TETRA TECH

January 15, 2020

Rick Rickman
District Supervisor
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

Re: Release Characterization Results and Closure Request
ConocoPhillips
SEMU BTD #156 Release
Unit Letter C, Section 25, Township 20 South, Range 37 East
Lea County, New Mexico
1RP-4402

Dear Mr. Rickman:

ConocoPhillips is pleased to submit the following release characterization results in response to a release that occurred at the SEMU BTD #156, Unit Letter C, Section 25, Township 20 South, Range 37 East, Lea County, New Mexico (Site). The release site coordinates are 32.549325, -103.207859. The Site location is shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) Initial Site Assessment/Characterization Report (Form C-141), the release occurred on August 15, 2016. The release occurred due to a flow line leak and resulted in the discharge of 5.29 barrels (bbls) of produced water to the ground surface. No fluids were recovered. The C-141 Form is shown in Appendix A.

SITE CHARACTERIZATION

A site characterization was performed and per 19.15.29.12 NMAC, no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances and the Site is in a low karst potential area. The Site is within a New Mexico oil and gas production area.

According to the New Mexico Office of the State Engineer (NMOSE) well database, there no wells located in Section 25, Township 20 South, Range 37 East. The nearest well is located in Section 13 and has a depth to groundwater documented at 84 feet below ground surface. The groundwater data is included in Appendix B.

REGULATORY FRAMEWORK

A risk-based evaluation was performed for the Site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills, and Releases, updated August 14, 2018. The guidelines require a risk-based

Tetra Tech
901 West Wall St., Suite 100, Midland, TX 79701
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil.

Based upon the Site characterization, the proposed RRALs for soil are:

- Benzene: 10 milligrams per kilogram (mg/kg);
- Total BTEX (sum of benzene, toluene, ethylbenzene, and xylene): 50 mg/kg;
- TPH (GRO + DRO + ORO): 2,500 mg/kg;
- TPH (GRO + DRO): 1,000 mg/kg;
- Chloride: 10,000 mg/kg (600 mg/kg in the top four feet)

SITE ASSESSMENT

Tetra Tech personnel were onsite to delineate and sample the release area in November 2019. A total of five (5) soil borings (BH-1 through BH-5) were installed using an air rotary drilling rig to a depth of 20 feet below ground surface to evaluate the vertical and horizontal extents of the release. BH-1 was installed within the release extent footprint, while BH-2 through BH-5 were installed around the perimeter of the reported release area. Selected samples were submitted to an analytical laboratory for TPH (Method 8015 modified), BTEX (Method 8260B), and chlorides (EPA Method 300.0). Boring logs, included as Appendix C, present soil descriptions, sample depths and field screening data from the site assessment. A copy of the analytical laboratory report and chain-of-custody documentation are included in Appendix D. The soil boring locations are shown on Figure 3.

SUMMARY OF SAMPLING RESULTS

The results of the sampling event in November 2019 are summarized in Table 1. All analytical results associated with Site soil samples were below the proposed RRALs for TPH, BTEX, and chlorides. Copies of analytical reports and chain-of-custody documentation are included in Appendix D.

REMEDIATION WORK PLAN

From review of the analytical data, as well as available aerial photography, it is discernible that remediation may have occurred at the release location sometime between 2016 and 2017. Although records are not available for said remediation work, the formerly impacted surface area now meets the applicable remediation standards.

As all soil sample results were below the closure criteria concentrations listed in Table 1 of the NMOCD Spill Rule (19.15.29 NMAC), no remediation will occur at the Site. The remediated area contains a minimum of four feet of uncontaminated earthen material with chloride concentrations less than the 600 mg/kg as analyzed by Method 300.0.

SITE RECLAMATION AND RESTORATION

Based on current satellite imagery and Site photos (Appendix E), per 19.15.29.13 D.(3) NMAC, uniform vegetative cover has been established that reflects a life-form ratio of plus fifty percent of pre-disturbance levels and a total percent plant cover in the formerly impacted release area has exceeded seventy percent of pre-disturbance levels. Therefore, any additional re-vegetation of the release area was deemed unnecessary.

CONCLUSION AND CLOSURE REQUEST

Based on the release characterization results provided, ConocoPhillips is requesting closure of the SEMU BTD #156 Release associated with 1RP-4402. The Final C-141 form is included in Appendix A. If you have any questions or comments concerning the release characterization results and closure request, please call me at (512) 338-2861 or Greg at (432) 682-4559.

Sincerely,
Tetra Tech, Inc.

Christian M. Llull, P.G.
Project Manager

Greg W. Pope, P.G.
Program Manager

cc:
Ms. Jenni Fortunato, RMR – ConocoPhillips
Mr. Gustavo Fejervary-Morena, GPBU - ConocoPhillips

List of Attachments

Figures:

- Figure 1 – Site Location/Overview Map
- Figure 2 – Site Location/Topographic Map
- Figure 3 – Release Assessment Map

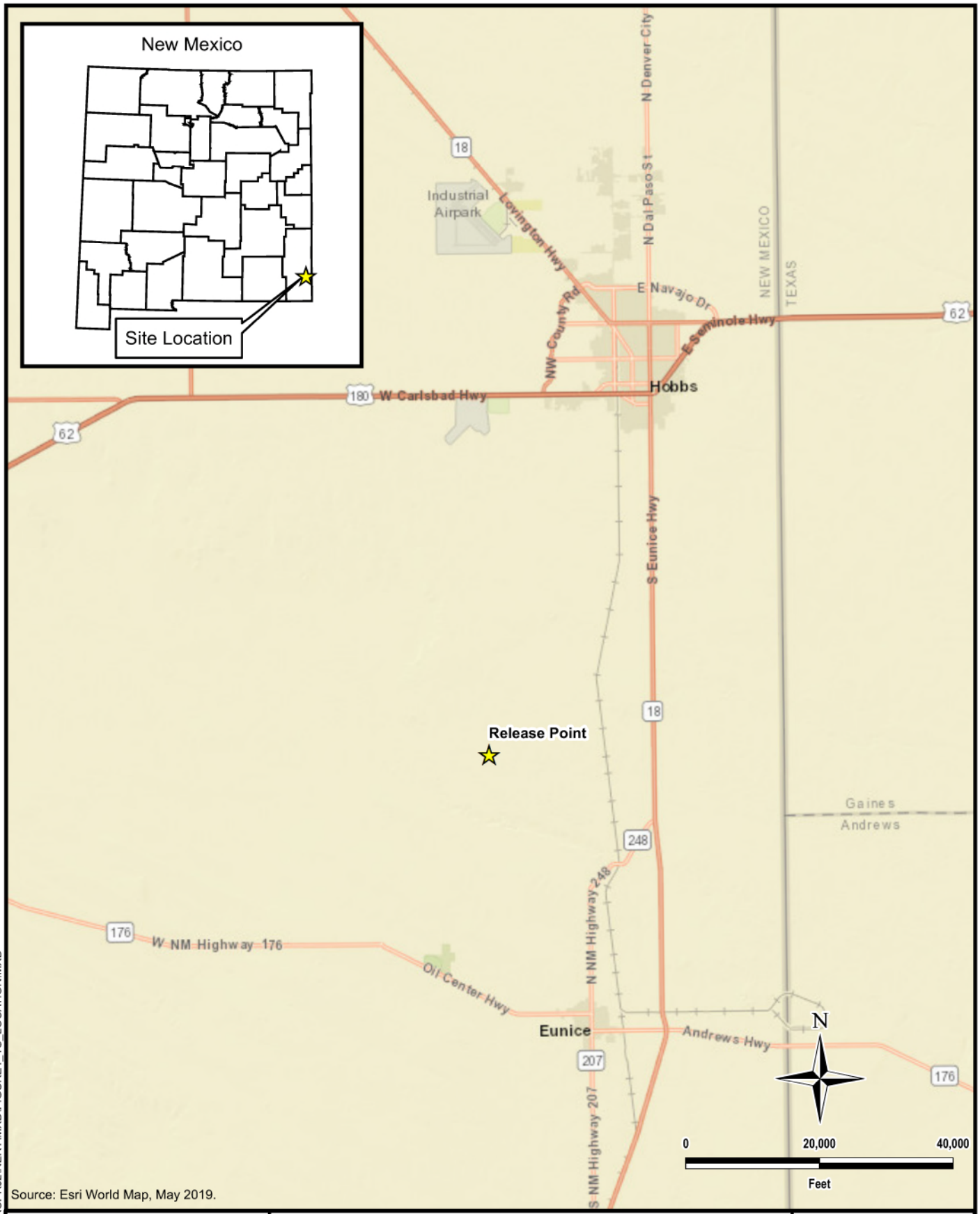
Tables:

- Table 1 – Summary of Analytical Results – Site Assessment

Appendices:

- Appendix A – C-141 Form
- Appendix B – NMOSE Groundwater Data/Karst Potential Map
- Appendix C – Soil Boring Logs
- Appendix D – Laboratory Analytical Data
- Appendix E – Photographic Documentation

FIGURES



\\TTS134FS1\SUP-GIS\ARCPRJ2\NERT\MXD\FIGURE1_TS_LOCATION.MXD

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www.tetratech.com
901 West Wall Street, Suite 100
Midland, Texas 79701
Phone: (432) 682-4559
Fax: (432) 682-3946

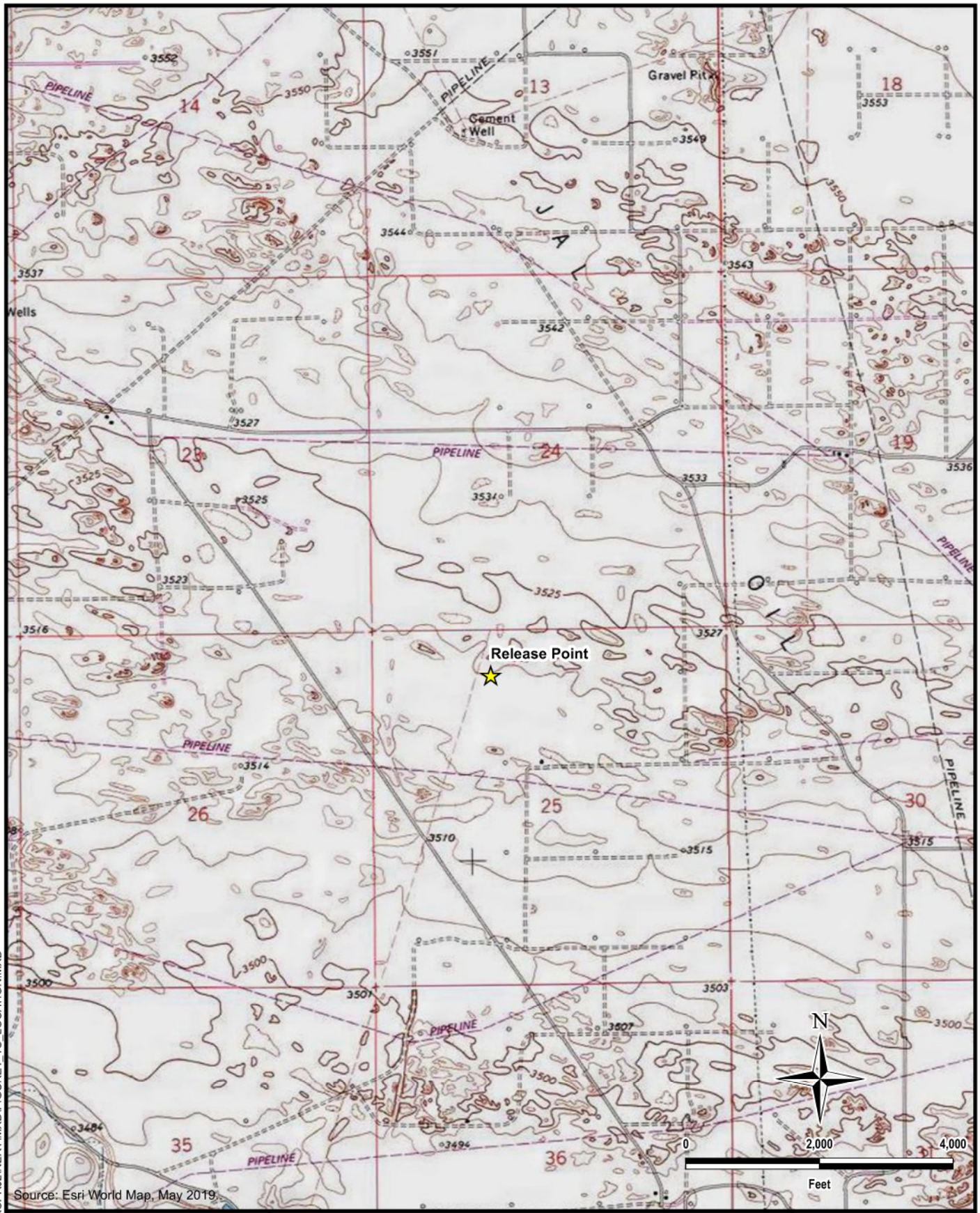
CONOCOPHILLIPS

1RP-4402
(32.549325°, -103.207859°)
LEA COUNTY, NEW MEXICO

SEMU BTD #156 RELEASE
OVERVIEW MAP

PROJECT NO.:	212C-MD-01988
DATE:	DECEMBER 06, 2019
DESIGNED BY:	AAM

Figure No.
1



Source: Esri World Map, May 2019.

\\TTS134FS1\SUP-GIS\ARCPRJ2\NERT\MXD\FIGURE1_TS_LOCATION.MXD

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CONOCOPHILLIPS

(32.549325°, -103.207859°)
LEA COUNTY, NEW MEXICO

SEMU BTD #156 RELEASE
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-01988
DATE:	DECEMBER 06, 2019
DESIGNED BY:	AAM

Figure No.
2

Legend

- Site Assessment Boring Location
- Surface Line
- Approximate Release Extent

\\TTS134FS1\SUP-GIS\ARCPRJ2\NERT\MXD\FIGURE1_TS_LOCATION.MXD

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CONOCOPHILLIPS

(32.549325°, -103.207859°)
LEA COUNTY, NEW MEXICO

SEMU BTD #156 RELEASE
RELEASE ASSESSMENT MAP

PROJECT NO.:	212C-MD-01988
DATE:	DECEMBER 06, 2019
DESIGNED BY:	AAM

Figure No.
3

TABLE

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT
SEMU BTD #156 RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Interval	Field Screening Results		Chloride[1]		BTEX[2]										TPH[3]							
							Benzene		Toluene		Ethylbenzene		Xylene		Total BTEX		GRO (C_3 - C_{10})[4]		DRO (C_{10} - C_{28})		ORO (C_{28} - C_{40})		TPH (C_3 - C_{40})	
		ft bgs	Chloride	PID																				
			ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	
BH -1	11/12/19	0-1	26.2	1.1	3.55	B J	< 0.00103		< 0.00513		< 0.00257		< 0.00667		--		< 0.103		22.3		33.6		55.9	
		2-3	--	0.9	5.77	B J	< 0.00112		< 0.00558		< 0.00279		< 0.00725		--		0.0302	B J	9.59		24		33.6202	
		4-5	25.1	1.2	5.84	B J	< 0.00125		< 0.00626		< 0.00313		< 0.00814		--		< 0.125		2.03	J	2.49	J	4.52	
		6-7	--	1.2	1170		< 0.00106		< 0.00531		< 0.00266		< 0.00691		--		0.0244	B J	2.87	J	1.82	J	4.7144	
		9-10	1580	1.1	1340		< 0.00106		< 0.00528		< 0.00264		< 0.00687		--		0.0237	B J	< 4.23		1.49	J	1.5137	
		14-15	1460	0.9	1120		< 0.00108		< 0.00539		< 0.00270		< 0.00700		--		0.0245	B J	< 4.27		1.32	J	1.3445	
		19-20	321	1.0	125		< 0.00109		< 0.00546		< 0.00273		< 0.00710		--		< 0.109		< 4.37		2.82	J	2.82	
BH-2	11/12/19	0-1	54.0	0.8	15.3	B	< 0.00101		< 0.00506		< 0.00253		< 0.00658		--		0.0234	B J	< 4.05		5.3		5.3234	
		2-3	--	0.9	18.7	B	< 0.00103		< 0.00516		< 0.00258		< 0.00670		--		< 0.103		< 4.13		2.68	J	2.68	
		4-5	76.8	1.3	20.9	B	< 0.00104		< 0.00522		< 0.00261		< 0.00678		--		0.0226	J	< 4.17		3.86	J	3.88	
		6-7	--	1.1	38.4		< 0.00107		< 0.00533		< 0.00266		< 0.00692		--		< 0.107		< 4.26		3.71	J	3.71	
		9-10	71.5	0.9	8.44	B J	< 0.00102		< 0.00512		< 0.00256		< 0.00666		--		< 0.102		< 4.10		1.02	J	1.02	
		14-15	148	1.2	25.8	B	< 0.00105		< 0.00524		< 0.00262		< 0.00681		--		< 0.105		4.35		5.06		9.41	
		19-20	--	1.1	53.5		< 0.00112		< 0.00559		< 0.00280		< 0.00727		--		0.0253	B J	< 4.47		0.586	J	0.6113	
BH-3	11/13/19	0-1	--	1.1	40.8	B	< 0.00103		< 0.00515		< 0.00258		< 0.00670		--		0.0272	B J	3.26	J	12.1		15.3872	
		2-3	15.1	0.9	21.4	B	< 0.00103		< 0.00517		< 0.00259		< 0.00673		--		< 0.103		< 4.14		3.45	J	3.45	
		4-5	--	0.6	24.6	B	< 0.00105		< 0.00523		< 0.00262		< 0.00680		--		< 0.105		< 4.19		2.96	J	2.96	
		6-7	29.4	0.9	29.8	B	< 0.00104		< 0.00522		< 0.00261		< 0.00679		--		0.0252	B J	< 4.18		5.47		5.4952	
		9-10	--	1.3	40.4	B	< 0.00102		< 0.00511		< 0.00255		< 0.00664		--		< 0.102		< 4.09		0.967	J	0.967	
		14-15	96.1	0.8	45.2	B	< 0.00103		< 0.00517		< 0.00258		< 0.00672		--		< 0.103		< 4.13		0.862	J	0.862	
		19-20	142	1.1	57.7		< 0.00107		< 0.00536		< 0.00268		< 0.00697		--		< 0.107		< 4.29	J 3	0.865	J	0.865	
BH-4	11/13/19	0-1	--	1.0	21.6	B	< 0.00103		< 0.00514		< 0.00257		< 0.00668		--		0.0228	B J	2.82	J	13.8		16.6428	
		2-3	16.2	0.9	25.5	B	< 0.00103		< 0.00515		< 0.00257		< 0.00669		--		< 0.103		< 4.12		4.72		4.72	
		4-5	--	0.5	25	B	< 0.00106		< 0.00529		< 0.00265		< 0.00688		--		0.0233	B J	6.36		120		126.38	
		6-7	18.4	1.2	24.7	B	< 0.00103		< 0.00513		< 0.00257		< 0.00667		--		< 0.103		< 4.11		1.75	J	1.75	
		9-10	16.6	0.9	110		< 0.00103		< 0.00516		< 0.00258		< 0.00671		--		0.0227	B J	< 4.13		0.779	J	0.8017	
		14-15	--	0.9	35.1	B	< 0.00103		< 0.00516		< 0.00258		< 0.00670		--		< 0.103		< 4.13		2.46	J	2.46	
		19-20	146	1.3	25.9	B	< 0.00110		< 0.00552		< 0.00276		< 0.00718		--		< 0.110		< 4.42		0.832	J	0.832	
BH-5	11/13/19	0-1	29.8	0.8	34.5	B	< 0.00104		< 0.00521		< 0.00261		< 0.00677		--		0.0276	B J	2.73	J	20.6		23.3576	
		2-3	--	1.0	31.4	B	< 0.00106		< 0.00529		< 0.00265		< 0.00688		--		< 0.106		2.59	J	22		24.59	
		4-5	32.2	1.1	25.3	B	< 0.00105		< 0.00527		< 0.00264		< 0.00685		--		< 0.105		< 4.22		2.81	J	2.81	
		6-7	--	1.1	67.3		< 0.00101		< 0.00504		< 0.00252		< 0.00655		--		< 0.101		< 4.03		0.669	J	0.669	
		9-10	295	0.9	208		< 0.00106		< 0.00529		< 0.00264		< 0.00687		--		0.051	B J	< 4.23		1.95	J	2.001	
		14-15	76.7	1.0	21.5		< 0.00104		< 0.00518		< 0.00259		< 0.00674		--		0.0304	B J	< 4.15		0.409	J	0.4394	
		19-20	68.9	0.8	6.16	B J	< 0.00105		< 0.00527		< 0.00263		< 0.00685		--		0.026	B J	< 4.21		< 4.21		0.026	

NOTES:

ft	Feet	***Bold and italicized values indicate exceedance of RRALS.***	
bgs	Below ground surface	1	Method 300.0
ppm	Parts per million	2	Method 8260B
mg/kg	Milligrams per kilogram	3	Method 8015
NM	Not measured	4	Method 8015D/GRO
TPH	Total Petroleum Hydrocarbons	B	The same analyte is found in the associated blank.
GRO	Gasoline range organics	J	The identification of the analyte is acceptable; the reported value is an estimate.
DRO	Diesel range organics	T8	Sample(s) received past/too close to holding time expiration.

APPENDIX A
C-141 Forms

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural R

Oil Conservation Divis
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED
By JKeyes at 8:53 am, Aug 17, 2016

Form C-141
Revised August 8, 2011

accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **ConocoPhillips**	Contact: **Jose A Zepeda**
Address: **1410 N West County Road**	Telephone No. **575-391-3165**
Facility Name: **SEMU BTD #156**	Facility Type: **Flowline**

Surface Owner: State	Mineral Owner: N/A	API No. 30-025-35537

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	25	20S	37E					**Lea**

Latitude _____ **Longitude**_____

NATURE OF RELEASE

Type of Release: **Produce Water**	Volume of Release: **5.29**	Volume Recovered: 0
Source of Release: **Flowline**	Date and Hour of Occurrence **08/15/2016 1100**	Date and Hour of Discovery **SAME**
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? Jamie Keyes	
By Whom? **Jose A Zepeda**	Date and Hour: **08/16/16 0700 via email**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken. *
ENV – Agency Reportable – MCBU – Permian – 5.29 bbls of Produce Water – SEMU BTD #156 – Hobbs – RR2 – On August 15, 2016 at 1100 MDT at SEMU BTD #156 a leak was found on a flowline resulting in a release of 5.29 bbls of Produce Water with 0 bbls recovered. Immediate action was to shut in well, turned in work order for repairs. Spill site will be remediated according to COPC and NMOCD guidelines.

Describe Area Affected and Cleanup Action Taken. *
Pasture area 20' X 20' X 8" deep.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: JOSE A ZEPEDA	OIL CONSERVATION DIVISION	
Printed Name: Jose A Zepeda	Approved by Environmental Specialist: Jamie Keyes	
Title: LEAD HSE	Approval Date: 08/17/2016	Expiration Date: 10/17/2016
E-mail Address: ***Jose. A. Zepeda@conocophillips.com***	Conditions of Approval: Discrete samples only. Delineate and remediate per NMOCD guidelines.	Attached ☐ 1RP 4402
Date: 08/16/2016 Phone:575-391-3165		

* Attach Additional Sheets If Necessary

nJXK1623031839
pJXK1623031915

State of New Mexico
Oil Conservation Division

Incident ID	nJXK1623031839
District RP	1RP-4402
Facility ID	
Application ID	pJXK1623031915

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	84 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nJXK1623031839
District RP	1RP-4402
Facility ID	
Application ID	pJXK1623031915

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Jenni Fortunato Title: Program Manager, Risk Management & Remediation

Signature: Date: 1.13.20

email: Jenni.Fortunato@cop.com Telephone: 832-486-2477

OCD Only

Received by: Cristina Eads Date: 03/02/2020

State of New Mexico
Oil Conservation Division

Incident ID	nJXK1623031839
District RP	1RP-4402
Facility ID	
Application ID	pJXK1623031915

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Jenni Fortunato Title: Program Manager, Risk Management & Remediation

Signature: _____ Date: 1.13.20

email: Jenni.Fortunato@cop.com Telephone: 832-486-2477

OCD Only

Received by: Cristina Eads Date: 03/02/2020

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: 03/02/2020

Printed Name: Cristina Eads Title: Environmental Specialist

APPENDIX B
NMOSE Groundwater Data
Karst Potential Map

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 04412 S		L	LE	4	4	2	13	20S	37E	669189	3605491*	2897	155	84	71

Average Depth to Water: **84 feet**
Minimum Depth: **84 feet**
Maximum Depth: **84 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 668273.351 **Northing (Y):** 3602742.196 **Radius:** 3000

***UTM location was derived from PLSS - see Help**

11/12/19 1:08 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

APPENDIX C
Soil Boring Logs

212C-MD-01988 | TETRA TECH | **LOG OF BORING BH-1** | Page 1 of 1

Project Name: SEMU BTD #156 Release

Borehole Location: GPS: 32.549340°, -103.207838° | Surface Elevation: 3524 ft

Borehole Number: BH-1 | Borehole Diameter (in.): 8 | Date Started: 11/12/2019 | Date Finished: 11/12/2019

WATER LEVEL OBSERVATIONS

While Drilling ▽ DRY ft Upon Completion of Drilling ▼ DRY ft

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			26.2	1.1								**-SM-** SILTY SAND; Brown, loose, non-cemented, topsoil with vegetation, with no hydrocarbon odor, with no staining.		BH-1 (0'-1')
				0.9										BH-1 (2'-3')
5			25.1	1.2										BH-1 (4'-5')
													5.5	
				1.2								**-SM-** SILTY SAND; Tan, medium dense, moderately cemented, with no hydrocarbon odor, with no staining.		BH-1 (6'-7')
10			1580	1.1										BH-1 (9'-10')
15			1460	0.9										BH-1 (14'-15')
													17	
												-SM- SILTY SAND; Tan, medium dense, strong cemented, with no hydrocarbon odor, with no staining.		
20			321	1									20	BH-1 (19'-20')

Bottom of borehole at 20.0 feet.

Sampler Types: Split Spoon, Acetate Liner, Shelby, Vane Shear, Bulk Sample, California, Grab Sample, Test Pit

Operation Types: Auger, Mud Rotary, Air Rotary, Continuous Flight Auger, Core Barrel, Wash Rotary, Direct Push

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

Logger: Joe Tyler | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-01988 | TETRA TECH | **LOG OF BORING BH-2** | Page 1 of 1

Project Name: SEMU BTD #156 Release

Borehole Location: GPS: 32.549325°, -103.207956° | Surface Elevation: 3524 ft

Borehole Number: BH-2 | Borehole Diameter (in.): 8 | Date Started: 11/12/2019 | Date Finished: 11/12/2019

WATER LEVEL OBSERVATIONS

While Drilling ▽ DRY ft Upon Completion of Drilling ▼ DRY ft

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			54.0	0.8								**-SM-** SILTY SAND; Brown, loose, non-cemented, topsoil with vegetation, with no hydrocarbon odor, with no staining.		BH-2 (0'-1')
				0.9										BH-2 (2'-3')
5			76.8	1.3										BH-2 (4'-5')
				1.1										BH-2 (6'-7')
													8	
10			71.5	0.9								**-SM-** SILTY SAND; Tan, medium dense, moderately cemented, with no hydrocarbon odor, with no staining.		BH-2 (9'-10')
													12	
15			148	1.2								**-SM-** SILTY SAND; Red, medium dense, moderately cemented, with no hydrocarbon odor, with no staining.		BH-2 (14'-15')
													17	
20				1.1								**-SM-** SILTY SAND; Tan, medium dense, strong cemented, with no hydrocarbon odor, with no staining.	20	BH-2 (19'-20')

Bottom of borehole at 20.0 feet.

Sampler Types: Split Spoon, Acetate Liner, Shelby, Vane Shear, Bulk Sample, California, Grab Sample, Test Pit

Operation Types: Auger, Mud Rotary, Air Rotary, Continuous Flight Auger, Core Barrel, Wash Rotary, Direct Push

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

Logger: Joe Tyler | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-01988 | TETRA TECH | **LOG OF BORING BH-3** | Page 1 of 1

Project Name: SEMU BTD #156 Release

Borehole Location: GPS: 32.549339°, -103.207789° | Surface Elevation: 3524 ft

Borehole Number: BH-3 | Borehole Diameter (in.): 8 | Date Started: 11/13/2019 | Date Finished: 11/13/2019

WATER LEVEL OBSERVATIONS

While Drilling ▽ DRY ft Upon Completion of Drilling ▽ DRY ft

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
				1.1								**-SM-** SILTY SAND; Brown, loose, non-cemented, topsoil with vegetation, with no hydrocarbon odor, with no staining.		BH-3 (0'-1')
			15.1	0.9										BH-3 (2'-3')
5				0.6										BH-3 (4'-5')
			29.4	0.9										BH-3 (6'-7')
													8	
												-SM- SILTY SAND; Tan, medium dense, non-cemented, with no hydrocarbon odor, with no staining.		
10				1.3										BH-3 (9'-10')
													12	
												-SM- SILTY SAND; Tan, medium dense, cemented, with no hydrocarbon odor, with no staining.		
15			96.1	0.8										BH-3 (14'-15')
													17	
												-SM- SILTY SAND; Tan, medium dense, non-cemented, with no hydrocarbon odor, with no staining.		
20			142	1.1									20	BH-3 (19'-20')

Bottom of borehole at 20.0 feet.

Sampler Types: Split Spoon, Acetate Liner, Shelby, Vane Shear, Bulk Sample, California, Grab Sample, Test Pit

Operation Types: Auger, Mud Rotary, Air Rotary, Continuous Flight Auger, Core Barrel, Wash Rotary, Direct Push

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

Logger: Joe Tyler | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-01988 | TETRA TECH | **LOG OF BORING BH-4** | Page 1 of 1

Project Name: SEMU BTD #156 Release

Borehole Location: GPS: 32.549382°, -103.207839° | Surface Elevation: 3524 ft

Borehole Number: BH-4 | Borehole Diameter (in.): 8 | Date Started: 11/13/2019 | Date Finished: 11/13/2019

WATER LEVEL OBSERVATIONS

While Drilling ▽ DRY ft Upon Completion of Drilling ▼ DRY ft

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
				1								**-SM-** SILTY SAND; Brown, loose, non-cemented, topsoil with vegetation, with no hydrocarbon odor, with no staining.		BH-4 (0'-1')
			16.2	0.9										BH-4 (2'-3')
5				0.5										BH-4 (4'-5')
													5.5	
			18.4	1.2								**-SM-** SILTY SAND; Tan, medium dense, non-cemented, with no hydrocarbon odor, with no staining.		BH-4 (6'-7')
													8	
												-SM- SILTY SAND; Tan, medium dense, cemented, with no hydrocarbon odor, with no staining.		
10			166	0.9										BH-4 (9'-10')
15				0.9										BH-4 (14'-15')
20			146	1.3									20	BH-4 (19'-20')

Bottom of borehole at 20.0 feet.

Sampler Types: Split Spoon, Acetate Liner, Shelby, Vane Shear, Bulk Sample, California, Grab Sample, Test Pit

Operation Types: Auger, Mud Rotary, Air Rotary, Continuous Flight Auger, Core Barrel, Wash Rotary, Direct Push

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

Logger: Joe Tyler | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-01988 | TETRA TECH | **LOG OF BORING BH-5** | Page 1 of 1

Project Name: SEMU BTD #156 Release

Borehole Location: GPS: 32.549266°, -103.207838° | Surface Elevation: 3523 ft

Borehole Number: BH-5 | Borehole Diameter (in.): 8 | Date Started: 11/13/2019 | Date Finished: 11/13/2019

WATER LEVEL OBSERVATIONS

While Drilling ▽ DRY ft Upon Completion of Drilling ▼ DRY ft

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			29.8	0.8								**-SM-** SILTY SAND; Brown, loose, non-cemented, topsoil with vegetation, with no hydrocarbon odor, with no staining.		BH-5 (0'-1')
				1										BH-5 (2'-3')
5			32.2	1.1										BH-5 (4'-5')
				1.1										BH-5 (6'-7')
													8	
10			295	0.9								**-SM-** SILTY SAND; Tan, medium dense, non-cemented, with no hydrocarbon odor, with no staining.		BH-5 (9'-10')
													12	
15			76.7	1								**-SM-** SILTY SAND; Tan, medium dense, cemented, with no hydrocarbon odor, with no staining.		BH-5 (14'-15')
													17	
20			68.9	0.8								**-SM-** SILTY SAND; Tan, medium dense, non-cemented, with no hydrocarbon odor, with no staining.	20	BH-5 (19'-20')

Bottom of borehole at 20.0 feet.

Sampler Types: Split Spoon, Acetate Liner, Shelby, Vane Shear, Bulk Sample, California, Grab Sample, Test Pit

Operation Types: Auger, Mud Rotary, Air Rotary, Continuous Flight Auger, Core Barrel, Wash Rotary, Direct Push

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

Logger: Joe Tyler | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

APPENDIX D
Laboratory Analytical Data

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 27, 2019

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1161793
Samples Received:	11/16/2019
Project Number:	212C-MD-01988
Description:	COP SEMU BTD #156

Report To: Christian Llull
901 West Wall
Suite 100
Midland, TX 79701

Entire Report Reviewed By:

Chris McCord
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.

TABLE OF CONTENTS

BH-1 (0-1) L1161793-01 Solid

Collected by | Collected date/time: 11/12/19 13:00 | Received date/time: 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385457	1	11/22/19 18:47	11/22/19 19:03	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	1	11/23/19 08:03	11/23/19 11:43	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 10:37	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385326	1	11/18/19 10:57	11/22/19 20:10	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384003	1	11/20/19 18:17	11/22/19 21:08	KME	Mt. Juliet, TN

BH-1 (2-3) L1161793-02 Solid

Collected by | Collected date/time: 11/12/19 13:05 | Received date/time: 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385457	1	11/22/19 18:47	11/22/19 19:03	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	1	11/23/19 08:03	11/23/19 11:53	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1387127	1	11/18/19 10:57	11/26/19 11:30	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385326	1	11/18/19 10:57	11/22/19 20:30	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384003	1	11/20/19 18:17	11/22/19 20:55	KME	Mt. Juliet, TN

BH-1 (4-5) L1161793-03 Solid

Collected by | Collected date/time: 11/12/19 13:10 | Received date/time: 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385457	1	11/22/19 18:47	11/22/19 19:03	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	1	11/23/19 08:03	11/23/19 12:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 11:18	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 12:07	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384003	1	11/20/19 18:17	11/24/19 14:36	KME	Mt. Juliet, TN

BH-1 (6-7) L1161793-04 Solid

Collected by | Collected date/time: 11/12/19 13:20 | Received date/time: 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385457	1	11/22/19 18:47	11/22/19 19:03	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	5	11/23/19 08:03	11/23/19 12:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 11:38	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 12:27	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384003	1	11/20/19 18:17	11/22/19 20:28	KME	Mt. Juliet, TN

BH-1 (9-10) L1161793-05 Solid

Collected by | Collected date/time: 11/12/19 13:30 | Received date/time: 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385457	1	11/22/19 18:47	11/22/19 19:03	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	5	11/23/19 08:03	11/23/19 12:21	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 11:59	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 12:47	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384003	1	11/20/19 18:17	11/24/19 14:50	KME	Mt. Juliet, TN

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

BH-1 (14-15) L1161793-06 Solid

Collected by | Collected date/time 11/12/19 13:40 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385457	1	11/22/19 18:47	11/22/19 19:03	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	5	11/23/19 08:03	11/23/19 12:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 12:19	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1.01	11/18/19 10:57	11/23/19 13:07	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 04:51	JDG	Mt. Juliet, TN

BH-1 (19-20) L1161793-07 Solid

Collected by | Collected date/time 11/12/19 13:50 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385458	1	11/22/19 18:10	11/22/19 18:26	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	1	11/23/19 08:03	11/23/19 12:40	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 12:40	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 13:27	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 05:04	JDG	Mt. Juliet, TN

BH-2 (0-1) L1161793-08 Solid

Collected by | Collected date/time 11/12/19 14:10 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385458	1	11/22/19 18:10	11/22/19 18:26	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	1	11/23/19 08:03	11/23/19 12:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 13:00	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 13:47	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 05:18	JDG	Mt. Juliet, TN

BH-2 (2-3) L1161793-09 Solid

Collected by | Collected date/time 11/12/19 14:15 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385458	1	11/22/19 18:10	11/22/19 18:26	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	1	11/23/19 08:03	11/23/19 13:19	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 13:21	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 14:07	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 05:31	JDG	Mt. Juliet, TN

BH-2 (4-5) L1161793-10 Solid

Collected by | Collected date/time 11/12/19 14:20 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385458	1	11/22/19 18:10	11/22/19 18:26	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	1	11/23/19 08:03	11/23/19 13:28	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 13:41	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 14:27	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 05:44	JDG	Mt. Juliet, TN

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

BH-2 (6-7) L1161793-11 Solid

Collected by | Collected date/time 11/12/19 14:30 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385458	1	11/22/19 18:10	11/22/19 18:26	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	1	11/23/19 08:03	11/23/19 13:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 14:02	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 14:47	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 07:39	JDG	Mt. Juliet, TN

BH-2 (9-10) L1161793-12 Solid

Collected by | Collected date/time 11/12/19 14:40 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385458	1	11/22/19 18:10	11/22/19 18:26	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	1	11/23/19 08:03	11/23/19 13:47	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 14:22	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 15:07	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 07:52	JDG	Mt. Juliet, TN

BH-2 (14-15) L1161793-13 Solid

Collected by | Collected date/time 11/12/19 14:55 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385458	1	11/22/19 18:10	11/22/19 18:26	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385504	1	11/23/19 08:03	11/23/19 13:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 14:43	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 15:27	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 08:05	JDG	Mt. Juliet, TN

BH-2 (19-20) L1161793-14 Solid

Collected by | Collected date/time 11/12/19 15:10 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385458	1	11/22/19 18:10	11/22/19 18:26	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 20:05	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1384906	1	11/18/19 10:57	11/23/19 15:03	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 15:47	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 08:18	JDG	Mt. Juliet, TN

BH-3 (0-1) L1161793-15 Solid

Collected by | Collected date/time 11/13/19 09:50 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385458	1	11/22/19 18:10	11/22/19 18:26	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 20:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 10:57	11/23/19 01:43	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 16:07	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 08:32	JDG	Mt. Juliet, TN

BH-3 (2-3) L1161793-16 Solid

Collected by | Collected date/time 11/13/19 09:55 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385458	1	11/22/19 18:10	11/22/19 18:26	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 20:34	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 10:57	11/23/19 02:03	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 16:27	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 12:31	KME	Mt. Juliet, TN

BH-3 (4-5) L1161793-17 Solid

Collected by | Collected date/time 11/13/19 10:00 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385459	1	11/22/19 17:49	11/22/19 18:07	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 20:43	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 10:57	11/23/19 02:24	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 16:47	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 12:44	KME	Mt. Juliet, TN

BH-3 (6-7) L1161793-18 Solid

Collected by | Collected date/time 11/13/19 10:05 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385459	1	11/22/19 17:49	11/22/19 18:07	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 20:53	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 10:57	11/23/19 02:44	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 10:57	11/23/19 17:07	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 12:57	KME	Mt. Juliet, TN

BH-3 (9-10) L1161793-19 Solid

Collected by | Collected date/time 11/13/19 10:10 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385459	1	11/22/19 17:49	11/22/19 18:07	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 21:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 03:05	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 11:13	11/23/19 17:27	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/24/19 14:22	KME	Mt. Juliet, TN

BH-3 (14-15) L1161793-20 Solid

Collected by | Collected date/time 11/13/19 10:20 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385459	1	11/22/19 17:49	11/22/19 18:07	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 21:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 03:25	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 11:13	11/23/19 17:47	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 13:23	KME	Mt. Juliet, TN

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

BH-3 (19-20) L1161793-21 Solid

Collected by | Collected date/time 11/13/19 10:30 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385459	1	11/22/19 17:49	11/22/19 18:07	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 21:40	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 03:46	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 11:13	11/23/19 18:07	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 13:36	KME	Mt. Juliet, TN

BH-4 (0-1) L1161793-22 Solid

Collected by | Collected date/time 11/13/19 11:00 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385459	1	11/22/19 17:49	11/22/19 18:07	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 21:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 04:07	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385336	1	11/18/19 11:13	11/23/19 18:26	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 14:16	KME	Mt. Juliet, TN

BH-4 (2-3) L1161793-23 Solid

Collected by | Collected date/time 11/13/19 11:05 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385459	1	11/22/19 17:49	11/22/19 18:07	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 21:59	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 04:27	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 01:48	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 14:29	KME	Mt. Juliet, TN

BH-4 (4-5) L1161793-24 Solid

Collected by | Collected date/time 11/13/19 11:10 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385459	1	11/22/19 17:49	11/22/19 18:07	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 22:09	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 04:48	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 02:08	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 14:42	KME	Mt. Juliet, TN

BH-4 (6-7) L1161793-25 Solid

Collected by | Collected date/time 11/13/19 11:15 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385459	1	11/22/19 17:49	11/22/19 18:07	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 22:19	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 05:08	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 02:28	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384285	1	11/21/19 05:42	11/22/19 15:35	KME	Mt. Juliet, TN

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

BH-4 (9-10) L1161793-26 Solid

Collected by | Collected date/time 11/13/19 11:20 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385459	1	11/22/19 17:49	11/22/19 18:07	RA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 22:28	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 05:29	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 02:48	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384665	1	11/21/19 12:36	11/22/19 17:08	SHG	Mt. Juliet, TN

BH-4 (14-15) L1161793-27 Solid

Collected by | Collected date/time 11/13/19 11:30 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385462	1	11/26/19 16:24	11/26/19 16:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 22:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 05:50	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 03:07	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384665	1	11/21/19 12:36	11/22/19 17:21	SHG	Mt. Juliet, TN

BH-4 (19-20) L1161793-28 Solid

Collected by | Collected date/time 11/13/19 11:40 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385462	1	11/26/19 16:24	11/26/19 16:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 23:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 06:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 03:27	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384665	1	11/21/19 12:36	11/22/19 17:34	SHG	Mt. Juliet, TN

BH-5 (0-1) L1161793-29 Solid

Collected by | Collected date/time 11/13/19 12:00 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385462	1	11/26/19 16:24	11/26/19 16:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 23:35	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 06:31	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 07:05	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384665	1	11/21/19 12:36	11/22/19 22:40	SHG	Mt. Juliet, TN

BH-5 (2-3) L1161793-30 Solid

Collected by | Collected date/time 11/13/19 12:05 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385462	1	11/26/19 16:24	11/26/19 16:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 23:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 06:51	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 07:25	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384665	1	11/21/19 12:36	11/22/19 22:54	SHG	Mt. Juliet, TN

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

BH-5 (4-5) L1161793-31 Solid

Collected by | Collected date/time 11/13/19 12:10 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385462	1	11/26/19 16:24	11/26/19 16:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/24/19 23:54	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 07:12	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 07:45	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384665	1	11/21/19 12:36	11/22/19 17:47	SHG	Mt. Juliet, TN

BH-5 (6-7) L1161793-32 Solid

Collected by | Collected date/time 11/13/19 12:20 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385462	1	11/26/19 16:24	11/26/19 16:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/25/19 00:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1385621	1	11/18/19 11:13	11/23/19 07:32	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 08:06	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384665	1	11/21/19 12:36	11/22/19 18:07	SHG	Mt. Juliet, TN

BH-5 (9-10) L1161793-33 Solid

Collected by | Collected date/time 11/13/19 12:30 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385462	1	11/26/19 16:24	11/26/19 16:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1385548	1	11/24/19 18:10	11/25/19 00:22	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1386889	1.01	11/18/19 11:13	11/26/19 12:12	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 08:26	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384665	1	11/21/19 12:36	11/22/19 18:20	SHG	Mt. Juliet, TN

BH-5 (14-15) L1161793-34 Solid

Collected by | Collected date/time 11/13/19 12:40 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385462	1	11/26/19 16:24	11/26/19 16:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1386303	1	11/25/19 16:16	11/25/19 23:11	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1386889	1	11/18/19 11:13	11/26/19 12:32	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 08:46	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384665	1	11/21/19 12:36	11/22/19 19:51	SHG	Mt. Juliet, TN

BH-5 (19-20) L1161793-35 Solid

Collected by | Collected date/time 11/13/19 13:00 | Received date/time 11/16/19 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1385462	1	11/26/19 16:24	11/26/19 16:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1386303	1	11/25/19 16:16	11/25/19 23:40	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1386889	1	11/18/19 11:13	11/26/19 12:53	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1385339	1	11/18/19 11:13	11/23/19 09:06	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1384665	1	11/21/19 12:36	11/22/19 20:18	SHG	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.

Chris McCord
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	11/22/2019 19:03	WG1385457

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	3.55	B J	0.816	10.3	1	11/23/2019 11:43	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	11/23/2019 10:37	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*98.5*			*77.0-120*		*11/23/2019 10:37*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000411	0.00103	1	11/22/2019 20:10	WG1385326
Toluene	U		0.00128	0.00513	1	11/22/2019 20:10	WG1385326
Ethylbenzene	U		0.000544	0.00257	1	11/22/2019 20:10	WG1385326
Total Xylenes	U		0.00491	0.00667	1	11/22/2019 20:10	WG1385326
(S) Toluene-d8	*99.1*			*75.0-131*		*11/22/2019 20:10*	WG1385326
(S) 4-Bromofluorobenzene	*78.4*			*67.0-138*		*11/22/2019 20:10*	WG1385326
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/22/2019 20:10*	WG1385326

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	22.3		1.65	4.11	1	11/22/2019 21:08	WG1384003
C28-C40 Oil Range	33.6		0.281	4.11	1	11/22/2019 21:08	WG1384003
(S) o-Terphenyl	*61.1*			*18.0-148*		*11/22/2019 21:08*	WG1384003

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.7		1	11/22/2019 19:03	WG1385457

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	5.77	B J	0.887	11.2	1	11/23/2019 11:53	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0302	B J	0.0242	0.112	1	11/26/2019 11:30	WG1387127
(S) a,a,a-Trifluorotoluene(FID)	*96.6*			*77.0-120*		*11/26/2019 11:30*	WG1387127

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000446	0.00112	1	11/22/2019 20:30	WG1385326
Toluene	U		0.00139	0.00558	1	11/22/2019 20:30	WG1385326
Ethylbenzene	U		0.000591	0.00279	1	11/22/2019 20:30	WG1385326
Total Xylenes	U		0.00533	0.00725	1	11/22/2019 20:30	WG1385326
(S) Toluene-d8	*101*			*75.0-131*		*11/22/2019 20:30*	WG1385326
(S) 4-Bromofluorobenzene	*75.4*			*67.0-138*		*11/22/2019 20:30*	WG1385326
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/22/2019 20:30*	WG1385326

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	9.59		1.80	4.46	1	11/22/2019 20:55	WG1384003
C28-C40 Oil Range	24.0		0.306	4.46	1	11/22/2019 20:55	WG1384003
(S) o-Terphenyl	*55.3*			*18.0-148*		*11/22/2019 20:55*	WG1384003

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.9		1	11/22/2019 19:03	WG1385457

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	5.84	B J	0.995	12.5	1	11/23/2019 12:02	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0272	0.125	1	11/23/2019 11:18	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*99.0*			*77.0-120*		*11/23/2019 11:18*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000501	0.00125	1	11/23/2019 12:07	WG1385336
Toluene	U		0.00156	0.00626	1	11/23/2019 12:07	WG1385336
Ethylbenzene	U		0.000663	0.00313	1	11/23/2019 12:07	WG1385336
Total Xylenes	U		0.00598	0.00814	1	11/23/2019 12:07	WG1385336
(S) Toluene-d8	*101*			*75.0-131*		*11/23/2019 12:07*	WG1385336
(S) 4-Bromofluorobenzene	*74.6*			*67.0-138*		*11/23/2019 12:07*	WG1385336
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/23/2019 12:07*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.03	J	2.02	5.01	1	11/24/2019 14:36	WG1384003
C28-C40 Oil Range	2.49	J	0.343	5.01	1	11/24/2019 14:36	WG1384003
(S) o-Terphenyl	*34.2*			*18.0-148*		*11/24/2019 14:36*	WG1384003

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.1		1	11/22/2019 19:03	WG1385457

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	1170		4.23	53.1	5	11/23/2019 12:12	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0244	B J	0.0231	0.106	1	11/23/2019 11:38	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*77.0-120*		*11/23/2019 11:38*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000425	0.00106	1	11/23/2019 12:27	WG1385336
Toluene	U		0.00133	0.00531	1	11/23/2019 12:27	WG1385336
Ethylbenzene	U		0.000563	0.00266	1	11/23/2019 12:27	WG1385336
Total Xylenes	U		0.00508	0.00691	1	11/23/2019 12:27	WG1385336
(S) Toluene-d8	*100*			*75.0-131*		*11/23/2019 12:27*	WG1385336
(S) 4-Bromofluorobenzene	*78.1*			*67.0-138*		*11/23/2019 12:27*	WG1385336
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/23/2019 12:27*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.87	J	1.71	4.25	1	11/22/2019 20:28	WG1384003
C28-C40 Oil Range	1.82	J	0.291	4.25	1	11/22/2019 20:28	WG1384003
(S) o-Terphenyl	*67.8*			*18.0-148*		*11/22/2019 20:28*	WG1384003

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.6		1	11/22/2019 19:03	WG1385457

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	1340		4.21	52.8	5	11/23/2019 12:21	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0237	B J	0.0229	0.106	1	11/23/2019 11:59	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*97.3*			*77.0-120*		*11/23/2019 11:59*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000423	0.00106	1	11/23/2019 12:47	WG1385336
Toluene	U		0.00132	0.00528	1	11/23/2019 12:47	WG1385336
Ethylbenzene	U		0.000560	0.00264	1	11/23/2019 12:47	WG1385336
Total Xylenes	U		0.00505	0.00687	1	11/23/2019 12:47	WG1385336
(S) Toluene-d8	*101*			*75.0-131*		*11/23/2019 12:47*	WG1385336
(S) 4-Bromofluorobenzene	*74.5*			*67.0-138*		*11/23/2019 12:47*	WG1385336
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/23/2019 12:47*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.70	4.23	1	11/24/2019 14:50	WG1384003
C28-C40 Oil Range	1.49	J	0.290	4.23	1	11/24/2019 14:50	WG1384003
(S) o-Terphenyl	*80.9*			*18.0-148*		*11/24/2019 14:50*	WG1384003

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.8		1	11/22/2019 19:03	WG1385457

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	1120		4.24	53.3	5	11/23/2019 12:31	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0245	B J	0.0231	0.107	1	11/23/2019 12:19	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*97.5*			*77.0-120*		*11/23/2019 12:19*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000431	0.00108	1.01	11/23/2019 13:07	WG1385336
Toluene	U		0.00134	0.00539	1.01	11/23/2019 13:07	WG1385336
Ethylbenzene	U		0.000571	0.00270	1.01	11/23/2019 13:07	WG1385336
Total Xylenes	U		0.00515	0.00700	1.01	11/23/2019 13:07	WG1385336
(S) Toluene-d8	*101*			*75.0-131*		*11/23/2019 13:07*	WG1385336
(S) 4-Bromofluorobenzene	*73.2*			*67.0-138*		*11/23/2019 13:07*	WG1385336
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/23/2019 13:07*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.72	4.27	1	11/22/2019 04:51	WG1384285
C28-C40 Oil Range	1.32	J	0.292	4.27	1	11/22/2019 04:51	WG1384285
(S) o-Terphenyl	*61.1*			*18.0-148*		*11/22/2019 04:51*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.6		1	11/22/2019 18:26	WG1385458

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	125		0.868	10.9	1	11/23/2019 12:40	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0237	0.109	1	11/23/2019 12:40	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*99.5*			*77.0-120*		*11/23/2019 12:40*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000437	0.00109	1	11/23/2019 13:27	WG1385336
Toluene	U		0.00136	0.00546	1	11/23/2019 13:27	WG1385336
Ethylbenzene	U		0.000579	0.00273	1	11/23/2019 13:27	WG1385336
Total Xylenes	U		0.00522	0.00710	1	11/23/2019 13:27	WG1385336
(S) Toluene-d8	*99.4*			*75.0-131*		*11/23/2019 13:27*	WG1385336
(S) 4-Bromofluorobenzene	*77.7*			*67.0-138*		*11/23/2019 13:27*	WG1385336
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/23/2019 13:27*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.76	4.37	1	11/22/2019 05:04	WG1384285
C28-C40 Oil Range	2.82	J	0.299	4.37	1	11/22/2019 05:04	WG1384285
(S) o-Terphenyl	*73.5*			*18.0-148*		*11/22/2019 05:04*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.8		1	11/22/2019 18:26	WG1385458

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	15.3	B	0.804	10.1	1	11/23/2019 12:50	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0234	B J	0.0220	0.101	1	11/23/2019 13:00	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*99.0*			*77.0-120*		*11/23/2019 13:00*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000405	0.00101	1	11/23/2019 13:47	WG1385336
Toluene	U		0.00126	0.00506	1	11/23/2019 13:47	WG1385336
Ethylbenzene	U		0.000536	0.00253	1	11/23/2019 13:47	WG1385336
Total Xylenes	U		0.00484	0.00658	1	11/23/2019 13:47	WG1385336
(S) Toluene-d8	*103*			*75.0-131*		*11/23/2019 13:47*	WG1385336
(S) 4-Bromofluorobenzene	*72.6*			*67.0-138*		*11/23/2019 13:47*	WG1385336
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*11/23/2019 13:47*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.63	4.05	1	11/22/2019 05:18	WG1384285
C28-C40 Oil Range	5.30		0.277	4.05	1	11/22/2019 05:18	WG1384285
(S) o-Terphenyl	*75.2*			*18.0-148*		*11/22/2019 05:18*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.0		1	11/22/2019 18:26	WG1385458

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	18.7	B	0.820	10.3	1	11/23/2019 13:19	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	11/23/2019 13:21	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*77.0-120*		*11/23/2019 13:21*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000413	0.00103	1	11/23/2019 14:07	WG1385336
Toluene	U		0.00129	0.00516	1	11/23/2019 14:07	WG1385336
Ethylbenzene	U		0.000547	0.00258	1	11/23/2019 14:07	WG1385336
Total Xylenes	U		0.00493	0.00670	1	11/23/2019 14:07	WG1385336
(S) Toluene-d8	*101*			*75.0-131*		*11/23/2019 14:07*	WG1385336
(S) 4-Bromofluorobenzene	*74.7*			*67.0-138*		*11/23/2019 14:07*	WG1385336
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/23/2019 14:07*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.66	4.13	1	11/22/2019 05:31	WG1384285
C28-C40 Oil Range	2.68	J	0.283	4.13	1	11/22/2019 05:31	WG1384285
(S) o-Terphenyl	*69.9*			*18.0-148*		*11/22/2019 05:31*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.8		1	11/22/2019 18:26	WG1385458

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	20.9	B	0.830	10.4	1	11/23/2019 13:28	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0226	J	0.0226	0.104	1	11/23/2019 13:41	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*97.3*			*77.0-120*		*11/23/2019 13:41*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000417	0.00104	1	11/23/2019 14:27	WG1385336
Toluene	U		0.00130	0.00522	1	11/23/2019 14:27	WG1385336
Ethylbenzene	U		0.000553	0.00261	1	11/23/2019 14:27	WG1385336
Total Xylenes	U		0.00499	0.00678	1	11/23/2019 14:27	WG1385336
(S) Toluene-d8	*102*			*75.0-131*		*11/23/2019 14:27*	WG1385336
(S) 4-Bromofluorobenzene	*72.0*			*67.0-138*		*11/23/2019 14:27*	WG1385336
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/23/2019 14:27*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.68	4.17	1	11/22/2019 05:44	WG1384285
C28-C40 Oil Range	3.86	J	0.286	4.17	1	11/22/2019 05:44	WG1384285
(S) o-Terphenyl	*77.3*			*18.0-148*		*11/22/2019 05:44*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.9		1	11/22/2019 18:26	WG1385458

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	38.4		0.847	10.7	1	11/23/2019 13:38	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0231	0.107	1	11/23/2019 14:02	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*98.6*			*77.0-120*		*11/23/2019 14:02*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000426	0.00107	1	11/23/2019 14:47	WG1385336
Toluene	U		0.00133	0.00533	1	11/23/2019 14:47	WG1385336
Ethylbenzene	U		0.000565	0.00266	1	11/23/2019 14:47	WG1385336
Total Xylenes	U		0.00509	0.00692	1	11/23/2019 14:47	WG1385336
(S) Toluene-d8	*99.7*			*75.0-131*		*11/23/2019 14:47*	WG1385336
(S) 4-Bromofluorobenzene	*74.7*			*67.0-138*		*11/23/2019 14:47*	WG1385336
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/23/2019 14:47*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.72	4.26	1	11/22/2019 07:39	WG1384285
C28-C40 Oil Range	3.71	J	0.292	4.26	1	11/22/2019 07:39	WG1384285
(S) o-Terphenyl	*72.7*			*18.0-148*		*11/22/2019 07:39*	WG1384285

BH-2 (9-10)
Collected date/time: 11/12/19 14:40

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.6		1	11/22/2019 18:26	WG1385458

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	8.44	B J	0.814	10.2	1	11/23/2019 13:47	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	11/23/2019 14:22	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*97.4*			*77.0-120*		*11/23/2019 14:22*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000410	0.00102	1	11/23/2019 15:07	WG1385336
Toluene	U		0.00128	0.00512	1	11/23/2019 15:07	WG1385336
Ethylbenzene	U		0.000543	0.00256	1	11/23/2019 15:07	WG1385336
Total Xylenes	U		0.00490	0.00666	1	11/23/2019 15:07	WG1385336
(S) Toluene-d8	*103*			*75.0-131*		*11/23/2019 15:07*	WG1385336
(S) 4-Bromofluorobenzene	*70.2*			*67.0-138*		*11/23/2019 15:07*	WG1385336
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/23/2019 15:07*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.65	4.10	1	11/22/2019 07:52	WG1384285
C28-C40 Oil Range	1.02	J	0.281	4.10	1	11/22/2019 07:52	WG1384285
(S) o-Terphenyl	*75.8*			*18.0-148*		*11/22/2019 07:52*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.4		1	11/22/2019 18:26	WG1385458

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	25.8	B	0.833	10.5	1	11/23/2019 13:57	WG1385504

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	11/23/2019 14:43	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*98.6*			*77.0-120*		*11/23/2019 14:43*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000419	0.00105	1	11/23/2019 15:27	WG1385336
Toluene	U		0.00131	0.00524	1	11/23/2019 15:27	WG1385336
Ethylbenzene	U		0.000555	0.00262	1	11/23/2019 15:27	WG1385336
Total Xylenes	U		0.00501	0.00681	1	11/23/2019 15:27	WG1385336
(S) Toluene-d8	*101*			*75.0-131*		*11/23/2019 15:27*	WG1385336
(S) 4-Bromofluorobenzene	*72.7*			*67.0-138*		*11/23/2019 15:27*	WG1385336
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/23/2019 15:27*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.35		1.69	4.19	1	11/22/2019 08:05	WG1384285
C28-C40 Oil Range	5.06		0.287	4.19	1	11/22/2019 08:05	WG1384285
(S) o-Terphenyl	*73.4*			*18.0-148*		*11/22/2019 08:05*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.4		1	11/22/2019 18:26	WG1385458

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	53.5		0.889	11.2	1	11/24/2019 20:05	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0253	B J	0.0243	0.112	1	11/23/2019 15:03	WG1384906
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*77.0-120*		*11/23/2019 15:03*	WG1384906

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000447	0.00112	1	11/23/2019 15:47	WG1385336
Toluene	U		0.00140	0.00559	1	11/23/2019 15:47	WG1385336
Ethylbenzene	U		0.000593	0.00280	1	11/23/2019 15:47	WG1385336
Total Xylenes	U		0.00535	0.00727	1	11/23/2019 15:47	WG1385336
(S) Toluene-d8	*101*			*75.0-131*		*11/23/2019 15:47*	WG1385336
(S) 4-Bromofluorobenzene	*73.0*			*67.0-138*		*11/23/2019 15:47*	WG1385336
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/23/2019 15:47*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.80	4.47	1	11/22/2019 08:18	WG1384285
C28-C40 Oil Range	0.586	J	0.306	4.47	1	11/22/2019 08:18	WG1384285
(S) o-Terphenyl	*67.2*			*18.0-148*		*11/22/2019 08:18*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.0		1	11/22/2019 18:26	WG1385458

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	40.8	B	0.819	10.3	1	11/24/2019 20:24	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0272	B J	0.0224	0.103	1	11/23/2019 01:43	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*77.0-120*		*11/23/2019 01:43*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000412	0.00103	1	11/23/2019 16:07	WG1385336
Toluene	U		0.00129	0.00515	1	11/23/2019 16:07	WG1385336
Ethylbenzene	U		0.000546	0.00258	1	11/23/2019 16:07	WG1385336
Total Xylenes	U		0.00493	0.00670	1	11/23/2019 16:07	WG1385336
(S) Toluene-d8	*99.1*			*75.0-131*		*11/23/2019 16:07*	WG1385336
(S) 4-Bromofluorobenzene	*76.7*			*67.0-138*		*11/23/2019 16:07*	WG1385336
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*11/23/2019 16:07*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3.26	J	1.66	4.12	1	11/22/2019 08:32	WG1384285
C28-C40 Oil Range	12.1		0.282	4.12	1	11/22/2019 08:32	WG1384285
(S) o-Terphenyl	*81.0*			*18.0-148*		*11/22/2019 08:32*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	11/22/2019 18:26	WG1385458

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	21.4	B	0.823	10.3	1	11/24/2019 20:34	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0225	0.103	1	11/23/2019 02:03	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*96.4*			*77.0-120*		*11/23/2019 02:03*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000414	0.00103	1	11/23/2019 16:27	WG1385336
Toluene	U		0.00129	0.00517	1	11/23/2019 16:27	WG1385336
Ethylbenzene	U		0.000548	0.00259	1	11/23/2019 16:27	WG1385336
Total Xylenes	U		0.00495	0.00673	1	11/23/2019 16:27	WG1385336
(S) Toluene-d8	*101*			*75.0-131*		*11/23/2019 16:27*	WG1385336
(S) 4-Bromofluorobenzene	*73.8*			*67.0-138*		*11/23/2019 16:27*	WG1385336
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*11/23/2019 16:27*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.67	4.14	1	11/22/2019 12:31	WG1384285
C28-C40 Oil Range	3.45	J	0.284	4.14	1	11/22/2019 12:31	WG1384285
(S) o-Terphenyl	*69.4*			*18.0-148*		*11/22/2019 12:31*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.5		1	11/22/2019 18:07	WG1385459

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	24.6	B	0.832	10.5	1	11/24/2019 20:43	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	11/23/2019 02:24	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*95.0*			*77.0-120*		*11/23/2019 02:24*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000419	0.00105	1	11/23/2019 16:47	WG1385336
Toluene	U		0.00131	0.00523	1	11/23/2019 16:47	WG1385336
Ethylbenzene	U		0.000555	0.00262	1	11/23/2019 16:47	WG1385336
Total Xylenes	U		0.00500	0.00680	1	11/23/2019 16:47	WG1385336
(S) Toluene-d8	*103*			*75.0-131*		*11/23/2019 16:47*	WG1385336
(S) 4-Bromofluorobenzene	*70.3*			*67.0-138*		*11/23/2019 16:47*	WG1385336
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/23/2019 16:47*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.69	4.19	1	11/22/2019 12:44	WG1384285
C28-C40 Oil Range	2.96	J	0.287	4.19	1	11/22/2019 12:44	WG1384285
(S) o-Terphenyl	*77.2*			*18.0-148*		*11/22/2019 12:44*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.7		1	11/22/2019 18:07	WG1385459

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	29.8	B	0.830	10.4	1	11/24/2019 20:53	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0252	B J	0.0227	0.104	1	11/23/2019 02:44	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*95.8*			*77.0-120*		*11/23/2019 02:44*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000418	0.00104	1	11/23/2019 17:07	WG1385336
Toluene	U		0.00131	0.00522	1	11/23/2019 17:07	WG1385336
Ethylbenzene	U		0.000554	0.00261	1	11/23/2019 17:07	WG1385336
Total Xylenes	U		0.00499	0.00679	1	11/23/2019 17:07	WG1385336
(S) Toluene-d8	*103*			*75.0-131*		*11/23/2019 17:07*	WG1385336
(S) 4-Bromofluorobenzene	*70.0*			*67.0-138*		*11/23/2019 17:07*	WG1385336
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/23/2019 17:07*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.68	4.18	1	11/22/2019 12:57	WG1384285
C28-C40 Oil Range	5.47		0.286	4.18	1	11/22/2019 12:57	WG1384285
(S) o-Terphenyl	*82.6*			*18.0-148*		*11/22/2019 12:57*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.9		1	11/22/2019 18:07	WG1385459

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	40.4	B	0.812	10.2	1	11/24/2019 21:02	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	11/23/2019 03:05	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*94.5*			*77.0-120*		*11/23/2019 03:05*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000409	0.00102	1	11/23/2019 17:27	WG1385336
Toluene	U		0.00128	0.00511	1	11/23/2019 17:27	WG1385336
Ethylbenzene	U		0.000542	0.00255	1	11/23/2019 17:27	WG1385336
Total Xylenes	U		0.00488	0.00664	1	11/23/2019 17:27	WG1385336
(S) Toluene-d8	*99.7*			*75.0-131*		*11/23/2019 17:27*	WG1385336
(S) 4-Bromofluorobenzene	*72.6*			*67.0-138*		*11/23/2019 17:27*	WG1385336
(S) 1,2-Dichloroethane-d4	*120*			*70.0-130*		*11/23/2019 17:27*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.65	4.09	1	11/24/2019 14:22	WG1384285
C28-C40 Oil Range	0.967	J	0.280	4.09	1	11/24/2019 14:22	WG1384285
(S) o-Terphenyl	*83.2*			*18.0-148*		*11/24/2019 14:22*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.8		1	11/22/2019 18:07	WG1385459

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	45.2	B	0.821	10.3	1	11/24/2019 21:12	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	11/23/2019 03:25	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*94.7*			*77.0-120*		*11/23/2019 03:25*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000413	0.00103	1	11/23/2019 17:47	WG1385336
Toluene	U		0.00129	0.00517	1	11/23/2019 17:47	WG1385336
Ethylbenzene	U		0.000548	0.00258	1	11/23/2019 17:47	WG1385336
Total Xylenes	U		0.00494	0.00672	1	11/23/2019 17:47	WG1385336
(S) Toluene-d8	*101*			*75.0-131*		*11/23/2019 17:47*	WG1385336
(S) 4-Bromofluorobenzene	*73.4*			*67.0-138*		*11/23/2019 17:47*	WG1385336
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/23/2019 17:47*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.66	4.13	1	11/22/2019 13:23	WG1384285
C28-C40 Oil Range	0.862	J	0.283	4.13	1	11/22/2019 13:23	WG1384285
(S) o-Terphenyl	*74.2*			*18.0-148*		*11/22/2019 13:23*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.3		1	11/22/2019 18:07	WG1385459

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	57.7		0.852	10.7	1	11/24/2019 21:40	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0233	0.107	1	11/23/2019 03:46	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*77.0-120*		*11/23/2019 03:46*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000429	0.00107	1	11/23/2019 18:07	WG1385336
Toluene	U		0.00134	0.00536	1	11/23/2019 18:07	WG1385336
Ethylbenzene	U		0.000568	0.00268	1	11/23/2019 18:07	WG1385336
Total Xylenes	U		0.00513	0.00697	1	11/23/2019 18:07	WG1385336
(S) Toluene-d8	*103*			*75.0-131*		*11/23/2019 18:07*	WG1385336
(S) 4-Bromofluorobenzene	*71.3*			*67.0-138*		*11/23/2019 18:07*	WG1385336
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*11/23/2019 18:07*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U	J3	1.73	4.29	1	11/22/2019 13:36	WG1384285
C28-C40 Oil Range	0.865	J	0.294	4.29	1	11/22/2019 13:36	WG1384285
(S) o-Terphenyl	*66.9*			*18.0-148*		*11/22/2019 13:36*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.3		1	11/22/2019 18:07	WG1385459

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	21.6	B	0.817	10.3	1	11/24/2019 21:50	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0228	B J	0.0223	0.103	1	11/23/2019 04:07	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*95.7*			*77.0-120*		*11/23/2019 04:07*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000411	0.00103	1	11/23/2019 18:26	WG1385336
Toluene	U		0.00128	0.00514	1	11/23/2019 18:26	WG1385336
Ethylbenzene	U		0.000545	0.00257	1	11/23/2019 18:26	WG1385336
Total Xylenes	U		0.00491	0.00668	1	11/23/2019 18:26	WG1385336
(S) Toluene-d8	*99.7*			*75.0-131*		*11/23/2019 18:26*	WG1385336
(S) 4-Bromofluorobenzene	*72.4*			*67.0-138*		*11/23/2019 18:26*	WG1385336
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/23/2019 18:26*	WG1385336

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.82	J	1.65	4.11	1	11/22/2019 14:16	WG1384285
C28-C40 Oil Range	13.8		0.282	4.11	1	11/22/2019 14:16	WG1384285
(S) o-Terphenyl	*74.3*			*18.0-148*		*11/22/2019 14:16*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.1		1	11/22/2019 18:07	WG1385459

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	25.5	B	0.818	10.3	1	11/24/2019 21:59	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	11/23/2019 04:27	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*95.4*			*77.0-120*		*11/23/2019 04:27*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000412	0.00103	1	11/23/2019 01:48	WG1385339
Toluene	U		0.00129	0.00515	1	11/23/2019 01:48	WG1385339
Ethylbenzene	U		0.000546	0.00257	1	11/23/2019 01:48	WG1385339
Total Xylenes	U		0.00492	0.00669	1	11/23/2019 01:48	WG1385339
(S) Toluene-d8	*102*			*75.0-131*		*11/23/2019 01:48*	WG1385339
(S) 4-Bromofluorobenzene	*75.5*			*67.0-138*		*11/23/2019 01:48*	WG1385339
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/23/2019 01:48*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.66	4.12	1	11/22/2019 14:29	WG1384285
C28-C40 Oil Range	4.72		0.282	4.12	1	11/22/2019 14:29	WG1384285
(S) o-Terphenyl	*67.2*			*18.0-148*		*11/22/2019 14:29*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	11/22/2019 18:07	WG1385459

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	25.0	B	0.842	10.6	1	11/24/2019 22:09	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0233	B J	0.0230	0.106	1	11/23/2019 04:48	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*77.0-120*		*11/23/2019 04:48*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000423	0.00106	1	11/23/2019 02:08	WG1385339
Toluene	U		0.00132	0.00529	1	11/23/2019 02:08	WG1385339
Ethylbenzene	U		0.000561	0.00265	1	11/23/2019 02:08	WG1385339
Total Xylenes	U		0.00506	0.00688	1	11/23/2019 02:08	WG1385339
(S) Toluene-d8	*103*			*75.0-131*		*11/23/2019 02:08*	WG1385339
(S) 4-Bromofluorobenzene	*72.5*			*67.0-138*		*11/23/2019 02:08*	WG1385339
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/23/2019 02:08*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	6.36		1.70	4.23	1	11/22/2019 14:42	WG1384285
C28-C40 Oil Range	120		0.290	4.23	1	11/22/2019 14:42	WG1384285
(S) o-Terphenyl	*62.9*			*18.0-148*		*11/22/2019 14:42*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	11/22/2019 18:07	WG1385459

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	24.7	B	0.816	10.3	1	11/24/2019 22:19	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	11/23/2019 05:08	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*95.5*			*77.0-120*		*11/23/2019 05:08*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000411	0.00103	1	11/23/2019 02:28	WG1385339
Toluene	U		0.00128	0.00513	1	11/23/2019 02:28	WG1385339
Ethylbenzene	U		0.000544	0.00257	1	11/23/2019 02:28	WG1385339
Total Xylenes	U		0.00491	0.00667	1	11/23/2019 02:28	WG1385339
(S) Toluene-d8	*99.7*			*75.0-131*		*11/23/2019 02:28*	WG1385339
(S) 4-Bromofluorobenzene	*77.1*			*67.0-138*		*11/23/2019 02:28*	WG1385339
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*11/23/2019 02:28*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.65	4.11	1	11/22/2019 15:35	WG1384285
C28-C40 Oil Range	1.75	J	0.281	4.11	1	11/22/2019 15:35	WG1384285
(S) o-Terphenyl	*69.1*			*18.0-148*		*11/22/2019 15:35*	WG1384285

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.8		1	11/22/2019 18:07	WG1385459

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	110		0.821	10.3	1	11/24/2019 22:28	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0227	B J	0.0224	0.103	1	11/23/2019 05:29	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*95.6*			*77.0-120*		*11/23/2019 05:29*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000413	0.00103	1	11/23/2019 02:48	WG1385339
Toluene	U		0.00129	0.00516	1	11/23/2019 02:48	WG1385339
Ethylbenzene	U		0.000547	0.00258	1	11/23/2019 02:48	WG1385339
Total Xylenes	U		0.00494	0.00671	1	11/23/2019 02:48	WG1385339
(S) Toluene-d8	*101*			*75.0-131*		*11/23/2019 02:48*	WG1385339
(S) 4-Bromofluorobenzene	*74.4*			*67.0-138*		*11/23/2019 02:48*	WG1385339
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/23/2019 02:48*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.66	4.13	1	11/22/2019 17:08	WG1384665
C28-C40 Oil Range	0.779	J	0.283	4.13	1	11/22/2019 17:08	WG1384665
(S) o-Terphenyl	*65.5*			*18.0-148*		*11/22/2019 17:08*	WG1384665

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.0		1	11/26/2019 16:36	WG1385462

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	35.1	B	0.820	10.3	1	11/24/2019 22:38	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	11/23/2019 05:50	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*95.4*			*77.0-120*		*11/23/2019 05:50*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000413	0.00103	1	11/23/2019 03:07	WG1385339
Toluene	U		0.00129	0.00516	1	11/23/2019 03:07	WG1385339
Ethylbenzene	U		0.000547	0.00258	1	11/23/2019 03:07	WG1385339
Total Xylenes	U		0.00493	0.00670	1	11/23/2019 03:07	WG1385339
(S) Toluene-d8	*100*			*75.0-131*		*11/23/2019 03:07*	WG1385339
(S) 4-Bromofluorobenzene	*73.8*			*67.0-138*		*11/23/2019 03:07*	WG1385339
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*11/23/2019 03:07*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.66	4.13	1	11/22/2019 17:21	WG1384665
C28-C40 Oil Range	2.46	J	0.283	4.13	1	11/22/2019 17:21	WG1384665
(S) o-Terphenyl	*65.1*			*18.0-148*		*11/22/2019 17:21*	WG1384665

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.5		1	11/26/2019 16:36	WG1385462

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	25.9	B	0.878	11.0	1	11/24/2019 23:06	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0240	0.110	1	11/23/2019 06:10	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*94.8*			*77.0-120*		*11/23/2019 06:10*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000442	0.00110	1	11/23/2019 03:27	WG1385339
Toluene	U		0.00138	0.00552	1	11/23/2019 03:27	WG1385339
Ethylbenzene	U		0.000585	0.00276	1	11/23/2019 03:27	WG1385339
Total Xylenes	U		0.00528	0.00718	1	11/23/2019 03:27	WG1385339
(S) Toluene-d8	*103*			*75.0-131*		*11/23/2019 03:27*	WG1385339
(S) 4-Bromofluorobenzene	*73.6*			*67.0-138*		*11/23/2019 03:27*	WG1385339
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/23/2019 03:27*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.78	4.42	1	11/22/2019 17:34	WG1384665
C28-C40 Oil Range	0.832	J	0.303	4.42	1	11/22/2019 17:34	WG1384665
(S) o-Terphenyl	*65.5*			*18.0-148*		*11/22/2019 17:34*	WG1384665

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.0		1	11/26/2019 16:36	WG1385462

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	34.5	B	0.828	10.4	1	11/24/2019 23:35	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0276	B J	0.0226	0.104	1	11/23/2019 06:31	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*95.4*			*77.0-120*		*11/23/2019 06:31*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000417	0.00104	1	11/23/2019 07:05	WG1385339
Toluene	U		0.00130	0.00521	1	11/23/2019 07:05	WG1385339
Ethylbenzene	U		0.000552	0.00261	1	11/23/2019 07:05	WG1385339
Total Xylenes	U		0.00498	0.00677	1	11/23/2019 07:05	WG1385339
(S) Toluene-d8	*103*			*75.0-131*		*11/23/2019 07:05*	WG1385339
(S) 4-Bromofluorobenzene	*76.6*			*67.0-138*		*11/23/2019 07:05*	WG1385339
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/23/2019 07:05*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.73	J	1.68	4.17	1	11/22/2019 22:40	WG1384665
C28-C40 Oil Range	20.6		0.286	4.17	1	11/22/2019 22:40	WG1384665
(S) o-Terphenyl	*61.7*			*18.0-148*		*11/22/2019 22:40*	WG1384665

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.4		1	11/26/2019 16:36	WG1385462

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	31.4	B	0.842	10.6	1	11/24/2019 23:44	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	11/23/2019 06:51	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*95.7*			*77.0-120*		*11/23/2019 06:51*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000424	0.00106	1	11/23/2019 07:25	WG1385339
Toluene	U		0.00132	0.00529	1	11/23/2019 07:25	WG1385339
Ethylbenzene	U		0.000561	0.00265	1	11/23/2019 07:25	WG1385339
Total Xylenes	U		0.00506	0.00688	1	11/23/2019 07:25	WG1385339
(S) Toluene-d8	*100*			*75.0-131*		*11/23/2019 07:25*	WG1385339
(S) 4-Bromofluorobenzene	*77.4*			*67.0-138*		*11/23/2019 07:25*	WG1385339
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/23/2019 07:25*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.59	J	1.70	4.24	1	11/22/2019 22:54	WG1384665
C28-C40 Oil Range	22.0		0.290	4.24	1	11/22/2019 22:54	WG1384665
(S) o-Terphenyl	*65.6*			*18.0-148*		*11/22/2019 22:54*	WG1384665

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.9		1	11/26/2019 16:36	WG1385462

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	25.3	B	0.838	10.5	1	11/24/2019 23:54	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0229	0.105	1	11/23/2019 07:12	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*95.6*			*77.0-120*		*11/23/2019 07:12*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000422	0.00105	1	11/23/2019 07:45	WG1385339
Toluene	U		0.00132	0.00527	1	11/23/2019 07:45	WG1385339
Ethylbenzene	U		0.000559	0.00264	1	11/23/2019 07:45	WG1385339
Total Xylenes	U		0.00504	0.00685	1	11/23/2019 07:45	WG1385339
(S) Toluene-d8	*101*			*75.0-131*		*11/23/2019 07:45*	WG1385339
(S) 4-Bromofluorobenzene	*73.0*			*67.0-138*		*11/23/2019 07:45*	WG1385339
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/23/2019 07:45*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.70	4.22	1	11/22/2019 17:47	WG1384665
C28-C40 Oil Range	2.81	J	0.289	4.22	1	11/22/2019 17:47	WG1384665
(S) o-Terphenyl	*62.5*			*18.0-148*		*11/22/2019 17:47*	WG1384665

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.2		1	11/26/2019 16:36	WG1385462

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	67.3		0.802	10.1	1	11/25/2019 00:13	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0219	0.101	1	11/23/2019 07:32	WG1385621
(S) a,a,a-Trifluorotoluene(FID)	*94.9*			*77.0-120*		*11/23/2019 07:32*	WG1385621

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000403	0.00101	1	11/23/2019 08:06	WG1385339
Toluene	U		0.00126	0.00504	1	11/23/2019 08:06	WG1385339
Ethylbenzene	U		0.000534	0.00252	1	11/23/2019 08:06	WG1385339
Total Xylenes	U		0.00482	0.00655	1	11/23/2019 08:06	WG1385339
(S) Toluene-d8	*100*			*75.0-131*		*11/23/2019 08:06*	WG1385339
(S) 4-Bromofluorobenzene	*74.8*			*67.0-138*		*11/23/2019 08:06*	WG1385339
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/23/2019 08:06*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.62	4.03	1	11/22/2019 18:07	WG1384665
C28-C40 Oil Range	0.669	J	0.276	4.03	1	11/22/2019 18:07	WG1384665
(S) o-Terphenyl	*74.2*			*18.0-148*		*11/22/2019 18:07*	WG1384665

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.6		1	11/26/2019 16:36	WG1385462

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	208		0.840	10.6	1	11/25/2019 00:22	WG1385548

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0510	B J	0.0232	0.107	1.01	11/26/2019 12:12	WG1386889
(S) a,a,a-Trifluorotoluene(FID)	*95.3*			*77.0-120*		*11/26/2019 12:12*	WG1386889

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000423	0.00106	1	11/23/2019 08:26	WG1385339
Toluene	U		0.00132	0.00529	1	11/23/2019 08:26	WG1385339
Ethylbenzene	U		0.000560	0.00264	1	11/23/2019 08:26	WG1385339
Total Xylenes	U		0.00505	0.00687	1	11/23/2019 08:26	WG1385339
(S) Toluene-d8	*102*			*75.0-131*		*11/23/2019 08:26*	WG1385339
(S) 4-Bromofluorobenzene	*70.1*			*67.0-138*		*11/23/2019 08:26*	WG1385339
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/23/2019 08:26*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.70	4.23	1	11/22/2019 18:20	WG1384665
C28-C40 Oil Range	1.95	J	0.290	4.23	1	11/22/2019 18:20	WG1384665
(S) o-Terphenyl	*63.8*			*18.0-148*		*11/22/2019 18:20*	WG1384665

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.5		1	11/26/2019 16:36	WG1385462

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	21.5		0.824	10.4	1	11/25/2019 23:11	WG1386303

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0304	B J	0.0225	0.104	1	11/26/2019 12:32	WG1386889
(S) a,a,a-Trifluorotoluene(FID)	*95.8*			*77.0-120*		*11/26/2019 12:32*	WG1386889

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000415	0.00104	1	11/23/2019 08:46	WG1385339
Toluene	U		0.00130	0.00518	1	11/23/2019 08:46	WG1385339
Ethylbenzene	U		0.000549	0.00259	1	11/23/2019 08:46	WG1385339
Total Xylenes	U		0.00495	0.00674	1	11/23/2019 08:46	WG1385339
(S) Toluene-d8	*99.8*			*75.0-131*		*11/23/2019 08:46*	WG1385339
(S) 4-Bromofluorobenzene	*72.3*			*67.0-138*		*11/23/2019 08:46*	WG1385339
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/23/2019 08:46*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.67	4.15	1	11/22/2019 19:51	WG1384665
C28-C40 Oil Range	0.409	J	0.284	4.15	1	11/22/2019 19:51	WG1384665
(S) o-Terphenyl	*68.2*			*18.0-148*		*11/22/2019 19:51*	WG1384665

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.0		1	11/26/2019 16:36	WG1385462

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	6.16	B J	0.837	10.5	1	11/25/2019 23:40	WG1386303

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0260	B J	0.0229	0.105	1	11/26/2019 12:53	WG1386889
(S) a,a,a-Trifluorotoluene(FID)	*95.7*			*77.0-120*		*11/26/2019 12:53*	WG1386889

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000421	0.00105	1	11/23/2019 09:06	WG1385339
Toluene	U		0.00132	0.00527	1	11/23/2019 09:06	WG1385339
Ethylbenzene	U		0.000558	0.00263	1	11/23/2019 09:06	WG1385339
Total Xylenes	U		0.00503	0.00685	1	11/23/2019 09:06	WG1385339
(S) Toluene-d8	*99.0*			*75.0-131*		*11/23/2019 09:06*	WG1385339
(S) 4-Bromofluorobenzene	*76.3*			*67.0-138*		*11/23/2019 09:06*	WG1385339
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*11/23/2019 09:06*	WG1385339

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.70	4.21	1	11/22/2019 20:18	WG1384665
C28-C40 Oil Range	U		0.289	4.21	1	11/22/2019 20:18	WG1384665
(S) o-Terphenyl	*73.5*			*18.0-148*		*11/22/2019 20:18*	WG1384665

Method Blank (MB)

(MB) R3475339-1 11/22/19 19:03

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00700			

L1161793-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1161793-05 11/22/19 19:03 • (DUP) R3475339-3 11/22/19 19:03

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.6	94.8	1	0.180		10

Laboratory Control Sample (LCS)

(LCS) R3475339-2 11/22/19 19:03

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) R3475337-1 11/22/19 18:26

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00600			

L1161793-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1161793-09 11/22/19 18:26 • (DUP) R3475337-3 11/22/19 18:26

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	97.0	97.2	1	0.258		10

Laboratory Control Sample (LCS)

(LCS) R3475337-2 11/22/19 18:26

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) R3475336-1 11/22/19 18:07

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1161793-23 Original Sample (OS) • Duplicate (DUP)

(OS) L1161793-23 11/22/19 18:07 • (DUP) R3475336-3 11/22/19 18:07

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	97.1	97.2	1	0.0407		10

Laboratory Control Sample (LCS)

(LCS) R3475336-2 11/22/19 18:07

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) R3476736-1 11/26/19 16:36

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1161793-34 Original Sample (OS) • Duplicate (DUP)

(OS) L1161793-34 11/26/19 16:36 • (DUP) R3476736-3 11/26/19 16:36

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	96.5	96.6	1	0.0718		10

Laboratory Control Sample (LCS)

(LCS) R3476736-2 11/26/19 16:36

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) R3475394-1 11/23/19 09:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	2.47	J	0.795	10.0

L1161775-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1161775-25 11/23/19 09:50 • (DUP) R3475394-3 11/23/19 09:59

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	2.89	2.61	1	10.1	J	20

L1161793-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1161793-13 11/23/19 13:57 • (DUP) R3475394-6 11/23/19 14:06

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	25.8	25.3	1	2.19		20

Laboratory Control Sample (LCS)

(LCS) R3475394-2 11/23/19 09:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	192	95.8	90.0-110	

L1161788-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161788-06 11/23/19 10:56 • (MS) R3475394-4 11/23/19 11:24 • (MSD) R3475394-5 11/23/19 11:34

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 %
Chloride	530	4.24	532	547	99.6	103	1	80.0-120			2.86	20

Method Blank (MB)

(MB) R3475795-1 11/24/19 19:37

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	4.52	J	0.795	10.0

L1161793-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1161793-14 11/24/19 20:05 • (DUP) R3475795-3 11/24/19 20:15

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	53.5	50.3	1	6.14		20

L1161793-31 Original Sample (OS) • Duplicate (DUP)

(OS) L1161793-31 11/24/19 23:54 • (DUP) R3475795-6 11/25/19 00:03

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	25.3	22.1	1	13.6		20

Laboratory Control Sample (LCS)

(LCS) R3475795-2 11/24/19 19:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	209	104	90.0-110	

L1161793-27 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161793-27 11/24/19 22:38 • (MS) R3475795-4 11/24/19 22:47 • (MSD) R3475795-5 11/24/19 22:57

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 %
Chloride	516	35.1	534	520	96.8	94.0	1	80.0-120			2.66	20

Method Blank (MB)

(MB) R3476333-1 11/25/19 22:02

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	1.87	J	0.795	10.0

L1161793-34 Original Sample (OS) • Duplicate (DUP)

(OS) L1161793-34 11/25/19 23:11 • (DUP) R3476333-3 11/25/19 23:25

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	21.5	21.4	1	0.491		20

L1163707-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1163707-01 11/26/19 05:54 • (DUP) R3476333-6 11/26/19 06:09

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	25200	25300	100	0.412		20

Laboratory Control Sample (LCS)

(LCS) R3476333-2 11/25/19 22:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	201	101	90.0-110	

L1162935-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1162935-02 11/26/19 02:54 • (MS) R3476333-4 11/26/19 03:09 • (MSD) R3476333-5 11/26/19 03:24

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 %
Chloride	500	1440	1980	2040	108	121	1	80.0-120	E	E J5	3.06	20

Method Blank (MB)

(MB) R3475368-5 11/23/19 07:32

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0261	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*

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

(LCS) R3475368-3 11/23/19 06:31 • (LCSD) R3475368-4 11/23/19 06:52

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 %
TPH (GC/FID) Low Fraction	5.50	5.01	5.02	91.1	91.3	72.0-127			0.199	20
(S) a,a,a-Trifluorotoluene(FID)				*108*	*108*	*77.0-120*				

L1161805-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161805-01 11/23/19 15:24 • (MS) R3475368-8 11/23/19 16:25 • (MSD) R3475368-9 11/23/19 16:45

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 %
TPH (GC/FID) Low Fraction	5.50	0.241	1.79	1.72	28.2	26.9	1	10.0-151			3.99	28
(S) a,a,a-Trifluorotoluene(FID)					*92.0*	*91.4*		*77.0-120*				

Method Blank (MB)

(MB) R3475617-2 11/22/19 23:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0270	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*97.0*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3475617-1 11/22/19 22:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.58	120	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*111*	*77.0-120*	

L1161793-31 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161793-31 11/23/19 07:12 • (MS) R3475617-3 11/23/19 07:53 • (MSD) R3475617-4 11/23/19 08:13

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 %
TPH (GC/FID) Low Fraction	5.80	U	5.86	6.07	101	105	1	10.0-151			3.53	28
(S) a,a,a-Trifluorotoluene(FID)					*109*	*109*		*77.0-120*				

Method Blank (MB)

(MB) R3476432-2 11/26/19 10:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0254	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*97.1*			*77.0-120*

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

(LCS) R3476432-1 11/26/19 10:08 • (LCSD) R3476432-3 11/26/19 15:59

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 %
TPH (GC/FID) Low Fraction	5.50	4.53	6.09	82.4	111	72.0-127		J3	29.4	20
(S) a,a,a-Trifluorotoluene(FID)				*106*	*111*	*77.0-120*				

Method Blank (MB)

(MB) R3476433-2 11/26/19 10:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0254	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*97.1*			*77.0-120*

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

(LCS) R3476433-1 11/26/19 10:08 • (LCSD) R3476433-3 11/26/19 15:59

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 %
TPH (GC/FID) Low Fraction	5.50	4.53	6.09	82.4	111	72.0-127		J3	29.4	20
(S) a,a,a-Trifluorotoluene(FID)				*106*	*111*	*77.0-120*				

Method Blank (MB)

(MB) R3476359-3 11/22/19 11:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*102*			*75.0-131*
(S) 4-Bromofluorobenzene	*82.0*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*

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

(LCS) R3476359-1 11/22/19 10:18 • (LCSD) R3476359-2 11/22/19 10:39

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 %
Benzene	0.125	0.115	0.119	92.0	95.2	70.0-123			3.42	20
Ethylbenzene	0.125	0.114	0.117	91.2	93.6	74.0-126			2.60	20
Toluene	0.125	0.0945	0.0959	75.6	76.7	75.0-121			1.47	20
Xylenes, Total	0.375	0.398	0.409	106	109	72.0-127			2.73	20
(S) Toluene-d8				*102*	*101*	*75.0-131*				
(S) 4-Bromofluorobenzene				*104*	*108*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*100*	*101*	*70.0-130*				

L1161775-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161775-08 11/22/19 13:08 • (MS) R3476359-4 11/22/19 20:50 • (MSD) R3476359-5 11/22/19 21:10

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 %
Benzene	0.132	U	0.108	0.116	82.4	88.0	1	10.0-149			6.57	37
Ethylbenzene	0.132	U	0.0955	0.104	72.6	78.8	1	10.0-160			8.25	38
Toluene	0.132	U	0.0868	0.0914	65.9	69.4	1	10.0-156			5.20	38
Xylenes, Total	0.395	U	0.332	0.350	84.0	88.5	1	10.0-160			5.26	38
(S) Toluene-d8					*102*	*98.9*		*75.0-131*				
(S) 4-Bromofluorobenzene					*99.9*	*102*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*103*	*99.9*		*70.0-130*				

Method Blank (MB)

(MB) R3476360-2 11/23/19 11:47

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*101*			*75.0-131*
(S) 4-Bromofluorobenzene	*78.8*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3476360-1 11/23/19 10:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.116	92.8	70.0-123	
Ethylbenzene	0.125	0.110	88.0	74.0-126	
Toluene	0.125	0.0941	75.3	75.0-121	
Xylenes, Total	0.375	0.387	103	72.0-127	
(S) Toluene-d8			*104*	*75.0-131*	
(S) 4-Bromofluorobenzene			*107*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*102*	*70.0-130*	

L1161793-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161793-03 11/23/19 12:07 • (MS) R3476360-3 11/23/19 18:46 • (MSD) R3476360-4 11/23/19 19:07

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 %
Benzene	0.156	U	0.129	0.136	82.4	87.2	1	10.0-149			5.66	37
Ethylbenzene	0.156	U	0.112	0.120	71.8	76.6	1	10.0-160			6.58	38
Toluene	0.156	U	0.105	0.109	67.1	69.4	1	10.0-156			3.40	38
Xylenes, Total	0.469	U	0.384	0.413	81.9	88.0	1	10.0-160			7.22	38
(S) Toluene-d8					*103*	*103*		*75.0-131*				
(S) 4-Bromofluorobenzene					*103*	*99.8*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*103*	*101*		*70.0-130*				

Method Blank (MB)

(MB) R3475855-2 11/22/19 23:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*99.5*			*75.0-131*
(S) 4-Bromofluorobenzene	*79.8*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3475855-1 11/22/19 22:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.122	97.6	70.0-123	
Ethylbenzene	0.125	0.118	94.4	74.0-126	
Toluene	0.125	0.0996	79.7	75.0-121	
Xylenes, Total	0.375	0.418	111	72.0-127	
(S) Toluene-d8			*104*	*75.0-131*	
(S) 4-Bromofluorobenzene			*99.5*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*103*	*70.0-130*	

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

Method Blank (MB)

(MB) R3475031-1 11/22/19 00:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*65.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3475031-2 11/22/19 00:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	41.8	83.6	50.0-150	
(S) o-Terphenyl			*60.8*	*18.0-148*	

L1161775-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161775-21 11/22/19 18:56 • (MS) R3475031-3 11/22/19 19:09 • (MSD) R3475031-4 11/22/19 19:22

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 %
C10-C28 Diesel Range	50.0	U	37.6	37.5	75.2	75.0	1	50.0-150			0.266	20
(S) o-Terphenyl					*52.4*	*53.8*		*18.0-148*				

Method Blank (MB)

(MB) R3475032-1 11/22/19 00:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*87.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3475032-2 11/22/19 00:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	46.0	92.0	50.0-150	
(S) o-Terphenyl			*68.2*	*18.0-148*	

L1161793-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161793-21 11/22/19 13:36 • (MS) R3475032-3 11/22/19 13:49 • (MSD) R3475032-4 11/22/19 14:03

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 %
C10-C28 Diesel Range	52.8	U	35.3	76.5	66.9	87.1	1	50.0-150		J3	73.7	20
(S) o-Terphenyl					*52.4*	*61.9*		*18.0-148*				

Method Blank (MB)

(MB) R3474862-1 11/22/19 11:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*80.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3474862-2 11/22/19 11:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	43.9	87.8	50.0-150	
(S) o-Terphenyl			*84.4*	*18.0-148*	

L1161931-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1161931-04 11/22/19 21:20 • (MS) R3474862-3 11/22/19 21:34 • (MSD) R3474862-4 11/22/19 21:47

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 %
C10-C28 Diesel Range	48.9	U	32.3	35.4	66.1	72.4	1	50.0-150			9.16	20
(S) o-Terphenyl					*54.9*	*61.5*		*18.0-148*				

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
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.

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

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

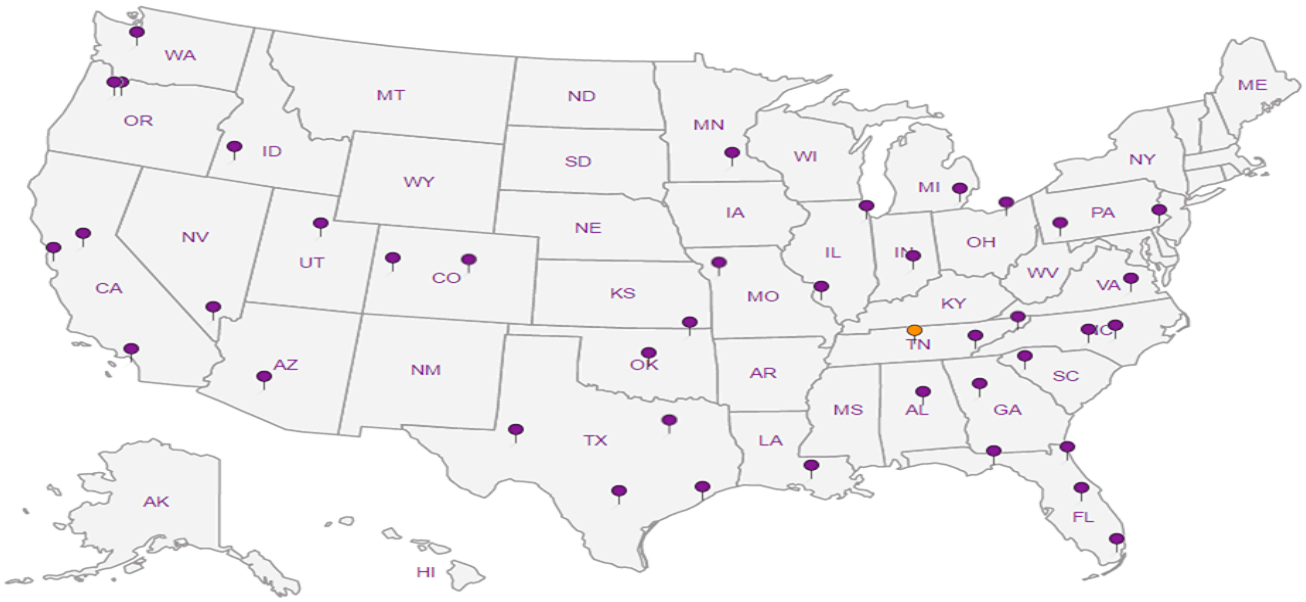
Third Party Federal Accreditations

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.



M096

Page : 1 of 4

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

901 West Wall Street, Suite 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

116 1793

Client Name:	ConocoPhillips	Site Manager:	Christian Llull
Project Name:	COP SEMU BTD #156		
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-01988
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
	BH-1 (0' - 1')	11/12/2019	1300		X				X			1	N	X		X												X						01
	BH-1 (2' - 3')	11/12/2019	1305		X				X			1	N															X						02
	BH-1 (4' - 5')	11/12/2019	1310		X				X			1	N															X						03
	BH-1 (6' - 7')	11/12/2019	1320		X				X			1	N															X						04
	BH-1 (9' - 10')	11/12/2019	1330		X				X			1	N															X						05
	BH-1 (14' - 15')	11/12/2019	1340		X				X			1	N															X						06
	BH-1 (19' - 20')	11/12/2019	1350		X				X			1	N															X						07
	BH-2 (0' - 1')	11/12/2019	1410		X				X			1	N															X						08
	BH-2 (2' - 3')	11/12/2019	1415		X				X			1	N															X						09
	BH-2 (4' - 5')	11/12/2019	1430		X				X			1	N															X						10

Relinquished by:	Date: 11-15-19	Time: 15:00	Received by: Date: 11-15-19 Time: 15:00
Relinquished by:	Date: 11-15-19	Time: 17:30	Received by: SCA Date: 11-15-19 Time: 17:30
Relinquished by:	Date:	Time:	Received by: Date: 11/16/19 Time: 1345

ORIGINAL COPY

over temps 2.4±D=2.4 1.1/1.4/0.3

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] STANDARD
- [ ] RUSH: Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

TC: 35=4oz

Analysis Request of Chain of Custody Record

Page : 2 of 4

Tetra Tech, Inc.

901 West Wall Street, Suite 100
Midland,Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

161794

Client Name:	ConocoPhillips	**Site Manager:**	Christian Llull
Project Name:	COP SEMU BTD #156		
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-01988
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
	BH-2 (6' - 7')	11/12/2019	1430		X				X			1	N	X		X												X						1
	BH-2 (9' - 10')	11/12/2019	1440		X				X			1	N															X						2
	BH-2 (14' - 15')	11/12/2019	1455		X				X			1	N															X						3
	BH-2 (19' - 20')	11/12/2019	1510		X				X			1	N															X						4
	BH-3 (0' - 1')	11/13/2019	0950		X				X			1	N															X						5
	BH-3 (2' - 3')	11/13/2019	0955		X				X			1	N															X						6
	BH-3 (4' - 5')	11/13/2019	1000		X				X			1	N															X						7
	BH-3 (6' - 7')	11/13/2019	1005		X				X			1	N															X						8
	BH-3 (9' - 10')	11/13/2019	1010		X				X			1	N															X						9
	BH-3 (14' - 15')	11/13/2019	1020		X				X			1	N															X						10

Relinquished by:	Date: 11-15-19	Time: 15:00	Received by:
Relinquished by:	Date: 11-15-19	Time: 17:30	Received by: Date: 11-15-19 Time: 17:30
Relinquished by:	Date:	Time:	Received by: Date: 11/16/19 Time: 1345

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] STANDARD
- [ ] RUSH: Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

2.4 ± 0 = 2.4 KP AA3

temps: 1.1 / 1.4 / 0.3

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

901 West Wall Street, Suite 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

1161747

Client Name:	ConocoPhillips	**Site Manager:**	Christian Llull
Project Name:	COP SEMU BTD #156		
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-01988
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	[signature]
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2019)	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE HCL	HNO_3	ICE	NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
	BH-3 (19' - 20')	11/13/2019	1030		X			X		1	N	X		X												X					21
	BH-4 (0' - 1')	11/13/2019	1100		X			X		1	N															X					22
	BH-4 (2' - 3')	11/13/2019	1105		X			X		1	N															X					23
	BH-4 (4' - 5')	11/13/2019	1110		X			X		1	N															X					24
	BH-4 (6' - 7')	11/13/2019	1115		X			X		1	N															X					25
	BH-4 (9' - 10')	11/13/2019	1120		X			X		1	N															X					26
	BH-4 (14' - 15')	11/13/2019	1130		X			X		1	N															X					27
	BH-4 (19' - 20')	11/13/2019	1140		X			X		1	N															X					28
	BH-5 (0' - 1')	11/13/2019	1200		X			X		1	N															X					29
	BH-5 (2' - 3')	11/13/2019	1205		X			X		1	N															X					30

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	11-15-19	8:00	[signature]	11-15-19	8:00
[signature]	11-15-19	17:30	SWA	11-15-19	17:30
			[signature]	11/16/19	1345

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] STANDARD
- [ ] **RUSH:** Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: ____________

ORIGINAL COPY

2.4±0=2.4 ℃

temps 1.1/1.4/0.3

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

901 West Wall Street, Suite 100
Midland,Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

1161797

Client Name: ConocoPhillips
Site Manager: Christian Llull
Project Name: COP SEMU BTD #156
Project Location: (county, state) Lea County, New Mexico
Project #: 212C-MD-01988
Invoice to: Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701
Receiving Laboratory: Pace Analytical
Sampler Signature: [signature]
Comments: COPTETRA Acctnum

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2019)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	PRESERVATIVE METHOD: HCL	HNO_3	ICE	NONE	# CONTAINERS	FILTERED (Y/N)
	BH-5 (4' - 5')	11/13/2019	1210		X			X		1	N
	BH-5 (6' - 7')	11/13/2019	1220		X			X		1	N
	BH-5 (9' - 10')	11/13/2019	1230		X			X		1	N
	BH-5 (14' - 15')	11/13/2019	1240		X			X		1	N
	BH-5 (19' - 20')	11/13/2019	1300		X			X		1	N

SAMPLE IDENTIFICATION	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
BH-5 (4' - 5')	X		X												X						31
BH-5 (6' - 7')	↓		↓												X						32
BH-5 (9' - 10')	↓		↓												X						33
BH-5 (14' - 15')	↓		↓												X						34
BH-5 (19' - 20')	↓		↓												X						35

Relinquished by	Date	Time	Received by	Date	Time
[signature]	11-15-19	15:00	[signature]	11-15-19	15:00
[signature]	11-15-19	17:30	[signature]	11-15-19	17:30
			[signature]	11/16/19	1345

LAB USE ONLY
Sample Temperature

REMARKS:
- [X] STANDARD
- [ ] RUSH: Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: ____________

ORIGINAL COPY 2.4±0=2.4 R3

temps 1.1/1.4/0.3

APPENDIX E
Photographic Documentation

TETRA TECH, INC. PROJECT NO. 212C-MD-01988	DESCRIPTION	View northeast. Area west of the release area and east of well pad.	1
	SITE NAME	SEMU BTD #156 Release	11/13/2019

TETRA TECH, INC. PROJECT NO. 212C-MD-01988	DESCRIPTION	View east. Site assessment activities at boring location BH-1.	2
	SITE NAME	SEMU BTD #156 Release	11/13/2019

TETRA TECH, INC. PROJECT NO. 212C-MD-01988	DESCRIPTION	View southeast. Southern portion of the release area.	3
	SITE NAME	SEMU BTD #156 Release	11/13/2019