.000954	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
1,3-Dichloropropane	U		0.000591	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
cis-1,3-Dichloropropene	U		0.000892	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
trans-1,3-Dichloropropene	U		0.00134	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
2,2-Dichloropropane	U		0.00163	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
Di-isopropyl ether	U		0.000483	0.00100	0.00118	1	06/16/2020 13:29	WG1493245
Ethylbenzene	U		0.000869	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
Hexachloro-1,3-butadiene	U		0.00707	0.0250	0.0295	1	06/16/2020 13:29	WG1493245
Isopropylbenzene	U		0.000501	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
p-Isopropyltoluene	U		0.00301	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
2-Butanone (MEK)	U		0.0749	0.100	0.118	1	06/16/2020 13:29	WG1493245
Methylene Chloride	U		0.00783	0.0250	0.0295	1	06/16/2020 13:29	WG1493245
4-Methyl-2-pentanone (MIBK)	U		0.00269	0.0250	0.0295	1	06/16/2020 13:29	WG1493245
Methyl tert-butyl ether	U		0.000413	0.00100	0.00118	1	06/16/2020 13:29	WG1493245
Naphthalene	U		0.00575	0.0125	0.0147	1	06/16/2020 13:29	WG1493245
n-Propylbenzene	U		0.00112	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
Styrene	U		0.000270	0.0125	0.0147	1	06/16/2020 13:29	WG1493245
1,1,1,2-Tetrachloroethane	U		0.00112	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
1,1,2,2-Tetrachloroethane	U		0.000819	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
1,1,2-Trichlorotrifluoroethane	U		0.000889	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
Tetrachloroethene	U		0.00106	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
Toluene	0.00157	J	0.00153	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
1,2,3-Trichlorobenzene	U		0.00864	0.0125	0.0147	1	06/16/2020 13:29	WG1493245
1,2,4-Trichlorobenzene	U		0.00519	0.0125	0.0147	1	06/16/2020 13:29	WG1493245
1,1,1-Trichloroethane	U		0.00109	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
1,1,2-Trichloroethane	U		0.000704	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
Trichloroethene	U		0.000688	0.00100	0.00118	1	06/16/2020 13:29	WG1493245
Trichlorofluoromethane	U		0.000975	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
1,2,3-Trichloropropane	U		0.00191	0.0125	0.0147	1	06/16/2020 13:29	WG1493245
1,2,4-Trimethylbenzene	U		0.00186	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
1,2,3-Trimethylbenzene	U		0.00186	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
Vinyl chloride	U		0.00137	0.00250	0.00295	1	06/16/2020 13:29	WG1493245
1,3,5-Trimethylbenzene	U		0.00236	0.00500	0.00589	1	06/16/2020 13:29	WG1493245
Xylenes, Total	0.00147	J	0.00104	0.00650	0.00766	1	06/16/2020 13:29	WG1493245
(S) Toluene-d8	*106*				*75.0-131*		*06/16/2020 13:29*	WG1493245
(S) 4-Bromofluorobenzene	*96.9*				*67.0-138*		*06/16/2020 13:29*	WG1493245
(S) 1,2-Dichloroethane-d4	*97.8*				*70.0-130*		*06/16/2020 13:29*	WG1493245

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		78.4	4.00	236	50	06/16/2020 19:26	WG1493392
Residual Range Organics (RRO)	496	J	196	10.0	589	50	06/16/2020 19:26	WG1493392
(S) o-Terphenyl	*102*	J7			*18.0-148*		*06/16/2020 19:26*	WG1493392

Sample Narrative:

L1229368-05 WG1493392: Cannot run at lower dilution due to viscosity of extract

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.6		1	06/16/2020 11:52	WG1493338

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0547		0.0223	0.0400	0.0496	1	06/16/2020 13:03	WG1493384

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.61		0.571	2.00	2.48	1	06/16/2020 13:38	WG1493381
Barium	135		0.298	0.500	0.620	1	06/16/2020 13:38	WG1493381
Cadmium	0.326	J	0.100	0.500	0.620	1	06/16/2020 13:38	WG1493381
Chromium	25.0		0.310	1.00	1.24	1	06/16/2020 13:38	WG1493381
Lead	18.0		0.258	0.500	0.620	1	06/16/2020 13:38	WG1493381
Selenium	U		0.765	2.00	2.48	1	06/16/2020 13:38	WG1493381
Silver	U		0.283	1.00	1.24	1	06/16/2020 13:38	WG1493381

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2.84	J	1.05	0.100	3.10	25	06/16/2020 14:36	WG1493368
(S) a,a,a-Trifluorotoluene(FID)	*106*				*77.0-120*		*06/16/2020 14:36*	WG1493368

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0453	0.0500	0.0620	1	06/16/2020 13:48	WG1493245
Acrylonitrile	U		0.00448	0.0125	0.0155	1	06/16/2020 13:48	WG1493245
Benzene	U		0.000579	0.00100	0.00124	1	06/16/2020 13:48	WG1493245
Bromobenzene	U		0.00112	0.0125	0.0155	1	06/16/2020 13:48	WG1493245
Bromodichloromethane	U		0.000899	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
Bromoform	U		0.00145	0.0250	0.0310	1	06/16/2020 13:48	WG1493245
Bromomethane	U		0.00244	0.0125	0.0155	1	06/16/2020 13:48	WG1493245
n-Butylbenzene	U		0.00651	0.0125	0.0155	1	06/16/2020 13:48	WG1493245
sec-Butylbenzene	U		0.00357	0.0125	0.0155	1	06/16/2020 13:48	WG1493245
tert-Butylbenzene	U		0.00242	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
Carbon tetrachloride	U		0.00111	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
Chlorobenzene	U		0.000260	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
Chlorodibromomethane	U		0.000759	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
Chloroethane	U		0.00211	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
Chloroform	U		0.00128	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
Chloromethane	U		0.00540	0.0125	0.0155	1	06/16/2020 13:48	WG1493245
2-Chlorotoluene	U		0.00107	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
4-Chlorotoluene	U		0.000558	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
1,2-Dibromo-3-Chloropropane	U		0.00484	0.0250	0.0310	1	06/16/2020 13:48	WG1493245
1,2-Dibromoethane	U		0.000804	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
Dibromomethane	U		0.000930	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
1,2-Dichlorobenzene	U		0.000527	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
1,3-Dichlorobenzene	U		0.000744	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
1,4-Dichlorobenzene	U		0.000868	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
Dichlorodifluoromethane	U		0.00200	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
1,1-Dichloroethane	U		0.000609	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
1,2-Dichloroethane	U		0.000805	0.00250	0.00310	1	06/16/2020 13:48	WG1493245

EXCAVATION S SIDE (10')

Collected date/time: 06/13/20 11:40

SAMPLE RESULTS - 06

L1229368

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.000752	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
cis-1,2-Dichloroethene	U		0.000910	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
trans-1,2-Dichloroethene	U		0.00129	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
1,2-Dichloropropane	U		0.00176	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
1,1-Dichloropropene	U		0.00100	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
1,3-Dichloropropane	U		0.000621	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
cis-1,3-Dichloropropene	U		0.000939	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
trans-1,3-Dichloropropene	U		0.00141	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
2,2-Dichloropropane	U		0.00171	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
Di-isopropyl ether	U		0.000509	0.00100	0.00124	1	06/16/2020 13:48	WG1493245
Ethylbenzene	U		0.000914	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
Hexachloro-1,3-butadiene	U		0.00744	0.0250	0.0310	1	06/16/2020 13:48	WG1493245
Isopropylbenzene	U		0.000527	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
p-Isopropyltoluene	U		0.00316	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
2-Butanone (MEK)	U		0.0788	0.100	0.124	1	06/16/2020 13:48	WG1493245
Methylene Chloride	U		0.00824	0.0250	0.0310	1	06/16/2020 13:48	WG1493245
4-Methyl-2-pentanone (MIBK)	U		0.00283	0.0250	0.0310	1	06/16/2020 13:48	WG1493245
Methyl tert-butyl ether	U		0.000434	0.00100	0.00124	1	06/16/2020 13:48	WG1493245
Naphthalene	U		0.00605	0.0125	0.0155	1	06/16/2020 13:48	WG1493245
n-Propylbenzene	U		0.00118	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
Styrene	U		0.000284	0.0125	0.0155	1	06/16/2020 13:48	WG1493245
1,1,1,2-Tetrachloroethane	U		0.00118	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
1,1,2,2-Tetrachloroethane	U		0.000862	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
1,1,2-Trichlorotrifluoroethane	U		0.000935	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
Tetrachloroethene	U		0.00111	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
Toluene	0.00200	J	0.00161	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
1,2,3-Trichlorobenzene	U		0.00909	0.0125	0.0155	1	06/16/2020 13:48	WG1493245
1,2,4-Trichlorobenzene	U		0.00546	0.0125	0.0155	1	06/16/2020 13:48	WG1493245
1,1,1-Trichloroethane	U		0.00114	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
1,1,2-Trichloroethane	U		0.000740	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
Trichloroethene	U		0.000724	0.00100	0.00124	1	06/16/2020 13:48	WG1493245
Trichlorofluoromethane	U		0.00103	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
1,2,3-Trichloropropane	U		0.00201	0.0125	0.0155	1	06/16/2020 13:48	WG1493245
1,2,4-Trimethylbenzene	U		0.00196	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
1,2,3-Trimethylbenzene	U		0.00196	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
Vinyl chloride	U		0.00144	0.00250	0.00310	1	06/16/2020 13:48	WG1493245
1,3,5-Trimethylbenzene	U		0.00248	0.00500	0.00620	1	06/16/2020 13:48	WG1493245
Xylenes, Total	U		0.00109	0.00650	0.00806	1	06/16/2020 13:48	WG1493245
(S) Toluene-d8	*105*				*75.0-131*		*06/16/2020 13:48*	WG1493245
(S) 4-Bromofluorobenzene	*96.7*				*67.0-138*		*06/16/2020 13:48*	WG1493245
(S) 1,2-Dichloroethane-d4	*92.6*				*70.0-130*		*06/16/2020 13:48*	WG1493245

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	31.4		1.65	4.00	4.96	1	06/16/2020 17:35	WG1493392
Residual Range Organics (RRO)	47.9		4.13	10.0	12.4	1	06/16/2020 17:35	WG1493392
(S) o-Terphenyl	*40.5*				*18.0-148*		*06/16/2020 17:35*	WG1493392

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	57.4		1	06/16/2020 11:52	WG1493338

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0707		0.0314	0.0400	0.0697	1	06/16/2020 13:05	WG1493384

Metals (ICP) by Method 6010D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.11		0.801	2.00	3.48	1	06/16/2020 13:40	WG1493381
Barium	92.9		0.418	0.500	0.871	1	06/16/2020 13:40	WG1493381
Cadmium	0.198	J	0.141	0.500	0.871	1	06/16/2020 13:40	WG1493381
Chromium	11.0		0.435	1.00	1.74	1	06/16/2020 13:40	WG1493381
Lead	12.6		0.362	0.500	0.871	1	06/16/2020 13:40	WG1493381
Selenium	U		1.07	2.00	3.48	1	06/16/2020 13:40	WG1493381
Silver	U		0.397	1.00	1.74	1	06/16/2020 13:40	WG1493381

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	3.74	J	1.48	0.100	4.35	25	06/16/2020 14:56	WG1493368
(S) a,a,a-Trifluorotoluene(FID)	*106*				*77.0-120*		*06/16/2020 14:56*	WG1493368

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0763	0.0500	0.105	1.2	06/16/2020 14:07	WG1493245
Acrylonitrile	U		0.00755	0.0125	0.0261	1.2	06/16/2020 14:07	WG1493245
Benzene	0.0162		0.000976	0.00100	0.00209	1.2	06/16/2020 14:07	WG1493245
Bromobenzene	U		0.00188	0.0125	0.0261	1.2	06/16/2020 14:07	WG1493245
Bromodichloromethane	U		0.00152	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
Bromoform	U		0.00245	0.0250	0.0523	1.2	06/16/2020 14:07	WG1493245
Bromomethane	U		0.00412	0.0125	0.0261	1.2	06/16/2020 14:07	WG1493245
n-Butylbenzene	U		0.0110	0.0125	0.0261	1.2	06/16/2020 14:07	WG1493245
sec-Butylbenzene	U		0.00602	0.0125	0.0261	1.2	06/16/2020 14:07	WG1493245
tert-Butylbenzene	U		0.00408	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
Carbon tetrachloride	U		0.00188	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
Chlorobenzene	U		0.000439	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
Chlorodibromomethane	U		0.00128	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
Chloroethane	U		0.00355	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
Chloroform	U		0.00215	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
Chloromethane	U		0.00909	0.0125	0.0261	1.2	06/16/2020 14:07	WG1493245
2-Chlorotoluene	U		0.00181	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
4-Chlorotoluene	U		0.000941	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
1,2-Dibromo-3-Chloropropane	U		0.00815	0.0250	0.0523	1.2	06/16/2020 14:07	WG1493245
1,2-Dibromoethane	U		0.00135	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
Dibromomethane	U		0.00157	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
1,2-Dichlorobenzene	U		0.000888	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
1,3-Dichlorobenzene	U		0.00125	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
1,4-Dichlorobenzene	U		0.00146	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
Dichlorodifluoromethane	U		0.00336	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
1,1-Dichloroethane	U		0.00103	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
1,2-Dichloroethane	U		0.00136	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245

EXCAVATION W SIDE (10')

Collected date/time: 06/13/20 11:42

SAMPLE RESULTS - 07

L1229368

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1-Dichloroethene	U		0.00127	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
cis-1,2-Dichloroethene	U		0.00153	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
trans-1,2-Dichloroethene	U		0.00217	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
1,2-Dichloropropane	U		0.00297	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
1,1-Dichloropropene	U		0.00169	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
1,3-Dichloropropane	U		0.00105	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
cis-1,3-Dichloropropene	U		0.00158	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
trans-1,3-Dichloropropene	U		0.00238	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
2,2-Dichloropropane	U		0.00288	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
Di-isopropyl ether	U		0.000857	0.00100	0.00209	1.2	06/16/2020 14:07	WG1493245
Ethylbenzene	0.0128		0.00154	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
Hexachloro-1,3-butadiene	U		0.0125	0.0250	0.0523	1.2	06/16/2020 14:07	WG1493245
Isopropylbenzene	0.00178	J	0.000888	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
p-Isopropyltoluene	0.0644		0.00533	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
2-Butanone (MEK)	U		0.133	0.100	0.209	1.2	06/16/2020 14:07	WG1493245
Methylene Chloride	U		0.0139	0.0250	0.0523	1.2	06/16/2020 14:07	WG1493245
4-Methyl-2-pentanone (MIBK)	0.00585	J	0.00477	0.0250	0.0523	1.2	06/16/2020 14:07	WG1493245
Methyl tert-butyl ether	U		0.000732	0.00100	0.00209	1.2	06/16/2020 14:07	WG1493245
Naphthalene	U		0.0102	0.0125	0.0261	1.2	06/16/2020 14:07	WG1493245
n-Propylbenzene	0.00439	J	0.00199	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
Styrene	U		0.000479	0.0125	0.0261	1.2	06/16/2020 14:07	WG1493245
1,1,1,2-Tetrachloroethane	U		0.00198	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
1,1,2,2-Tetrachloroethane	U		0.00145	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
1,1,2-Trichlorotrifluoroethane	U		0.00158	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
Tetrachloroethene	U		0.00187	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
Toluene	0.225		0.00272	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
1,2,3-Trichlorobenzene	U		0.0153	0.0125	0.0261	1.2	06/16/2020 14:07	WG1493245
1,2,4-Trichlorobenzene	U		0.00920	0.0125	0.0261	1.2	06/16/2020 14:07	WG1493245
1,1,1-Trichloroethane	U		0.00193	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
1,1,2-Trichloroethane	U		0.00125	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
Trichloroethene	U		0.00122	0.00100	0.00209	1.2	06/16/2020 14:07	WG1493245
Trichlorofluoromethane	U		0.00173	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
1,2,3-Trichloropropane	U		0.00339	0.0125	0.0261	1.2	06/16/2020 14:07	WG1493245
1,2,4-Trimethylbenzene	0.0266		0.00330	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
1,2,3-Trimethylbenzene	0.0100	J	0.00330	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
Vinyl chloride	U		0.00242	0.00250	0.00523	1.2	06/16/2020 14:07	WG1493245
1,3,5-Trimethylbenzene	0.00669	J	0.00418	0.00500	0.0105	1.2	06/16/2020 14:07	WG1493245
Xylenes, Total	0.0427		0.00184	0.00650	0.0136	1.2	06/16/2020 14:07	WG1493245
(S) Toluene-d8	*104*				*75.0-131*		*06/16/2020 14:07*	WG1493245
(S) 4-Bromofluorobenzene	*94.8*				*67.0-138*		*06/16/2020 14:07*	WG1493245
(S) 1,2-Dichloroethane-d4	*92.3*				*70.0-130*		*06/16/2020 14:07*	WG1493245

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	55.6		2.32	4.00	6.97	1	06/16/2020 17:48	WG1493392
Residual Range Organics (RRO)	119		5.80	10.0	17.4	1	06/16/2020 17:48	WG1493392
(S) o-Terphenyl	*48.9*				*18.0-148*		*06/16/2020 17:48*	WG1493392

QUALITY CONTROL SUMMARY

L1229368-01,02,03,04,05,06,07

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3539339-1 06/16/20 11:52

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1229368-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1229368-03 06/16/20 11:52 • (DUP) R3539339-3 06/16/20 11:52

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	65.2	69.9	1	6.91		10

Laboratory Control Sample (LCS)

(LCS) R3539339-2 06/16/20 11:52

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) R3539206-1 06/16/20 12:35

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3539206-2 06/16/20 12:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.500	0.536	107	80.0-120	

L1229368-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1229368-02 06/16/20 12:40 • (MS) R3539206-3 06/16/20 12:42 • (MSD) R3539206-4 06/16/20 12:45

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 %
Mercury	0.673	0.0586	0.689	0.685	93.6	93.0	1	75.0-125			0.636	20

Method Blank (MB)

(MB) R3539241-1 06/16/20 13:05

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.460	2.00
Barium	U		0.240	0.500
Cadmium	U		0.0810	0.500
Chromium	U		0.250	1.00
Lead	U		0.208	0.500
Selenium	U		0.617	2.00
Silver	U		0.228	1.00

Laboratory Control Sample (LCS)

(LCS) R3539241-2 06/16/20 13:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	89.7	89.7	80.0-120	
Barium	100	94.9	94.9	80.0-120	
Cadmium	100	90.2	90.2	80.0-120	
Chromium	100	91.7	91.7	80.0-120	
Lead	100	91.0	91.0	80.0-120	
Selenium	100	90.8	90.8	80.0-120	
Silver	20.0	16.8	84.1	80.0-120	

L1229368-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1229368-02 06/16/20 13:10 • (MS) R3539241-5 06/16/20 13:17 • (MSD) R3539241-6 06/16/20 13:20

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 %
Arsenic	135	8.68	120	130	83.0	90.2	1	75.0-125			7.77	20
Barium	135	134	217	250	61.6	85.6	1	75.0-125	J6		13.9	20
Cadmium	135	0.298	116	122	85.6	90.7	1	75.0-125			5.85	20
Chromium	135	40.8	131	139	67.3	73.2	1	75.0-125	J6	J6	5.89	20
Lead	135	12.1	127	136	85.6	92.1	1	75.0-125			6.61	20
Selenium	135	U	114	122	84.5	90.5	1	75.0-125			6.89	20
Silver	26.9	U	21.9	23.1	81.3	85.9	1	75.0-125			5.48	20

Method Blank (MB)

(MB) R3539281-2 06/16/20 11:58

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)	*106*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3539281-1 06/16/20 11:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.71	104	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*99.9*	*77.0-120*	

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3539254-3 06/16/20 09:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Di-isopropyl ether	U		0.000410	0.00100
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
Isopropylbenzene	U		0.000425	0.00250

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3539254-3 06/16/20 09:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*107*			*75.0-131*
(S) 4-Bromofluorobenzene	*93.9*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*94.2*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3539254-1 06/16/20 08:11 • (LCSD) R3539254-2 06/16/20 08:30

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	0.614	0.544	98.2	87.0	10.0-160			12.1	31
Acrylonitrile	0.625	0.538	0.486	86.1	77.8	45.0-153			10.2	22
Benzene	0.125	0.106	0.103	84.8	82.4	70.0-123			2.87	20
Bromobenzene	0.125	0.128	0.130	102	104	73.0-121			1.55	20
Bromodichloromethane	0.125	0.121	0.123	96.8	98.4	73.0-121			1.64	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3539254-1 06/16/20 08:11 • (LCSD) R3539254-2 06/16/20 08:30

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 %
Bromoform	0.125	0.123	0.125	98.4	100	64.0-132			1.61	20
Bromomethane	0.125	0.119	0.113	95.2	90.4	56.0-147			5.17	20
n-Butylbenzene	0.125	0.125	0.121	100	96.8	68.0-135			3.25	20
sec-Butylbenzene	0.125	0.139	0.134	111	107	74.0-130			3.66	20
tert-Butylbenzene	0.125	0.123	0.124	98.4	99.2	75.0-127			0.810	20
Carbon tetrachloride	0.125	0.141	0.139	113	111	66.0-128			1.43	20
Chlorobenzene	0.125	0.124	0.120	99.2	96.0	76.0-128			3.28	20
Chlorodibromomethane	0.125	0.120	0.124	96.0	99.2	74.0-127			3.28	20
Chloroethane	0.125	0.106	0.0982	84.8	78.6	61.0-134			7.64	20
Chloroform	0.125	0.132	0.128	106	102	72.0-123			3.08	20
Chloromethane	0.125	0.125	0.124	100	99.2	51.0-138			0.803	20
2-Chlorotoluene	0.125	0.132	0.133	106	106	75.0-124			0.755	20
4-Chlorotoluene	0.125	0.131	0.131	105	105	75.0-124			0.000	20
1,2-Dibromo-3-Chloropropane	0.125	0.122	0.114	97.6	91.2	59.0-130			6.78	20
1,2-Dibromoethane	0.125	0.118	0.120	94.4	96.0	74.0-128			1.68	20
Dibromomethane	0.125	0.125	0.127	100	102	75.0-122			1.59	20
1,2-Dichlorobenzene	0.125	0.120	0.118	96.0	94.4	76.0-124			1.68	20
1,3-Dichlorobenzene	0.125	0.121	0.121	96.8	96.8	76.0-125			0.000	20
1,4-Dichlorobenzene	0.125	0.118	0.120	94.4	96.0	77.0-121			1.68	20
Dichlorodifluoromethane	0.125	0.138	0.136	110	109	43.0-156			1.46	20
1,1-Dichloroethane	0.125	0.121	0.118	96.8	94.4	70.0-127			2.51	20
1,2-Dichloroethane	0.125	0.135	0.136	108	109	65.0-131			0.738	20
1,1-Dichloroethene	0.125	0.129	0.125	103	100	65.0-131			3.15	20
cis-1,2-Dichloroethene	0.125	0.108	0.107	86.4	85.6	73.0-125			0.930	20
trans-1,2-Dichloroethene	0.125	0.127	0.126	102	101	71.0-125			0.791	20
1,2-Dichloropropane	0.125	0.111	0.116	88.8	92.8	74.0-125			4.41	20
1,1-Dichloropropene	0.125	0.113	0.112	90.4	89.6	73.0-125			0.889	20
1,3-Dichloropropane	0.125	0.115	0.121	92.0	96.8	80.0-125			5.08	20
cis-1,3-Dichloropropene	0.125	0.123	0.128	98.4	102	76.0-127			3.98	20
trans-1,3-Dichloropropene	0.125	0.119	0.118	95.2	94.4	73.0-127			0.844	20
2,2-Dichloropropane	0.125	0.120	0.114	96.0	91.2	59.0-135			5.13	20
Di-isopropyl ether	0.125	0.128	0.127	102	102	60.0-136			0.784	20
Ethylbenzene	0.125	0.110	0.105	88.0	84.0	74.0-126			4.65	20
Hexachloro-1,3-butadiene	0.125	0.130	0.140	104	112	57.0-150			7.41	20
Isopropylbenzene	0.125	0.130	0.128	104	102	72.0-127			1.55	20
p-Isopropyltoluene	0.125	0.129	0.129	103	103	72.0-133			0.000	20
2-Butanone (MEK)	0.625	0.645	0.676	103	108	30.0-160			4.69	24
Methylene Chloride	0.125	0.107	0.106	85.6	84.8	68.0-123			0.939	20
4-Methyl-2-pentanone (MIBK)	0.625	0.573	0.557	91.7	89.1	56.0-143			2.83	20
Methyl tert-butyl ether	0.125	0.143	0.146	114	117	66.0-132			2.08	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3539254-1 06/16/20 08:11 • (LCSD) R3539254-2 06/16/20 08:30

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 %
Naphthalene	0.125	0.0976	0.0989	78.1	79.1	59.0-130			1.32	20
n-Propylbenzene	0.125	0.128	0.126	102	101	74.0-126			1.57	20
Styrene	0.125	0.121	0.122	96.8	97.6	72.0-127			0.823	20
1,1,1,2-Tetrachloroethane	0.125	0.116	0.112	92.8	89.6	74.0-129			3.51	20
1,1,2,2-Tetrachloroethane	0.125	0.116	0.114	92.8	91.2	68.0-128			1.74	20
Tetrachloroethene	0.125	0.116	0.113	92.8	90.4	70.0-136			2.62	20
Toluene	0.125	0.114	0.110	91.2	88.0	75.0-121			3.57	20
1,1,2-Trichlorotrifluoroethane	0.125	0.124	0.128	99.2	102	61.0-139			3.17	20
1,2,3-Trichlorobenzene	0.125	0.116	0.118	92.8	94.4	59.0-139			1.71	20
1,2,4-Trichlorobenzene	0.125	0.104	0.104	83.2	83.2	62.0-137			0.000	20
1,1,1-Trichloroethane	0.125	0.139	0.136	111	109	69.0-126			2.18	20
1,1,2-Trichloroethane	0.125	0.120	0.115	96.0	92.0	78.0-123			4.26	20
Trichloroethene	0.125	0.134	0.134	107	107	76.0-126			0.000	20
Trichlorofluoromethane	0.125	0.125	0.126	100	101	61.0-142			0.797	20
1,2,3-Trichloropropane	0.125	0.127	0.133	102	106	67.0-129			4.62	20
1,2,3-Trimethylbenzene	0.125	0.113	0.115	90.4	92.0	74.0-124			1.75	20
1,2,4-Trimethylbenzene	0.125	0.122	0.123	97.6	98.4	70.0-126			0.816	20
1,3,5-Trimethylbenzene	0.125	0.120	0.120	96.0	96.0	73.0-127			0.000	20
Vinyl chloride	0.125	0.117	0.110	93.6	88.0	63.0-134			6.17	20
Xylenes, Total	0.375	0.376	0.368	100	98.1	72.0-127			2.15	20
(S) Toluene-d8				*100*	*101*	*75.0-131*				
(S) 4-Bromofluorobenzene				*103*	*101*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*109*	*108*	*70.0-130*				

Method Blank (MB)

(MB) R3539387-1 06/16/20 16:07

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	*75.1*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3539387-2 06/16/20 16:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	34.6	69.2	50.0-150	
(S) o-Terphenyl			*72.7*	*18.0-148*	

L1229368-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1229368-01 06/16/20 16:57 • (MS) R3539387-3 06/16/20 17:10 • (MSD) R3539387-4 06/16/20 17:23

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)	60.1	8.69	50.7	45.0	69.8	60.0	1	50.0-150			11.8	20
(S) o-Terphenyl					*59.7*	*54.4*		*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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCREDITATIONS & LOCATIONS

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

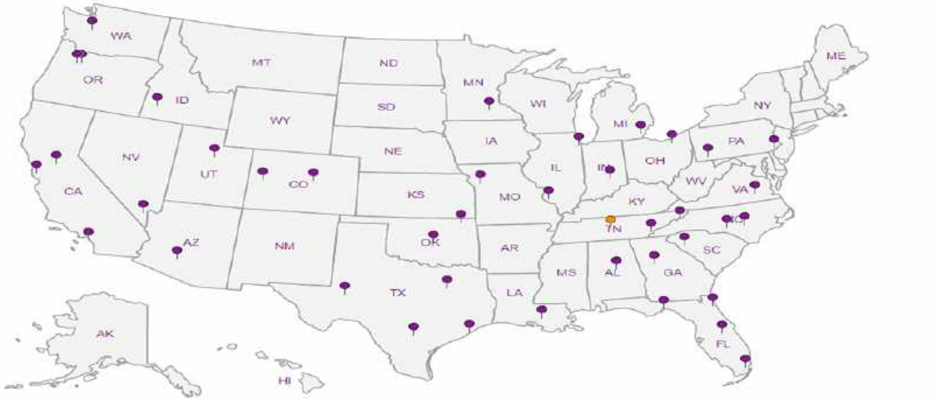
Third Party Federal Accreditations

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.



Pace Analytical®

CHAIN-OF-CUSTODY Analytical Request Document

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

mpany: TGE Resources, Inc.
Billing Information: 8048 Northcourt Road, Houston, TX 77040
ldress: 8048 Northcourt Road, Houston, TX 77040
port To: Kelli Barnette
Email To: KRBARNETTE@TGERESOURCES.COM
py To: KRBARNETTE@TGERESOURCES.COM
Site Collection Info/Address: 29805 Pacific Highway, Federal Way, WA
stomer Project Name/Number: :13411.06
State: County/City: WA/King
Time Zone Collected: [✓]PT [ ]MT [ ]CT [ ]ET
one: 713-744-5800
nail: krbarnette@tgeresources.com
Site/Facility ID #:
Compliance Monitoring? [ ] Yes [ ] No
llected By (print): . Barnette
Purchase Order #: 9305
Quote #:
DW PWS ID #:
DW Location Code:
llected By (signature): KBarnette
Turnaround Date Required: SAME DAY
Immediately Packed on Ice: [✓]Yes [ ] No
mple Disposal:
| Dispose as appropriate [ ] Return
| Archive: ____________
| Hold: notify TGE before disposal
Rush: [✓] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)
Field Filtered (if applicable): [ ] Yes [ ] No
Analysis: ____________

Container Preservative Type **

U	U	6	6	U					

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 ____________

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:

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)

stomer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns	RCRA 8	NWTPHDX	NWTPHGX	VOCs	TCLP RCRA 8+3 (HOLD)						Lab Sample # / Comments
			Date	Time	Date	Time													
xcavation W. Side (11')	SL	Grab	6/13/20	1145	6/13/20	1145	RES	3	X	X	X	X							1229369.01
xcavation E. Side (10')	SL	Grab	6/13/20	1142	6/13/20	1142	RES	3	X	X	X	X							02
ockpile Comp	SL	Grab	6/13/20	0940	6/13/20	0940	RES	3	X	X	X	X							03
xcavation Base	SL	Grab	6/13/20	1130	6/13/20	1130	RES	3	X	X	X	X							07
xcavation N. Side (10')	SL	Grab	6/13/20	1141	6/13/20	1141	RES	3	X	X	X	X							05
xcavation S. Side (10')	SL	Grab	6/13/20	1140	6/13/20	1140	RES	3	X	X	X	X							06
xcavation W. Side (10')	SL	Grab	6/13/20	1142	6/13/20	1142	RES	3	X	X	X	X							07

stomer 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#: MPA2
Cooler 1 Temp Upon Receipt: 1.2 oC
Cooler 1 Therm Corr. Factor: .2 oC
Cooler 1 Corrected Temp: 1.4 oC
Comments:

RAD SCREEN: <0.5 mR/hr

linquished by/Company: (Signature) KBarnette	Date/Time: 6/15/20	Received by/Company: (Signature)	Date/Time: 6/16/20 8:45
linquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
linquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

G215

Acctnum:
Template:
Prelogin:
PM:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s):
Page: ______