

SITE INFORMATION

Report Type: Work Plan 1RP-739

General Site Information:

Site:	EVGSAU 3366-029 Flowline Release			
Company:	ConocoPhillips			
Section, Township and Range	Unit Letter E	Sec. 33	T 17S	R 35E
Lease Number:	Associated API No. 30-025-02987			
County:	Lea			
GPS:	32.793369		-103.470367	
Surface Owner:	State			
Mineral Owner:	State			
Directions:	Depart from Buckeye (NM238/Buckeye Rd.). Head east on Buckeye Rd. for 1.72 miles. Turn right onto dirt road. Head south for 0.44 miles. Turn left onto dirt road. Head northeast for 0.16 miles. Turn right onto dirt road. Head east for 0.14miles. Arrive at location.			

Release Data:

Date Released:	3/29/2004
Type Release:	Produced Water/Oil
Source of Contamination:	Flowline Leak
Fluid Released:	88 bbls
Fluids Recovered:	85 bbls

Official Communication:

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Company:	Conoco Phillips - RMR	Tetra Tech
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City:	Houston, Texas 77079	Austin, Texas
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Fax:		
Email:	marvin.soriwei@conocophillips.com	christian.llull@tetrattech.com

Site Characterization

Shallowest Depth to Groundwater:	80' below surface
Impact to groundwater or surface water:	No
Extents within 300 feet of a watercourse:	No
Extents within 200 feet of lakebed, sinkhole, or playa la	No
Extents within 300 feet of an occupied structure:	No
Extents within 500 horizontal feet of a private water we	No
Extents within 1000 feet of any water well or spring:	No
Extents within incorporated municipal well field:	No
Extents within 300 feet of a wetland:	No
Extents overlying a subsurface mine:	No
Karst Potential:	Low
Extents within a 100-year floodplain:	No
Impact to areas not on a production site:	No

Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	1,000 mg/kg	2,500 mg/kg	10,000 mg/kg



October 27, 2020

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

**Re: Release Characterization and Remediation Work Plan
ConocoPhillips
EVGSAU 3366-029 Flowline Release
Unit Letter E, Section 33, Township 17 South, Range 35 East
Lea County, New Mexico
1RP-739**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a release that occurred from the flowline of the East Vacuum Grayburg-San Andres Unit (EVGSAU) 3366-029 well (Associated API No. 30-025-02987), approximately 300 feet west of the wellhead. The release footprint is located in Public Land Survey System (PLSS) Unit Letter E, Section 33, Township 17 South, Range 35 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.793358°, -103.470211°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report (Attachment A), the release was discovered on March 29, 2004. As documented on the C-41 form, a flowline rupture due to external corrosion led to the release of approximately 62 barrels (bbls.) of produced water and 26 bbls of oil. The approximate release extent was reported as encompassing an area of 8,740 square feet (sf). During the initial response, 61 bbls of produced water and 24 bbls of oil were recovered. The C-141 is dated April 2004, however it is unclear when the New Mexico Oil Conservation District (NMOCD) received the C-141 report form for the release. The NMOCD assigned this release Remediation Permit 1RP-739.

SITE CHARACTERIZATION

A site characterization was performed and no watercourses, sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.0029 New Mexico Administrative Code (NMAC). The Site is in an area of low karst potential.

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are three water wells within a ½ mile (800-meter) radius of the Site in the Public Land Survey System (PLSS) Section 33, Township 17 South, and Range 35 East with an average depth to groundwater at 80 feet below ground surface (bgs). The site characterization data is included in Appendix B.

REGULATORY FRAMEWORK

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine recommended remedial action

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levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

Based on the site characterization, the RRALs for the Site are as follows:

Constituent	RRAL
Chloride (0-4 ft bgs)	600 mg/kg
Chloride (>4 ft bgs)	10,000 mg/kg
TPH	2,500 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

INITIAL ASSESSMENT ACTIVITIES AND SAMPLING RESULTS

As a portion of initial response, an Environmental Site Investigation was conducted by BBC International, and their summary report is dated June 1, 2004 (Appendix C). This report is available in the online NMOCD database for this release. The report states that on May 4, 2004, BBC personnel conducted an inspection of the site and drilled one soil boring (SB1). Three (3) samples were taken from the soil boring in the center of the release area footprint. The soil boring was drilled with an air rotary drilling rig to a total depth of 25 feet. The three samples were taken from the soil boring at depths of one foot, 15 feet, and 25 feet. The samples were taken to Cardinal Laboratories and analyzed for BTEX, TPH (GRO and ORO), and chlorides. Boring locations are shown in Figure 3.

The report also states that a second additional sampling event was conducted by BBC personnel on May 12, 2004. Two (2) samples were taken, both at a depth of approximately 1 foot. Sample Point 1 was taken from the west end of the release site and Sample Point 2 was taken from the east end of the site. The samples were taken to Cardinal Laboratories and analyzed for BTEX, TPH (GRO and ORO), and chlorides. Approximate boring locations are shown in Figure 3.

Analytical results associated with the three (3) sample locations exceeded the current delineation concentration of 600 mg/kg chloride required by NMOCD regulations. The analytical results associated with two (2) of the soil samples exceeded the reclamation concentration for TPH (100 mg/kg) in the upper four feet. A copy of the analytical laboratory report and chain-of-custody documentation are included in Appendix C. Sample results from the initial assessment are summarized in Table 1. Horizontal delineation of the release was not achieved during this assessment.

The report recommended that that approximately 1 foot of topsoil, down to the rock layer, be removed and properly disposed of. The report states that this soil would be transported to an approved land farm or disposal site. The excavated area would then be backfilled with clean topsoil and reseeded with the appropriate BLM seed mix and the site would be closed. It is unclear when or whether this remediation ever occurred for the release site.

ADDITIONAL SITE ASSESSMENT

In order to properly characterize this historic release and achieve horizontal and vertical delineation of the release extent, Tetra Tech personnel conducted soil sampling on May 20, 2020 on behalf of ConocoPhillips.

A total of five (5) borings (BH-20-1 through BH-20-5) were installed using an air rotary drilling rig at the 1RP-739 footprint. Three (3) borings (BH-20-1, BH-20-2 and BH-20-5) were installed within the release extent. Borings BH-20-1 and BH-20-2 were drilled to a depth of 25 feet bgs to achieve vertical delineation. Boring BH-20-5 was drilled to 5 feet bgs. Two borings (BH-20-3 and BH-20-4) were installed along the perimeter of the release extent (to the east, north, respectively) to a depth of 10 feet bgs to achieve horizontal delineation.

Additionally, two borings were drilled on the west side of the release footprint, BH-20-1W and BH-20-2W. These borings provided the western horizontal edge of the delineation.

Due to numerous surface and subsurface lines in the vicinity of the release, the air rotary drilling rig could not access the immediate area south of the release extent. One additional boring (BH-20-1S) was completed on the other side of the subsurface pipelines in order to provide horizontal delineation to the south. Figure 4 depicts the release extent and the May 2020 soil boring locations.

A previous boring from a different COP release characterization (EVGSAU 3307-007 Flowline release (1RP-5079), B-8, served as the southern boundary for the T-shaped release on the south and southwest side. The analytical data from the B-8 boring is included in Table 3 and the analytical report is included within Appendix C.

A total of thirty-eight (38) samples were collected from the eight (8) borings drilled in May 2020 and submitted to Pace Analytical National Center for Testing & Innovation (Pace) in Nashville, Tennessee to be analyzed for chlorides via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix C. Sample locations are shown in Figure 4. Photographic documentation of the release extent from an additional site inspection is included in Appendix E.

SUMMARY OF SAMPLING RESULTS

Results from the May 2020 soil sampling event are summarized in Table 2. The analytical results associated with the BH-20-2 and the BH-20-5 (release interior) locations exceeded the Site RRAL for TPH of 100 mg/kg at the 0-1' interval. The analytical results associated with the BH-20-2 and the BH-20-5 exceeded the Site chloride RRAL (0-4 ft bgs) of 600 mg/kg in both the 0-1' and the 2-3' sample intervals. The analytical results associated with the BH-20-1 location exceeded the Site chloride RRAL (0-4 ft bgs) of 600 mg/kg in the 2-3' sample interval. There were no other analytical results which exceeded the Site chloride RRAL in the upper four feet during the additional assessment. Analytical results associated with samples collected from below four feet within the footprint were below the Site RRAL for chloride (10,000 mg/kg) at greater than 4' bgs. There were no detections of BTEX above the Site RRAL of 50 mg/kg in any of the analyzed samples.

REMEDIATION WORK PLAN

Based on the analytical results, ConocoPhillips proposes to remove the remaining impacted material as shown in Figure 5. Impacted soils will be excavated using heavy equipment (backhoes, hoe rams, and track hoes) to a maximum depth of 4 feet below the surrounding surface or until a representative sample from the walls and bottom of the excavation is below the RRALs. The southern area of the release extent that contains steel surface lines will be hand-dug to a depth of 3 feet or the maximum extent practicable and heavy equipment will come no closer than 3 ft from any pressurized lines.

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Confirmation bottom and sidewall samples will be collected for verification of remedial activities, and analyzed for TPH, BTEX, and chlorides. Once results are received, NMOCD will be notified and the excavation will then be backfilled with clean material to surface grade. The estimated volume of material to be remediated is approximately 1,500 cubic yards.

ALTERNATIVE CONFIRMATION SAMPLING PLAN

In accordance with 19.15.29.12(D)(1)(b) NMAC, ConocoPhillips proposes the following alternative confirmation sampling plan to adhere with NMOCD requirements. The proposed confirmation sample locations are depicted in Figure 6. Twenty-seven (27) confirmation floor samples and twenty-three (23) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses a surface area of approximately 10,335 square feet.

These confirmation sidewall and floor samples will be representative of no more than approximately 500 square feet of excavated area. Confirmation samples will be sent to Pace Laboratories for analysis of TPH (Method 8015 modified), BTEX (Method 8260B), and chloride (USEPA Method 300.0). Once results are received, NMOCD will be notified and the excavation will then be backfilled with clean material to surface grade.

SITE RECLAMATION AND RESTORATION PLAN

The backfilled areas will be seeded in Spring 2021 (first favorable growing season) to aid in revegetation. Based on the soils at the site, the New Mexico State Land Office (NMSLO) Sandy Loam (SL) Sites Seed Mixture will be used for seeding and will be planted in the amount specified in the pounds pure live seed (PLS) per acre. The seed mixture will be spread by a drill equipped with a depth regulator or a hand-held broadcaster and raked. If a hand-held broadcaster is used for dispersal, the pounds pure live seed per acre will be doubled.

Site inspections will be performed to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate. The NMSLO seed mixture details and corresponding pounds pure live seed per acre are included in Appendix F.

CONCLUSION

ConocoPhillips proposes to begin remediation activities at the Site within 120 days of NMOCD plan approval. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results of the confirmation sampling will be submitted to NMOCD. If you have any questions concerning the soil assessment or the proposed remediation activities for the Site, 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:
Mr. Marvin Soriwei, RMR – ConocoPhillips
Mr. Charles Beauvais, GPBU - ConocoPhillips

LIST OF ATTACHMENTS

Figures:

- Figure 1 – Site Location Map
- Figure 2 – Topographic Map
- Figure 3 – Approximate Release Extent and Initial Assessment
- Figure 4 – Approximate Release Extent and Additional Assessment
- Figure 5 – Proposed Remediation Area
- Figure 6 – Alternative Confirmation Sampling Plan

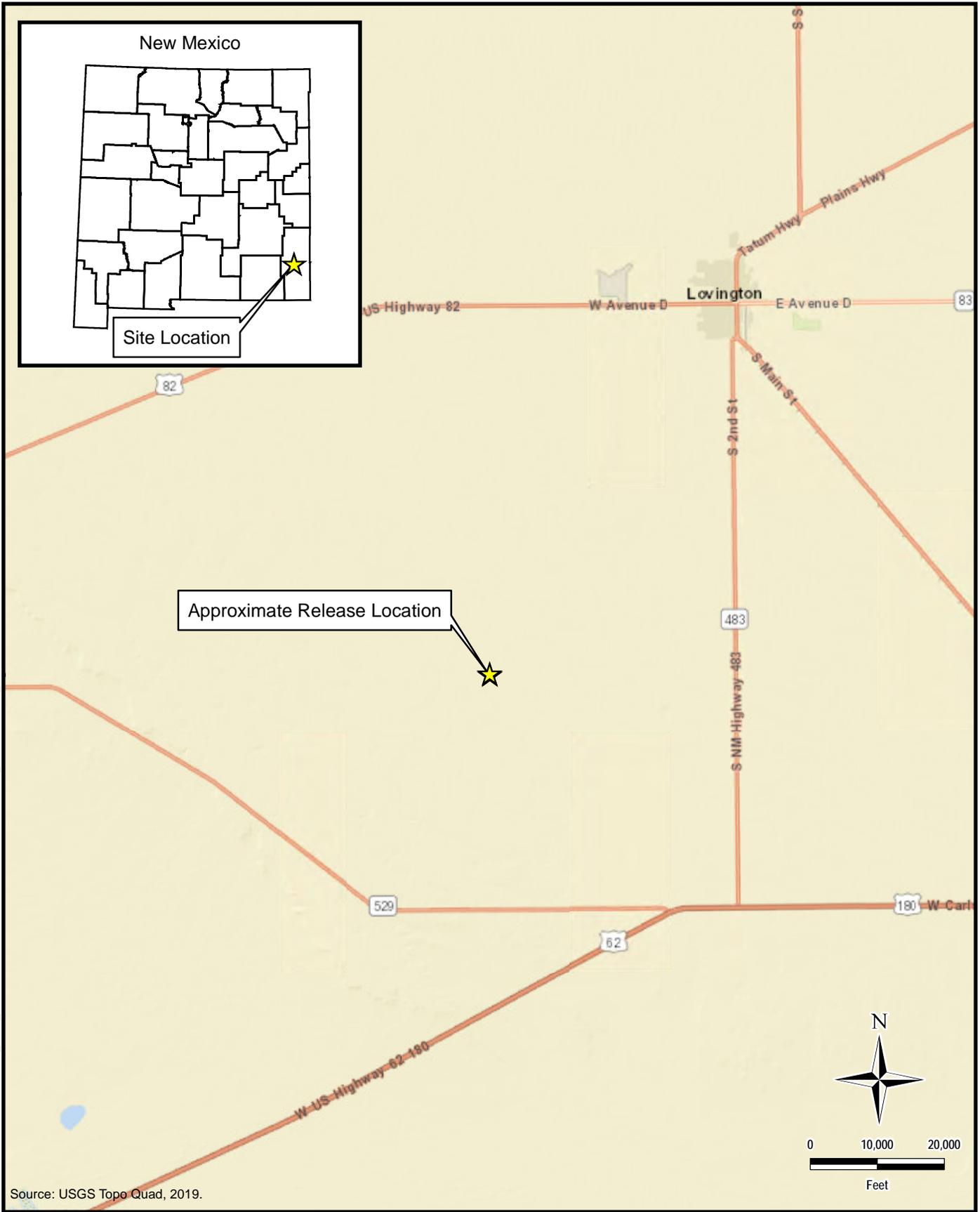
Tables:

- Table 1 – Summary of Analytical Results – Initial Soil Assessment
- Table 2 – Summary of Analytical Results – Additional Soil Assessment
- Table 3 – Summary of Analytical Results – Additional Soil Assessment

Appendices:

- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – 2004 Environmental Site Assessment
- Appendix D – Laboratory Analytical Data
- Appendix E – Photographic Documentation
- Appendix F – NMSLO Seed Mixture Details

FIGURES



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\EVGSAU_3366_029\REMEDIATION\FIGURE 1 SITE LOCATION_EVGSAU_3366_029_1RP-739.MXD

Source: USGS Topo Quad, 2019.



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CONOCOPHILLIPS

1RP-739
(32.793358°, -103.470211°)
LEA COUNTY, NEW MEXICO

EVGSAU 3366-029 FLOWLINE RELEASE
SITE LOCATION MAP

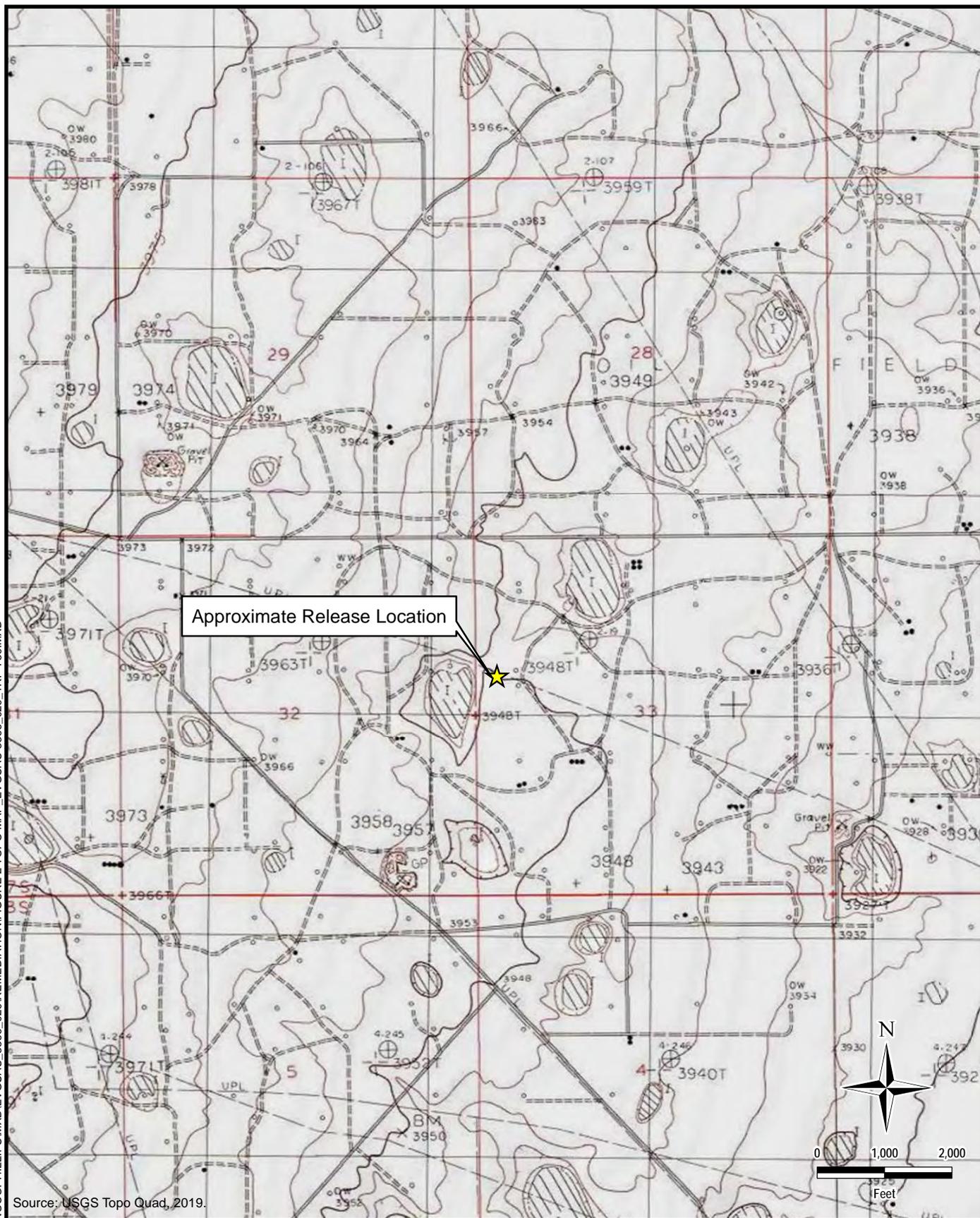
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DATE: AUGUST 18, 2020

DESIGNED BY: AAM

Figure No.

1



Approximate Release Location

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Source: USGS Topo Quad, 2019.



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CONOCOPHILLIPS

1RP-739
(32.793358°, -103.470211°)
LEA COUNTY, NEW MEXICO
EVGSAU 3366-029 FLOWLINE RELEASE
TOPOGRAPHIC MAP

PROJECT NO.: 212C-AU-01576

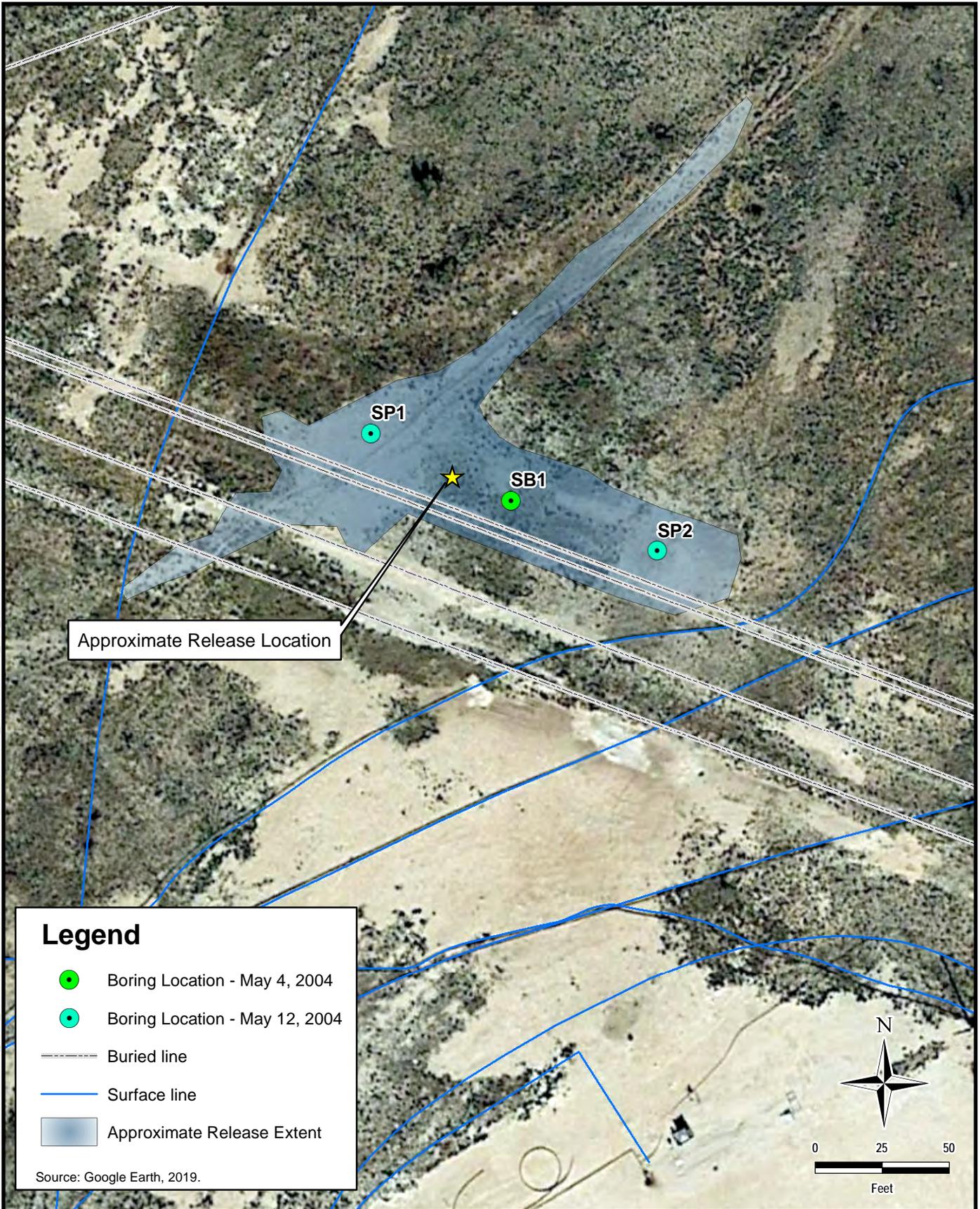
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Figure No.

2

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Legend

- Boring Location - May 4, 2004
- Boring Location - May 12, 2004
- Buried line
- Surface line
- Approximate Release Extent

Source: Google Earth, 2019.



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CONOCOPHILLIPS

1RP-739
 (32.793358°, -103.470211°)
 LEA COUNTY, NEW MEXICO

**EVGSAU 3366-029 FLOWLINE RELEASE
 APPROXIMATE RELEASE EXTENT AND INITIAL ASSESSMENT**

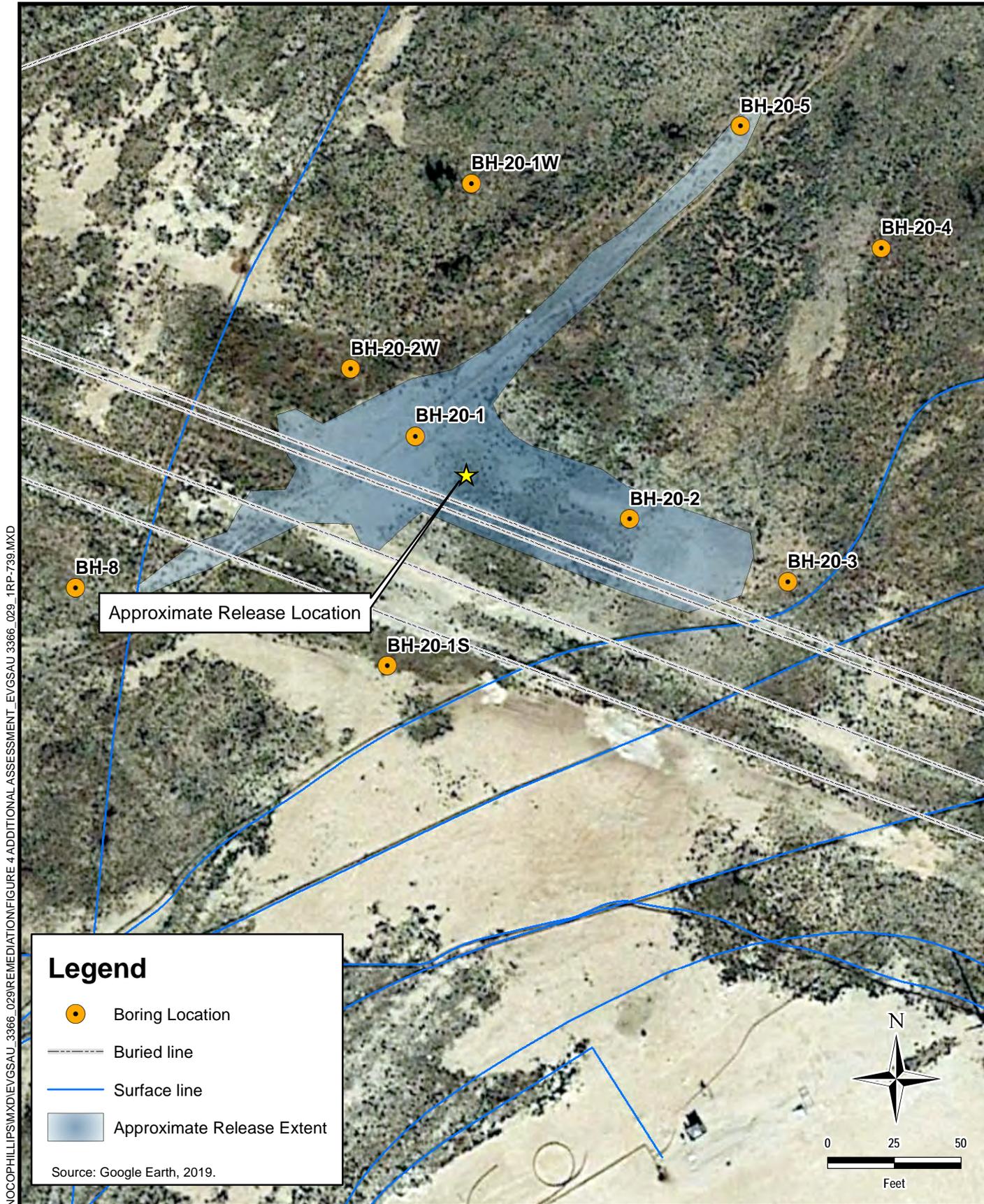
PROJECT NO.: 212C-AU-01576

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Figure No.

3



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Legend

-  Boring Location
-  Buried line
-  Surface line
-  Approximate Release Extent

Source: Google Earth, 2019.



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**EVGSAU 3366-029 FLOWLINE RELEASE
 APPROXIMATE RELEASE EXTENT AND ADDITIONAL ASSESSMENT**

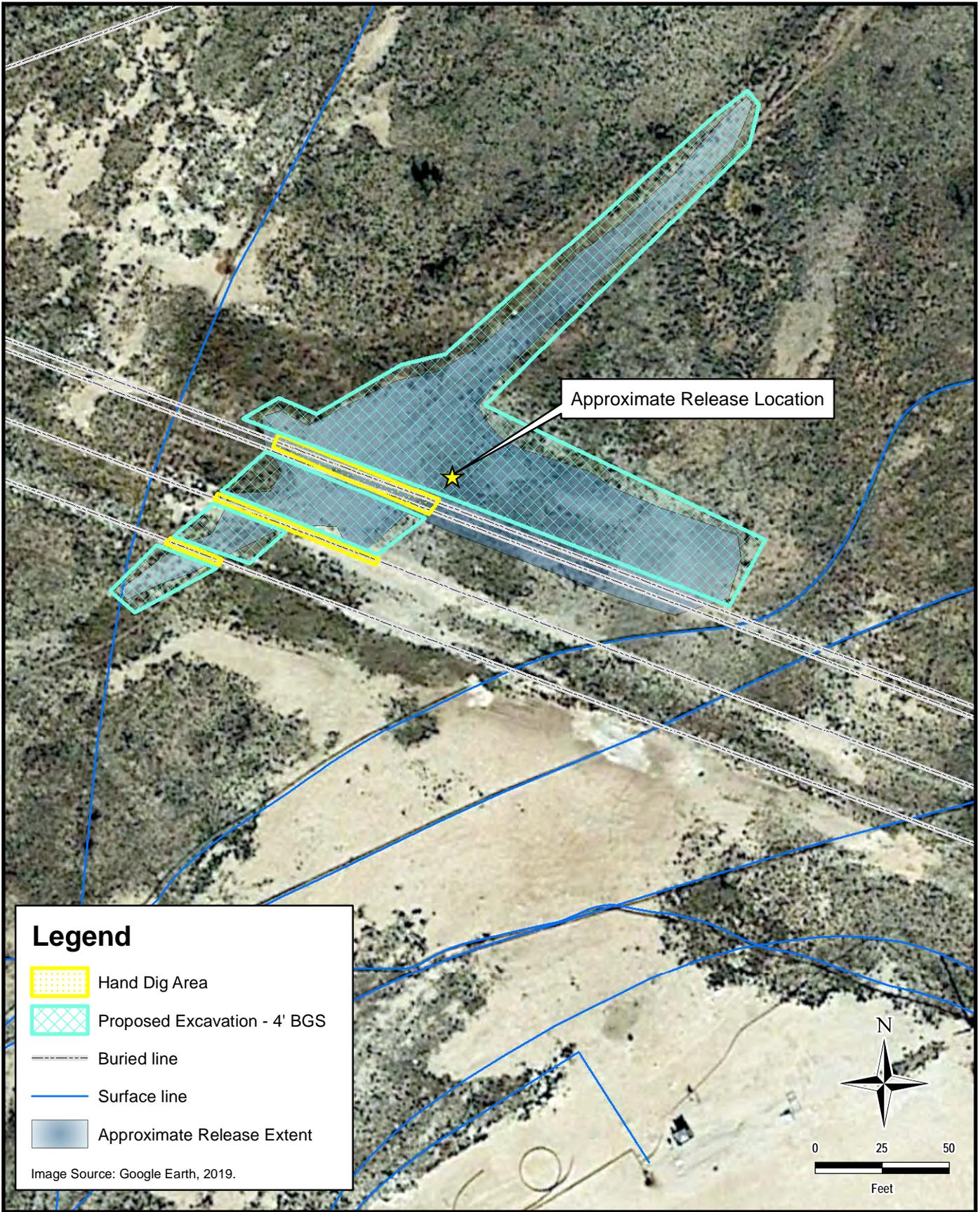
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Figure No.

4

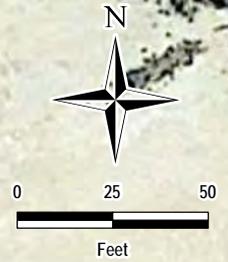


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Legend

- Hand Dig Area
- Proposed Excavation - 4' BGS
- Buried line
- Surface line
- Approximate Release Extent

Image Source: Google Earth, 2019.



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**EVGSAU 3366-029 FLOWLINE RELEASE
 PROPOSED REMEDIATION AREA**

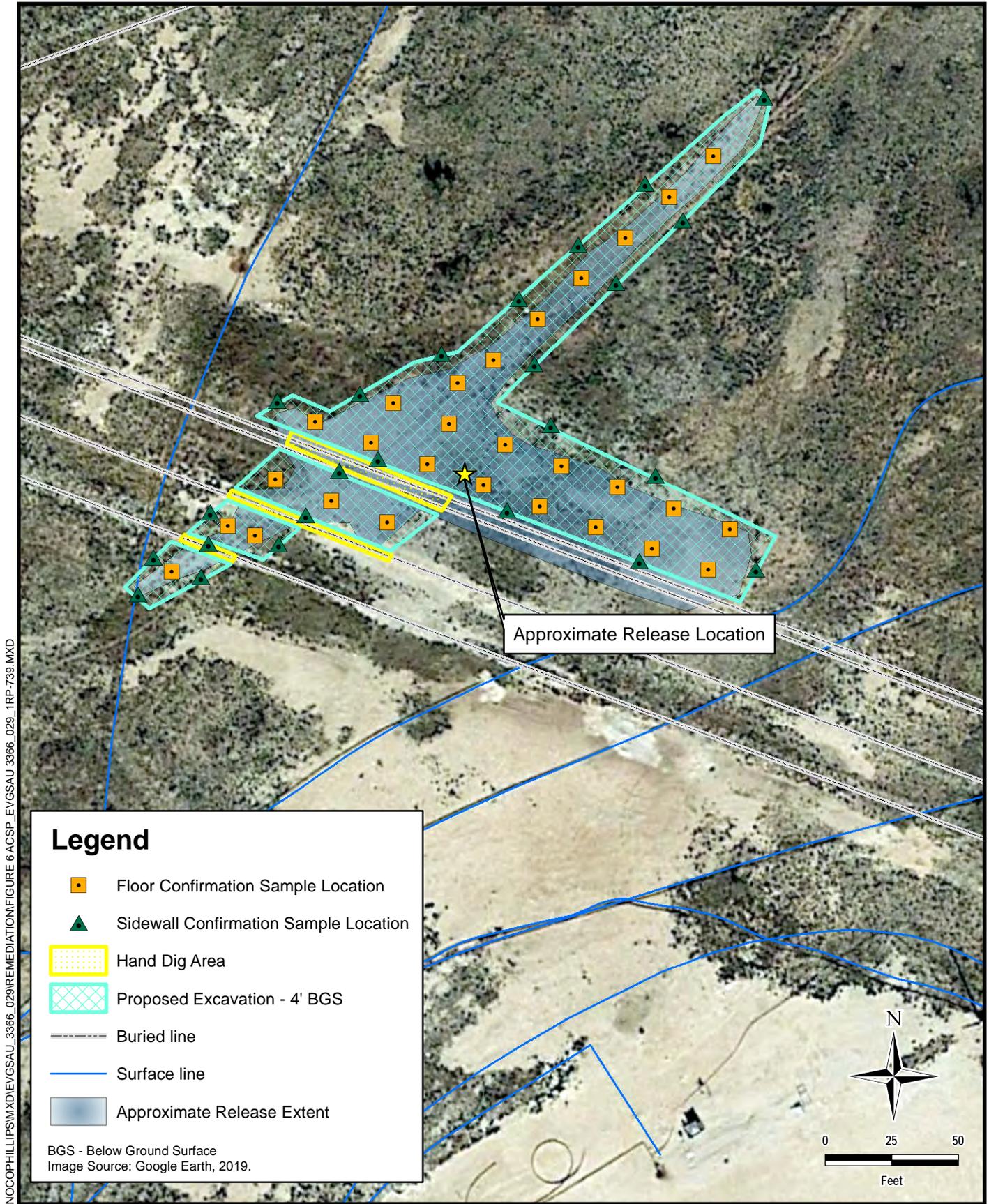
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Figure No.

5



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\EVGSAU_3366_029\REMEDATION\FIGURE 6 ACSP_EVGSAU 3366_029_1RP-739.MXD

Legend

- Floor Confirmation Sample Location
- Sidewall Confirmation Sample Location
- Hand Dig Area
- Proposed Excavation - 4' BGS
- Buried line
- Surface line
- Approximate Release Extent

BGS - Below Ground Surface
Image Source: Google Earth, 2019.



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LEA COUNTY, NEW MEXICO

**EVGSAU 3366-029 FLOWLINE RELEASE
ALTERNATIVE CONFIRMATION SAMPLING PLAN**

PROJECT NO.: 212C-AU-01576

DATE: OCTOBER 13, 2020

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Figure No.

6

TABLES

TABLE 1
 SUMMARY OF ANALYTICAL RESULTS
 2004 INITIAL SOIL ASSESSMENT - 1RP-0739
 CONOCOPHILLIPS
 EVGSAU 3366-029 FLOWLINE RELEASE
 LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride ¹		BTEX ²								TPH ³						
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		Total TPH (GRO+DRO)
					mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	C ₆ - C ₁₀	Q	> C ₁₀ - C ₂₈	Q	
SB1 @ 1'	5/5/2004	1	4240	Q	< 0.005	Q	< 0.005	Q	< 0.005	Q	< 0.005	Q	-	Q	< 10	Q	37.1	Q	37.1
SB1 @ 15'	5/5/2004	15	2160	Q	< 0.005	Q	< 0.005	Q	< 0.005	Q	< 0.005	Q	-	Q	< 10	Q	< 10	Q	-
SB1 @ 25'	5/5/2004	25	512	Q	< 0.005	Q	< 0.005	Q	< 0.005	Q	< 0.005	Q	-	Q	< 10	Q	< 10	Q	-
SB2 @ 1'	5/12/2004	1	4160	Q	< 0.005	Q	0.070	Q	0.117	Q	0.297	Q	0.484	Q	< 10	Q	431	Q	431
SB3 @ 1'	5/12/2004	1	1140	Q	< 0.005	Q	0.140	Q	0.235	Q	0.594	Q	0.969	Q	288	Q	11,400	Q	11,688

NOTES:

- ft. Feet
- bgs Below ground surface
- mg/kg Milligrams per kilogram
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline range organics
- DRO Diesel range organics
- 1 SM4500Cl-B

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
2020 ADDITIONAL SOIL ASSESSMENT - 1RP-739
CONOCOPHILLIPS
EVGSAU 3366-029 FLOWLINE RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth Interval	Chloride ¹		BTEX ²								TPH ³								
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO ⁴ C ₁ - C ₁₀		DRO C ₁₀ - C ₂₈		ORO C ₂₉ - C ₄₀		Total TPH (GRO+DRO+ORO)
					mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	
BH-20-1	5/20/2020	0-1	232		< 0.00107		< 0.00534		< 0.00267		< 0.00694		-		< 0.107		25.4		69.9		95.3
		2-3	1170		< 0.00111		< 0.00553		< 0.00277		< 0.00719		-		< 0.111		5.17		12.6		17.8
		4-5	574		< 0.00103		< 0.00516		< 0.00258		< 0.00671		-		< 0.103		< 4.13		2.60	J	2.60
		6-7	1870		< 0.00109		< 0.00546		< 0.00273		< 0.00710		-		< 0.109		< 4.37		0.632	J	0.632
		9-10	375		< 0.00105		< 0.00527		< 0.00264		0.00111	J	0.00111		< 0.105		< 4.22		0.958	J	0.958
		14-15	124		< 0.00103		< 0.00516		< 0.00258		< 0.00671		-		< 0.103		< 4.13		< 4.13		-
BH-20-15	5/21/2020	0-1	103		< 0.00103		< 0.00517		< 0.00258		< 0.00671		-		< 0.103		7.71		18.8	B	26.5
		2-3	306		< 0.00106		< 0.00529		< 0.00265		< 0.00688		-		< 0.106		23.1		41.5		64.6
		4-5	3720		< 0.00108		< 0.00539		< 0.00270		< 0.00701		-		< 0.108		< 4.32		0.782	B J	0.782
BH-20-1W*	5/21/2020	0-1	< 21.0		< 0.00105		< 0.00524		< 0.00262		< 0.00681		-		0.0813	B J	10.6		20.4	B	31.1
		2-3	18.2		< 0.00102		< 0.00510		< 0.00255		< 0.00663		-		0.0567	B J	< 4.08		1.65	B J	1.71
		4-5	47.6		< 0.00103		< 0.00514		< 0.00257		< 0.00668		-		0.0497	B J	< 4.11		1.32	B J	1.37
		6-7	175		< 0.00105		< 0.00523		< 0.00261		< 0.00680		-		0.0463	B J	< 4.18		< 4.18		0.0463
		9-10	191		< 0.00104		< 0.00521		< 0.00261		< 0.00678		-		< 0.104		< 4.17		< 4.17		-
BH-20-2	5/20/2020	0-1	1290		< 0.00107		< 0.00537		< 0.00269		< 0.00698		-		< 0.107		351		750		1101
		2-3	1320		< 0.00111		< 0.00554		< 0.00277		< 0.00720		-		0.0623	B J	30.5		63.0		93.6
		4-5	1160		< 0.00103		< 0.00515		< 0.00258		< 0.00670		-		0.0572	B J	9.63		16.9		26.6
		6-7	875		< 0.00102		< 0.00512		< 0.00256		< 0.00665		-		0.0487	B J	2.07	J	3.00	J	5.12
		9-10	781		< 0.00101		< 0.00504		< 0.00252		< 0.00655		-		0.0540	B J	< 4.03		0.975	J	1.03
		14-15	1630		< 0.00104		< 0.00522		< 0.00261		< 0.00678		-		0.0646	B J	< 4.17		0.623	J	0.688
		19-20	2600		< 0.00118		< 0.00591		< 0.00296		< 0.00769		-		< 0.118		< 4.73		< 4.73		-
		24-25	1670		< 0.00103		< 0.00516		< 0.00258		< 0.00670		-		0.0537	B J	< 4.13		0.781	J	0.835
		29-30	2420		< 0.00106		< 0.00532		< 0.00266		< 0.00691		-		0.0697	B J	1.85	J	2.35	J	4.27
39-40	400		< 0.00104		< 0.00522		< 0.00261		< 0.00679		-		0.0552	B J	2.85	J	5.37		8.28		
BH-20-2W*	5/21/2020	0-1	128		< 0.00103		< 0.00517		< 0.00258		< 0.00672		-		< 0.103		2.58	J	5.61	B	8.19
		2-3	315		< 0.00102		< 0.00511		< 0.00256		< 0.00664		-		< 0.102		< 4.09		3.02	B J	3.02
		4-5	278		< 0.00105		< 0.00523		< 0.00261		< 0.00679		-		< 0.105		< 4.18		0.839	B J	0.839
BH-20-3	5/21/2020	0-1	93.0		< 0.00106		< 0.00530		< 0.00265		< 0.00689		-		< 0.106		9.77		19.3		29.1
		2-3	20.7		< 0.00103		< 0.00516		< 0.00258		< 0.00671		-		< 0.103		4.86		10.4		15.3
		4-5	65.5		< 0.00104		< 0.00520		< 0.00260		< 0.00676		-		< 0.104		2.47	J	2.47	J	4.94
BH-20-4	5/21/2020	0-1	27.8		< 0.00101		< 0.00507		< 0.00254		< 0.00659		-		0.0913	J	12.6		25.1		37.8
		2-3	19.8	J	< 0.00103		< 0.00514		< 0.00257		< 0.00668		-		< 0.103		7.70		21.1		28.8
		4-5	273		< 0.00103		< 0.00514		< 0.00257		< 0.00668		-		< 0.103		2.07	J	2.52	J	4.59
BH-20-5	5/21/2020	0-1	20.2	J	< 0.00104		< 0.00519		< 0.00260		< 0.00675		-		0.0262	J	605		977		1582
		3-4	< 20.7		< 0.00103		< 0.00516		< 0.00258		< 0.00671		-		< 0.103		22.6		38.6		61.2
		4-5	< 20.8		< 0.00104		< 0.00519		< 0.00260		< 0.00675		-		< 0.104		< 4.15	Q	1.13	J Q	1.13

NOTES:

ft. Feet
bgs Below ground surface
ppm Parts per million
mg/kg Milligrams per kilogram
TPH Total Petroleum Hydrocarbons
GRO Gasoline range organics
DRO Diesel range organics
ORO Oil range organics

Bold and italicized values indicate exceedance of proposed RRALS

- * Analytical results from EVGSAU 3308-007 Flowline Release Soil Assessment & Delineation (NRM2008348428)
- 1 EPA Method 300.0
- 2 EPA Method 8260B
- 3 EPA Method 8015
- 4 EPA Method 8015D/GRO

QUALIFIERS:

- B The same analyte is found in the associated blank.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- Q Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.

TABLE 3
 SUMMARY OF ANALYTICAL RESULTS
 ADDITIONAL SOIL ASSESSMENT - 1RP-739
 CONOCOPHILLIPS
 EVGSAU 3366-029 FLOWLINE RELEASE
 LEA COUNTY, NM

Sample ID	Sample Date	Sample Interval ft. bgs	Field Screening Results		Chloride ¹ mg/kg Q		BTEX ²								TPH ³									
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Xylene		Total BTEX	GRO ⁴ C ₃ - C ₁₀		DRO C ₁₀ - C ₂₈		ORO C ₂₈ - C ₄₀		TPH (GRO+DRO)	TPH (GRO+DRO+ORO)	
							ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
BH-8	10/10/19	0-1	134	2.4	53.7		< 0.00111		0.00529	B	J	< 0.00278		< 0.00720		0.00529	< 0.110		4.84		19.6		4.84	24.4
		2-3	-	2.1	50.1		< 0.00105		0.00417	B	J	< 0.00263		< 0.00684		0.00417	< 0.105		3.03	J	9.03		3.03	12.06
		4-5	63.8	4.9	59.9	J3	< 0.00105		0.00402	B	J	< 0.00261		< 0.00680		0.00402	< 0.105		< 4.18		< 4.18		-	-
		6-7	-	4.1	505		< 0.00105		0.00474	B	J	< 0.00263		< 0.00683		0.00474	< 0.105		< 4.16		< 4.16		-	-
		9-10	-	5.5	641		< 0.00107		0.00444	B	J	< 0.00269		< 0.00699		0.00444	< 0.107		< 4.30		< 4.30		-	-
		14-15	66.5	6.2	72.0		< 0.00102		0.00446	B	J	< 0.00255		< 0.00664		0.00446	< 0.102		< 4.09		< 4.09		-	-

NOTES:

ft. Feet
 bgs Below ground surface
 ppm Parts per million
 mg/kg Milligrams per kilogram
 TPH Total Petroleum Hydrocarbons
 GRO Gasoline range organics
 DRO Diesel range organics
 ORO Oil range organics

Bold and italicized values indicate exceedance of proposed RRALS

- 1 Method 300.0
- 2 Method 8260B
- 3 Method 8015
- 4 Method 8015D/GRO

QUALIFIERS:

- B The same analyte is found in the associated blank.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- J3 The associated batch QC was outside the established quality control range for precision.
- V The sample concentration is too high to evaluate accurate spike recoveries.

APPENDIX A C-141 Forms

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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 Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR Initial Report Final Report

Name of Company ConocoPhillips	Contact Stephen Wilson
Address HC60 Box 66, Lovington, NM	Telephone No. 505-396-7962
Facility Name EVGSAU Well# 3366-029	Facility Type Oil and Gas

Surface Owner State of NM	Mineral Owner	Lease No 30-025-02987-00-00
----------------------------------	---------------	------------------------------------

LOCATION OF RELEASE

Unit Letter E	Section 33	Township 17S	Range 35E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
-------------------------	----------------------	------------------------	---------------------	---------------	------------------	---------------	----------------	----------------------

Latitude N 32° 47.600' Longitude W 103° 28.219'

NATURE OF RELEASE

Type of Release Oil and Produced water	Volume of Release 88bbl (26oil, 62water)	Volume Recovered (24oil, 61water)
Source of Release 3" steel flowline External corrosion	Date and Hour of Occurrence 03-29-04 9:00am	Date and Hour of Discovery 03-29-04 10:00am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Sylvia Dickey	
By Whom? Rey Sosa	Date and Hour 03-30-04 9:00am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.*
3" steel flowline external corrosion . Vacuum truck out to pickn up free liquids and spread sand to secure area. No cattle present. Replace section(s) of 3"pipe around leak area, and externally coat replacement pipe to protect from corrosion

Describe Area Affected and Cleanup Action Taken.*
92' x 95' of pasture. The well was shut-in and a vacuum truck dispatched to pick up free liquid. Other flowlines in the area will be assessed. The weather was clear and dry at the time of the leak with no cattle present.

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.

OIL CONSERVATION DIVISION	
Signature:	Approved by District Supervisor:
Printed Name: Stephen R. Wilson	Approval Date:
Title: Sr. SHEAR Specialist	Expiration Date:
E-mail Address: Stephen.R.Wilson@ConocoPhillips.com	Conditions of Approval:
Date: 04-0-04 Phone: 505-396-7962	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

Incident ID	
District RP	
Facility ID	
Application ID	

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?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> 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.

Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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: _____ Title: _____

Signature:  _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: _____ Title: _____
 Signature:  _____ Date: _____
 email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

- Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature: _____ Date: _____

APPENDIX B

Site Characterization Data



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	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 04829 S5	L	LE		3	1	33	17S	35E		643347	3629400*	120	220	90	130
L 04880	L	LE		2	3	33	17S	35E		643757	3629002*	673	145	90	55
L 04578	L	LE				33	17S	35E		643962	3629198*	766	126	60	66

Average Depth to Water: **80 feet**

Minimum Depth: **60 feet**

Maximum Depth: **90 feet**

Record Count: 3

UTMNAD83 Radius Search (in meters):

Easting (X): 643227.957

Northing (Y): 3629419

Radius: 800

*UTM location was derived from PLSS - see Help

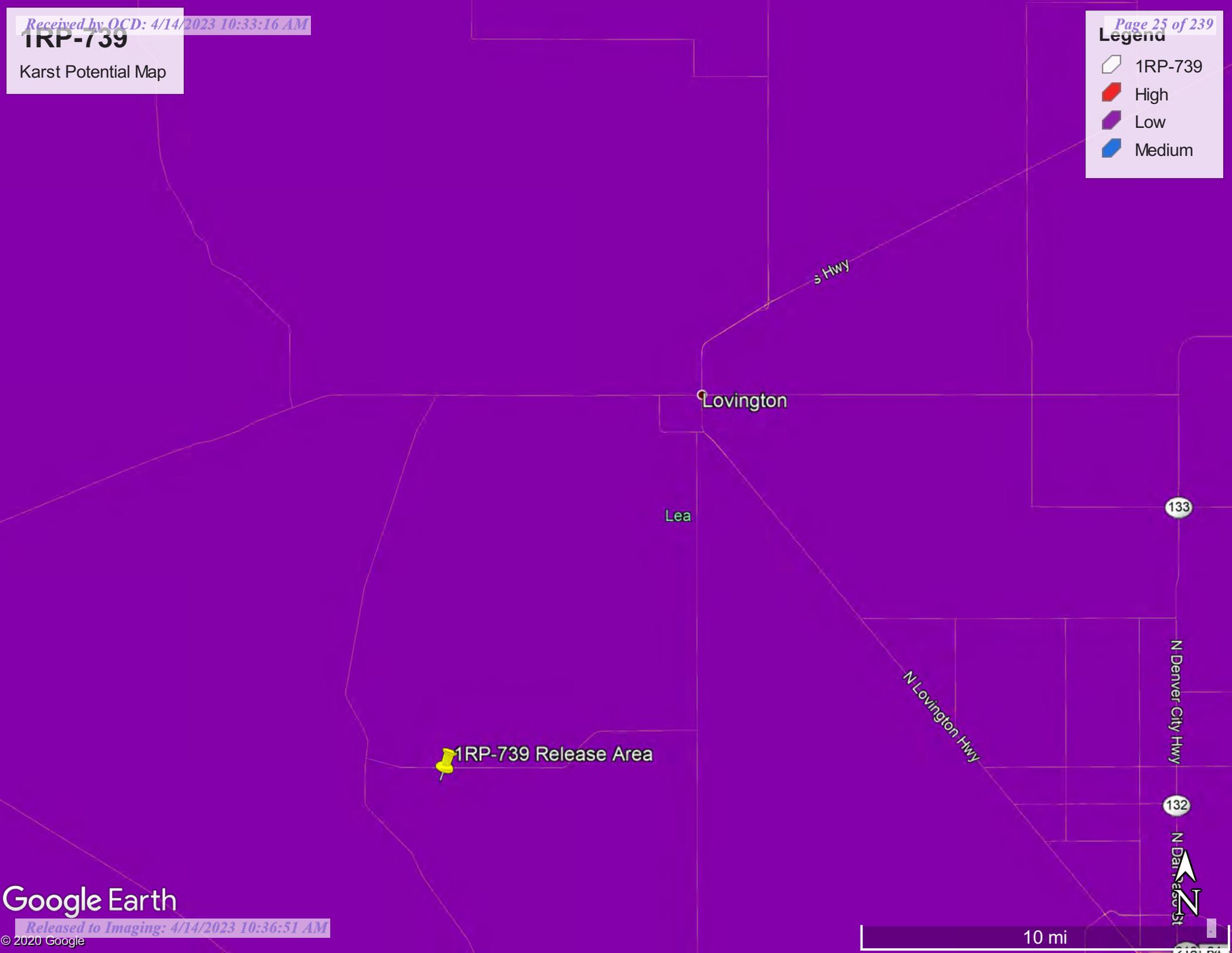
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1RP-739

Karst Potential Map

Legend

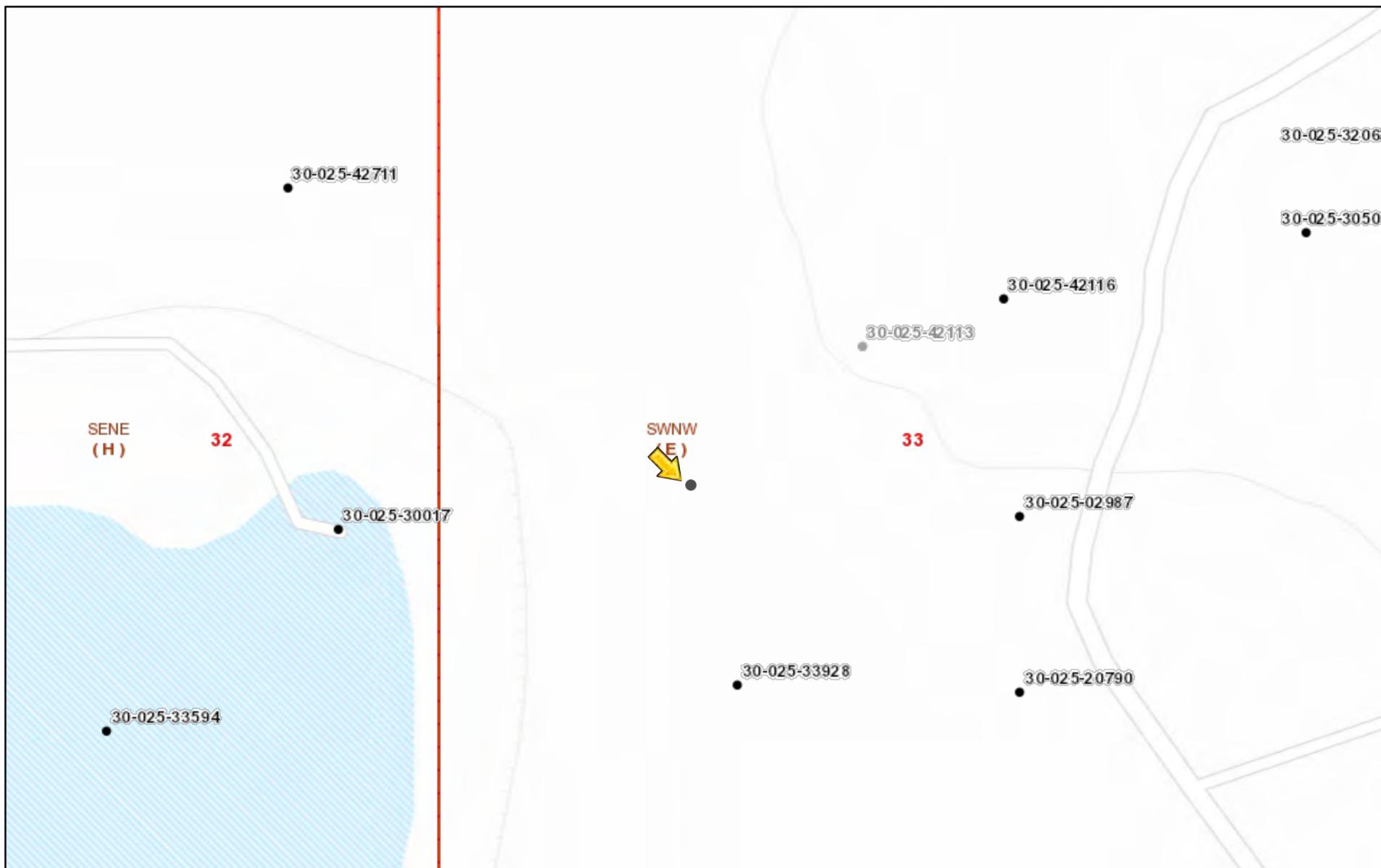
-  1RP-739
-  High
-  Low
-  Medium



10 mi

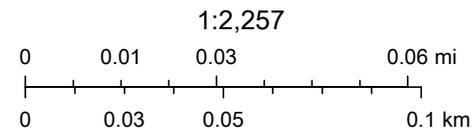


1RP-739



8/3/2020, 2:22:13 PM

-  Override 1
-  Miscellaneous
-  CO2, New
-  Gas, Active
-  Gas, Plugged
- Wells - Large Scale
-  CO2, Active
-  CO2, Plugged
-  Gas, Cancelled
-  Gas, Temporarily Abandoned
-  undefined
-  CO2, Cancelled
-  CO2, Temporarily Abandoned
-  Gas, New
-  Injection, Active



Oil Conservation Division of the New Mexico Energy, Minerals and Natural

New Mexico Oil Conservation Division

APPENDIX C

2004 Environmental Site Assessment



CONOCOPHILLIPS

EVGSAU WELL # 3366-029 (3-29-04)

ENVIRONMENTAL SITE INVESTIGATION

PERFORMED BY:

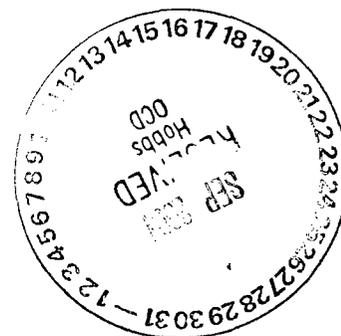
BBC INTERNATIONAL, INC.
 WORLD-WIDE ENVIRONMENTAL SPECIALISTS
 1324 W. MARLAND BLVD.
 P. O. BOX 805
 HOBBS, NEW MEXICO 88240
 (505)397-6388 • FAX (505)397-0397
 EMAIL: bbc@bbcinternational.com
 WEBSITE: www.bbcinternational.com

JUNE 1, 2004

PREPARED FOR:

MR. STEPHEN R. WILSON
CONOCOPHILLIPS
29 VACUUM COMPLEX RD.
LOVINGTON, NEW MEXICO 88260-9613

Incident - n PAC 0605541294
Application - p PAC 0605541521



ConocoPhillips

EVGSAU Well #3366-029

3-29-04

1.0 INTRODUCTION

The subject site is located east of Buckeye, New Mexico in Unit Letter E, of Section 33, Township 17 South, and Range 35 East. The site consists of undeveloped rangeland and petroleum production facilities. On March 29, 2004, the 3" steel flowline from well #3366-029 leaked approximately 26 bbls of oil and 62 bbls of water with approximately 24 bbls of oil and 61 bbls of water being recovered.

2.0 SITE CHARACTERIZATION

The leak area is approximately the shape of a T, the top area of which runs north to south and measures approximately 290 feet by 56 feet. The lower area runs east to west and measures approximately 118 feet by 30 feet. A sketch of the leak area including the sample points can be reviewed in Appendix II of this report. The surface soil is brown topsoil. There is no water source within 1,000 feet of the site. There is no surface water within 1,000 feet of the site. Based on data from the New Mexico Office of the State Engineer, there are seven water wells located in Section 33, Township 17 South, and Range 35 East. The depth to groundwater in these wells ranges from 50 to 90 feet. The bedrock in the Buckeye area is very shallow and at this site it is approximately one foot below the surface of the topsoil.

3.0 SITE INVESTIGATION ACTIVITIES

On May 4, 2004, BBC personnel conducted an inspection of the site. Three samples were taken at the site from a soil boring in the center of the leak area. The soil boring was drilled with an air rotary drill to a total depth of 25 feet. The three samples were taken from the soil boring at a depth of one foot, 15 feet, and 25 feet. The samples were taken to Cardinal Laboratories and analyzed for BTEX, TPH (GRO and DRO), and Chlorides. Laboratory analysis for SB1 @ 1' is: GRO – non detect, DRO – 37.1 ppm, and Chlorides – 4240 ppm. Laboratory analysis for SB1 @ 15' is: GRO - non detect, DRO – non detect, and Chlorides – 2160 ppm. Laboratory analysis for SB1 @ 25' is: GRO – non detect, DRO – non detect, and Chlorides – 512 ppm. BTEX analysis is non detect for all samples. Laboratory analytical results for this sampling event, as well as, the drilling log for the soil boring can be reviewed in Appendix I of this report. The soil boring location can be reviewed on the site diagram in Appendix II of this report.

A second sampling event was conducted by BBC personnel on May 12, 2004. Two samples were taken, both at a depth of approximately 1 foot. Sample Point 1 was taken from the west end of the leak site and Sample Point 2 was taken from the east end of the leak site. The samples were taken to Cardinal Laboratories and analyzed for BTEX, TPH (GRO and DRO), and Chlorides. Laboratory analysis for SP1-1' is: GRO – non detect, DRO – 431 ppm, Chlorides – 4160 ppm, Benzene – non detect, Toluene – 0.070 ppm, Ethyl Benzene – 0.117 ppm, and Total Xylenes – 0.297 ppm. Laboratory analysis for SP2-1' is: GRO – 288 ppm, DRO – 11,400 ppm, Chlorides – 1140 ppm, Benzene – non detect, Toluene – 0.140 ppm, Ethyl Benzene – 0.235 ppm, and Total Xylenes - 0.594 ppm. Laboratory analytical results for this sampling event can be reviewed in Appendix I of this report and their locations can be seen in the site diagram located in Appendix II of this report.

4.0 CONCLUSION AND RECOMMENDATION

The laboratory data for this site indicates that the area of greatest contamination is in the near surface portion of the leak area. Taking into consideration that the depth to groundwater is greater than 50 feet and the existence of the rock layer at a depth of approximately one foot below ground surface, the evidence indicates that the migration of contamination to groundwater is unlikely. Therefore it is recommended that approximately 1 foot of topsoil, down to the rock layer, be removed and disposed of. This soil would be transported to an OCD approved landfarm or disposal site. The excavated area would then be backfilled with clean topsoil and reseeded with the appropriate BLM seed mix and the site would be closed.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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 Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR Initial Report Final Report

Name of Company ConocoPhillips	Contact Stephen Wilson
Address HC60 Box 66, Lovington, NM	Telephone No. 505-396-7962
Facility Name EVGSAU Well# 3366-029	Facility Type Oil and Gas

Surface Owner State of NM	Mineral Owner	Lease No 30-025-02987-00-00
----------------------------------	---------------	------------------------------------

LOCATION OF RELEASE

Unit Letter E	Section 33	Township 17S	Range 35E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
-------------------------	----------------------	------------------------	---------------------	---------------	------------------	---------------	----------------	----------------------

Latitude N 32° 47.600' Longitude W 103° 28.219'

NATURE OF RELEASE

Type of Release Oil and Produced water	Volume of Release 88bbl (26oil, 62water)	Volume Recovered (24oil, 61water)
Source of Release 3" steel flowline External corrosion	Date and Hour of Occurrence 03-29-04 9:00am	Date and Hour of Discovery 03-29-04 10:00am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Sylvia Dickey	
By Whom? Rey Sosa	Date and Hour 03-30-04 9:00am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.*
3" steel flowline external corrosion . Vacuum truck out to pickn up free liquids and spread sand to secure area. No cattle present. Replace section(s) of 3"pipe around leak area, and externally coat replacement pipe to protect from corrosion

Describe Area Affected and Cleanup Action Taken.*
92' x 95' of pasture. The well was shut-in and a vacuum truck dispatched to pick up free liquid. Other flowlines in the area will be assessed. The weather was clear and dry at the time of the leak with no cattle present.

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.

OIL CONSERVATION DIVISION	
Signature:	Approved by District Supervisor:
Printed Name: Stephen R. Wilson	Approval Date:
Title: Sr. SHEAR Specialist	Expiration Date:
E-mail Address: Stephen.R.Wilson@ConocoPhillips.com	Conditions of Approval:
Date: 04-0-04 Phone: 505-396-7962	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary



Permian Basin Asset

Record of Accidental Discharge of Crude Oil, Water or Hazardous Substances

Lease: EVGSAU Well # 3366-029		Lease # 30-025-02987-00-00 (API, RRC, State, or Federal)		Field:	
Discovered By: Eddy Evans			Date and Time Discovered: 03-29-04 @ 10:00pm		
Date and Time Discharge Began: 03-29-04 @ 9:00pm			Date and Time Discharge Ended: 03-29-04 @ 10:30pm		
Discharge Site: Unit Letter E Sec. 33 Blk/TWP 17S Survey/Range 35E County/State: Lea, New Mexico					
Latitude N 32 47.600 Longitude W 103 28.219					
Highway Map Location: West 30 miles of Hobbs to Buckeye office. West on CR50 to plant entrance go West around plant .5 mile.					
Location Of Discharge: 3" steel flowline				<input checked="" type="checkbox"/> Flowline ——— 180 Feet to Nearest Wellhead Number 3366-029 <input type="checkbox"/> Injection Line Feet to Nearest Wellhead Number	
Specific Source of Discharge: Flowline					
Describe Cause of Discharge : External corrosion					
Actions taken to Prevent Reoccurrence: Replace section(s) of 3" pipe around leak area and externally coat replacement pipe to protect from corrosion					
Describe Nature and Extent of Area Affected: 92' x 95' Pasture					
Weather Conditions: Clear and Dry					
Clean-Up Action Taken: Vacuum truck out to clean up free liquids and spread sand to secure area. No cattle present					
Remediation Action Taken: A determination will be made as to the need for any further action. If further action is deemed necessary a follow up report will be filed. No cattle in the area.					
Specific Source of Discharge			Possible Reasons For Failure		
<input checked="" type="checkbox"/> Flowline <input type="checkbox"/> Tank Piping <input type="checkbox"/> Vessel Piping <input type="checkbox"/> Line Check Valve <input type="checkbox"/> Wellhead Connections <input type="checkbox"/> Tank			<input checked="" type="checkbox"/> Corrosion <input checked="" type="checkbox"/> External <input type="checkbox"/> Internal <input type="checkbox"/> Fatigue <input type="checkbox"/> Age		
<input type="checkbox"/> Pump <input type="checkbox"/> Vessel <input type="checkbox"/> Chemical Storage Container <input type="checkbox"/> Chemical Injection Equipment <input type="checkbox"/> Casing/Tubing Communication <input type="checkbox"/> Other:			<input type="checkbox"/> Human Error <input type="checkbox"/> Pressure <input type="checkbox"/> Instrumentation <input type="checkbox"/> Mechanical <input type="checkbox"/> Weather		
Cost of Cleanup/Repair: \$1000					
Pipe Size = 3 inches					
<input checked="" type="checkbox"/> Steel <input type="checkbox"/> Fiberglass <input type="checkbox"/> Plastic <input type="checkbox"/> Transite					
<input type="checkbox"/> Buried <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Bare					
<input type="checkbox"/> Coated <input type="checkbox"/> Internal <input type="checkbox"/> External <input type="checkbox"/> Cement Lined					
<input type="checkbox"/> Plastic Lined <input type="checkbox"/> Fiberglass <input type="checkbox"/> Was Line Chemically Treated <input type="checkbox"/> Other					
Names and Volumes of Substances Spilled			Remedial Action Picked Up		
26 BBL Oil 62 BBL Produced Water			24 BBL Oil 61 BBL Produced Water		Contained in Dike? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Gallons Chemical Spilled			Gallons Chemical		MFG/Chemical Name:
Gas Volume Released (MCF)			<input type="checkbox"/> Gas Leak	<input type="checkbox"/> Blowdown	<input type="checkbox"/> Upset
Other – Explain:					
Federal, State, and Local Agencies Notified				Job Number	
Agency	Person Notified	Date and Time Notified	Method Used		Person Notifying
NMOCD	Sylvia Dickey	03-30-04 @ 9:00am	<input checked="" type="checkbox"/> Phone	<input type="checkbox"/> Fax	Rey Sosa
		@	<input type="checkbox"/> Phone	<input type="checkbox"/> Fax	
		@	<input type="checkbox"/> Phone	<input type="checkbox"/> Fax	
Landowner/Tenant:				Telephone No.	
I Hereby Certify That The Above Information Is True To The Best Of My Knowledge.				PBBU Discharge Report Form 10-24-03	
Signature: Steve Wilson					

DB File Nbr	Use	Diversion	Owner			Well
Number	Source	Tws	Rng	Sec	q q q	Zone X
UTM_Zone	Easting	Northing	Date	Date	Well	Water
L	04578	PRO	3	SHOENFELD-HUNTER-KITCH	DRLG.CO	L
04578	Shallow	17S	35E	33		
13	644016	3628991	01/12/1961	01/12/1961	126	60
						<u>L</u>
04578 APPRO	Shallow	17S	35E	33		
13	644016	3628991	01/12/1961	01/14/1961	126	60
L 04586	PRO	3	HONDO DRILLING			<u>L</u>
04586	Shallow	17S	35E	33	4 3 3	
13	644115	3628294	01/16/1961	01/18/1961	125	50
						<u>L</u>
04586 APPRO	Shallow	17S	35E	33	4 3 3	
13	644115	3628294	01/16/1961	01/18/1961	125	50
L 04633	PRO	0	HONDO DRILLING COMPANY			<u>L</u>
04633 APPRO	Shallow	17S	35E	33	4 2	
13	644612	3628803	04/20/1961	04/20/1961	130	65
L 04880	PRO	0	HONDO DRILLING CO.			<u>L</u>
04880	Shallow	17S	35E	33	3 2	
13	643809	3628797	04/18/1960	04/18/1962	145	90
L 05834	IND	1150	SOUTHWESTERN PUBLIC SERVICE			<u>L</u>
05834		17S	35E	33	4	
13	644417	3628596				
L 07785	IND	0	SOUTHWESTERN PUBLIC SERVICE CO			<u>L</u>
07785		17S	35E	33	4 3	
13	644216	3628395			225	
L 08045	SAN	0	PHILLIPS PETROLEUM COMPANY			<u>L</u>
08045 EXP		17S	35E	33	2 1 4	
13	644297	3629507				

APPENDIX I

Laboratory Analytical Results *May 2004*

EVGSAU WELL #3366-029 (3-29-04)
Buckeye, New Mexico

Prepared for:
ConocoPhillips
Lovington, New Mexico

2004

Prepared by:
BBC International, Inc.



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2328 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
BBC INTERNATIONAL, INC.
ATTN: CLIFF BRUNSON
P.O. BOX 805
HOBBS, NM 88241
FAX TO: (505) 397-0397

Receiving Date: 05/05/04
Reporting Date: 05/06/04
Project Owner: CONOCO PHILLIPS
Project Name: EVGSAU 3366-029
Project Location: BUCKEYE, NM

Sampling Date: 05/04/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC/AH

LAB NUMBER SAMPLE ID	GRO	DRO	CI*
	(C ₈ -C ₁₀) (mg/Kg)	(>C ₁₀ -C ₂₈) (mg/Kg)	(mg/Kg)

ANALYSIS DATE	05/05/04	05/05/04	05/06/04
H8663-1 SB1 @ 1'	<10	37.1	4240
H8663-2 SB1 @ 15'	<10	<10	2160
H8663-3 SB1 @ 25'	<10	<10	512
Quality Control	737	746	1010
True Value QC	800	800	1000
% Recovery	92.2	93.3	101
Relative Percent Difference	6.0	7.8	3.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CFB

*Analyses performed on 1:4 w:v aqueous extracts.

Bryan R. Cook
Chemist

5/6/04
Date

H8663A.XLS

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



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ANALYTICAL RESULTS FOR
BBC INTERNATIONAL, INC.
ATTN: CLIFF BRUNSON
P.O. BOX 805
HOBBS, NM 88241
FAX TO: (505) 397-0397

Receiving Date: 05/05/04
Reporting Date: 05/06/04
Project Owner: CONOCO PHILLIPS
Project Name: EVGSAU 3366-029
Project Location: BUCKEYE, NM

Sampling Date: 05/04/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		05/05/04	05/05/04	05/05/04	05/05/04
H8663-1	SB1 @ 1'	<0.005	<0.005	<0.005	<0.015
H8663-2	SB1 @ 15'	<0.005	<0.005	<0.005	<0.015
H8663-3	SB1 @ 25'	<0.005	<0.005	<0.005	<0.015
Quality Control		0.101	0.092	0.090	0.268
True Value QC		0.100	0.100	0.100	0.300
% Recovery		101	92.2	90.0	89.3
Relative Percent Difference		1.7	3.6	2.0	1.2

METHOD: EPA SW-846 8260

Benjamin A. Cooke
Chemist

5/6/04
Date

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

Page 1 of 1

Company Name: DAC International Inc. **BILL TO**

Project Manager: Cliff Beveland

Address: 1324 W. Marland

City: Hobbs **State:** N.M. **Zip:** 88240

Phone #: (505) 777-6388 **Fax #:** (505) 797-0797

Project #: - **Project Owner:** ConocoPhillips

Project Name: EUGSAD 3366-029

Project Location: Box Keys N.M.

Sampler Name: Ken Swinney

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	CONTAINERS			MATRIX			PRESERV			SAMPLING			
		(G)FAB	OR	(G)OMP	GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE:	ICE/COOL	OTHER:	DATE
KE663-1	SBI @ 1'	6	1	1	W						✓		5-4-07	12:20
-2	SRI @ 15'	6	1	1	W						✓		5-4-07	13:00
-3	SRI @ 25'	6	1	1	W						✓		5-4-07	13:25

TPH ROUTE ✓
RTK ✓
Chloride ✓

PLEASE NOTE: Liberty and Demopex. Cardinal's liability and ability to analyze is limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analyses. In no event shall Cardinal be liable for traditional or consequential damages, including without limitation, business interruption, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated causes or otherwise.

Sampler Relinquished: Date: 5-5-07 Time: 10:00
Relinquished By: Ken Swinney
Date: 5-5-07 Time: 10:40
Received By: (Lab Staff) Roy K. [Signature]

Delivered By: (Circle One) Bus Other
Delivered By: Roy K. [Signature]

Sample Condition: Cool Intact Yes No

CHECKED BY: (Initials)

Phone Results: Yes No **Add'l Phone #:**
Fax Results: Yes No **Add'l Fax #:**

REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
 BBC INTERNATIONAL, INC.
 ATTN: CLIFF BRUNSON
 P.O. BOX 805
 HOBBS, NM 88241
 FAX TO: (505) 397-0397

Receiving Date: 05/12/04
 Reporting Date: 05/13/04
 Project Owner: CONOCO PHILLIPS
 Project Name: EVGSAU #3386-029
 Project Location: BUCKEYE, NM

Sampling Date: 05/12/04
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: GP
 Analyzed By: BC/AH

LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		05/12/04	05/12/04	05/13/04
H8688-1	SP 1-1' (029)	<10.0	431	4160
H8688-2	SP 2-1' (029)	288	11400	1140
Quality Control		765	779	1030
True Value QC		800	800	1000
% Recovery		95.7	97.4	103
Relative Percent Difference		5.8	6.3	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-ClB
 *Analyses performed on 1:4 w:v aqueous extracts.

Bryan J. Leake
 Chemist

5/13/04
 Date

H8688A.XLS

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



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PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
 BBC INTERNATIONAL, INC.
 ATTN: CLIFF BRUNSON
 P.O. BOX 805
 HOBBS, NM 88241
 FAX TO: (505) 397-0397

Receiving Date: 05/12/04
 Reporting Date: 05/13/04
 Project Owner: CONOCO PHILLIPS
 Project Name: EVGSAU #3366-029
 Project Location: BUCKEYE, NM

Sampling Date: 05/12/04
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: GP
 Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		05/12/04	05/12/04	05/12/04	05/12/04
H8688-1	SP 1-1' (029)	<0.005	0.070	0.117	0.297
H8688-2	SP 2-1' (029)	<0.005	0.140	0.235	0.594
Quality Control		0.100	0.096	0.093	0.275
True Value QC		0.100	0.100	0.100	0.300
% Recovery		99.7	95.5	92.5	91.5
Relative Percent Difference		6.8	1.9	1.1	<0.1

METHOD: EPA SW-846 8260

Russell J. Lohr
 Chemist

5/13/04
 Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

CARDINAL LABORATORIES, INC.
 2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240
 (915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

Company Name: BBC International, Inc.		P.O. #:		BILL TO		ANALYSIS REQUEST	
Project Manager: Cliff Brunson		Company:					
Address: 1324 W. Marland		City: Hobbs		State: NM		Zip: 88240	
Phone #: 505-397-6388		Fax #: 505-397-0297		Project Name: ENVISA W#3366-029		Project Location: Buckeye, NM	
Project #: -		Project Owner: Anna Phillips		Sampler Name: K.A. Swinney		FOR LAB USE ONLY	
Lab I.D.		Sample I.D.		Matrix		PRESERV	
186688-1		SP1-1' (029)		GROUNDWATER		ICE/COOL	
-2		SP2-1' (029)		WASTEWATER		ACID/BASE	
				SLUDGE		OTHER	
				SOIL		DATE	
				CRUDE OIL		TIME	
				# CONTAINERS		5-12-04 8:59 am	
				(G)RAB DR (C)DMP		5-12-04 9:10 am	
						TPH 8015 M	
						BTEX	
						Chloride	

PLEASE NOTE: Utility and Diagnostic Cardinal's facility and client's materials ready for any chain custody whether based in contract or test, shall be limited to the amount paid by the client for the analysis. All orders including those for reanalysis and any other cause whatsoever shall be deemed unshipped unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors solely on or caused by the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

30 days plus date at the rate of 21% per annum from the original date of breach, plus all costs of collections, including attorney's fees.

Vermin Proof Condition: Insected will be shipped in of appropriate form (see)

Phone Result: Yes No Add'l Phone #: _____
 Fax Result: Yes No Add'l Fax #: _____

Received By: (Lab Staff) _____
 Date: 5-11-04 Time: 11:27
 Delivered By: K.A. Swinney
 Checked By: _____ (Initials)
 Sample Condition: Cool In tact Yes No Yes No

Sampler - UPS - Bus - Other: _____

REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.

APPENDIX II

Site Diagram
May 2004

EVGSAU WELL #3366-029 (3-29-04)
Buckeye, New Mexico

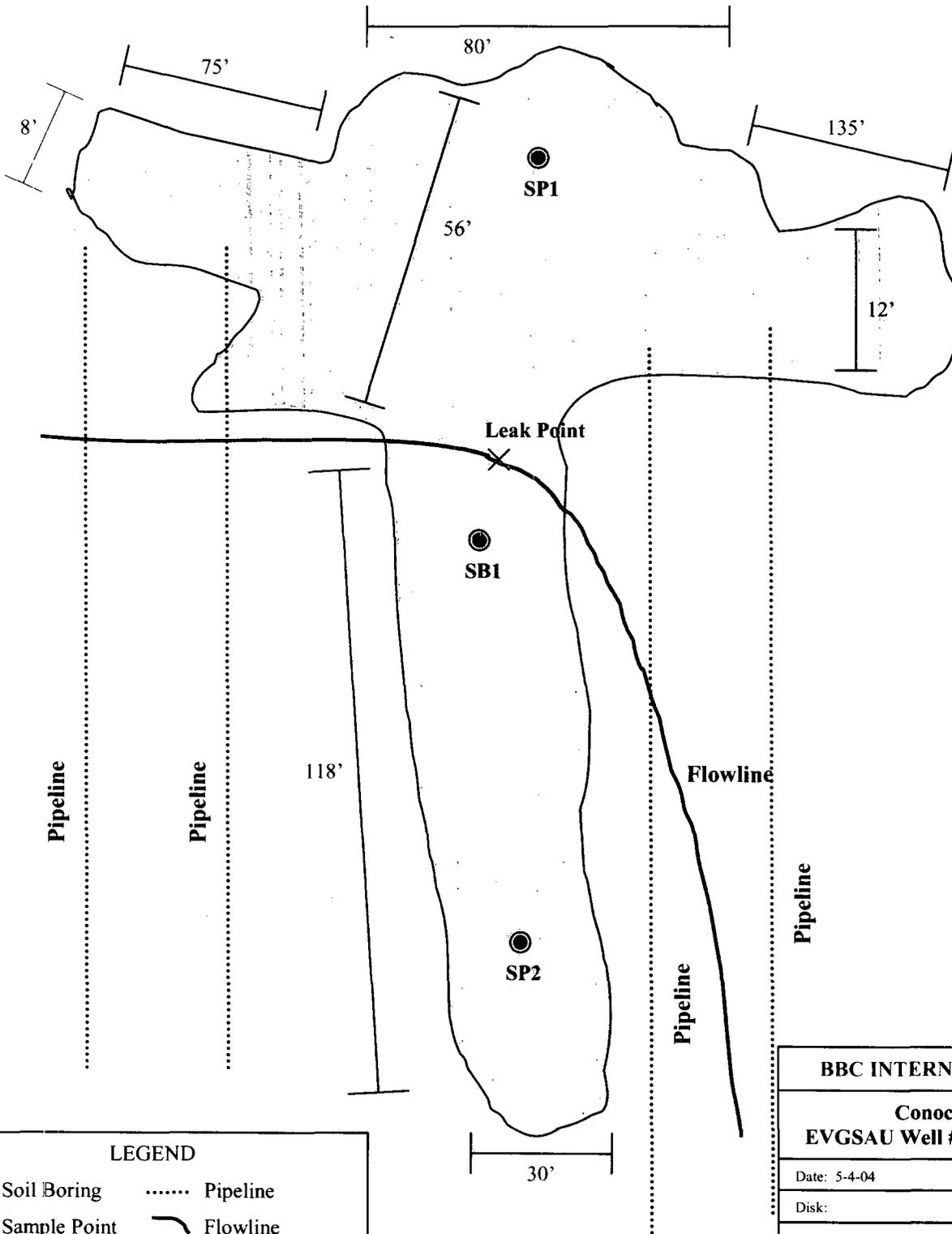
Prepared for:
ConocoPhillips
Lovington, New Mexico

2004

Prepared by:
BBC International, Inc.



CONOCOPHILLIPS EVGSAU WELL #3366-029 3-29-04

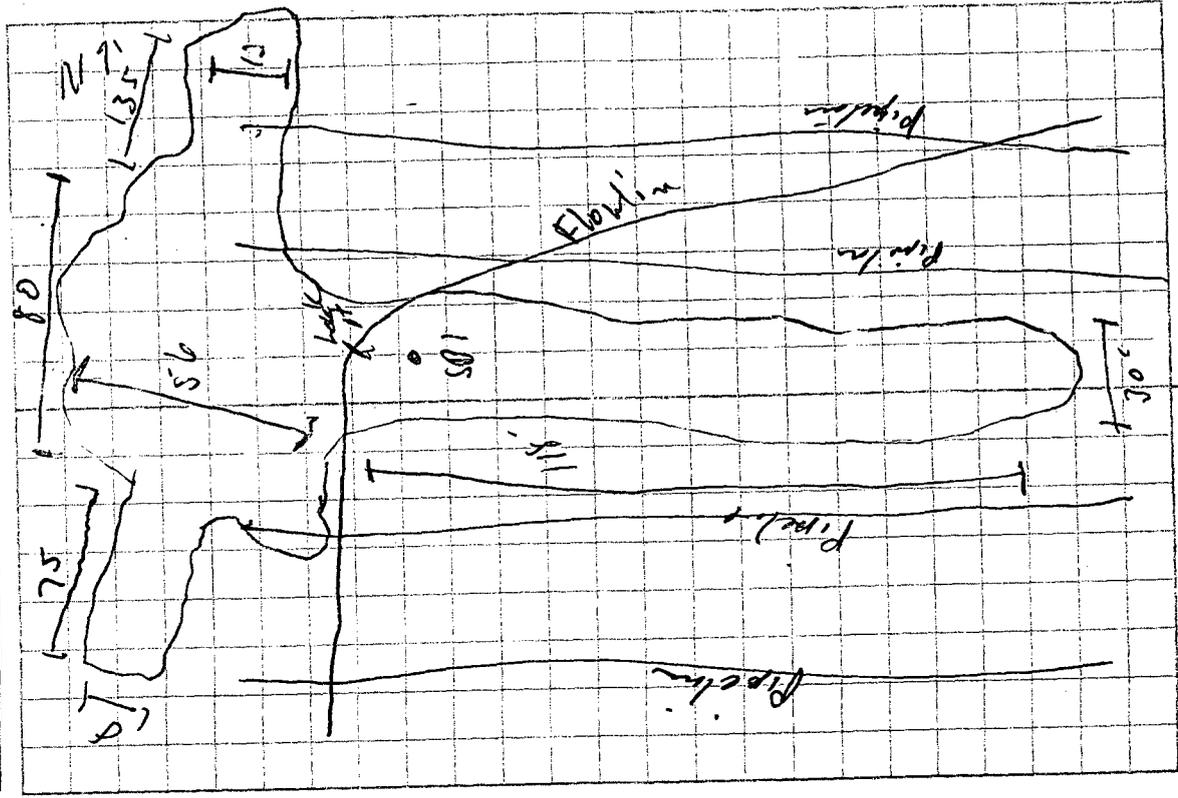


LEGEND	
	Soil Boring
	Sample Point
	Pipeline
	Flowline

BBC INTERNATIONAL, INC.	
ConocoPhillips	
EVGSAU Well #3366-029 (3-29-04)	
Date: 5-4-04	Drawn By: JC
Disk:	Sheet 1 of 1 Sheets
Scale: Not to Scale	File Name

Location _____ Date _____

Project / Client: _____



140 Location Buckeye W. Dr. Date 5-4-04

Project / Client EKS SA 03366-039 /

ConocoPhillips

Sample #	Depth	Time	Date	Field	Odor
S01-1'	1'	12:10	5-4-04	4560	odor
S01-3'	3'	11:27	5-4-04	4800	slight
S01-5'	5'	12:30	5-4-04	4200	none
S01-10'	10'	12:37	5-4-04	4200	none
S01-15'	15'	13:00	5-4-04	2600	none
S01-20'	20'	13:05	5-4-04	2600	none
S01-25'	25'	13:25	5-4-04	600	none

141

Date

Location

Project / Client

Date 5-4-04

Date

Location

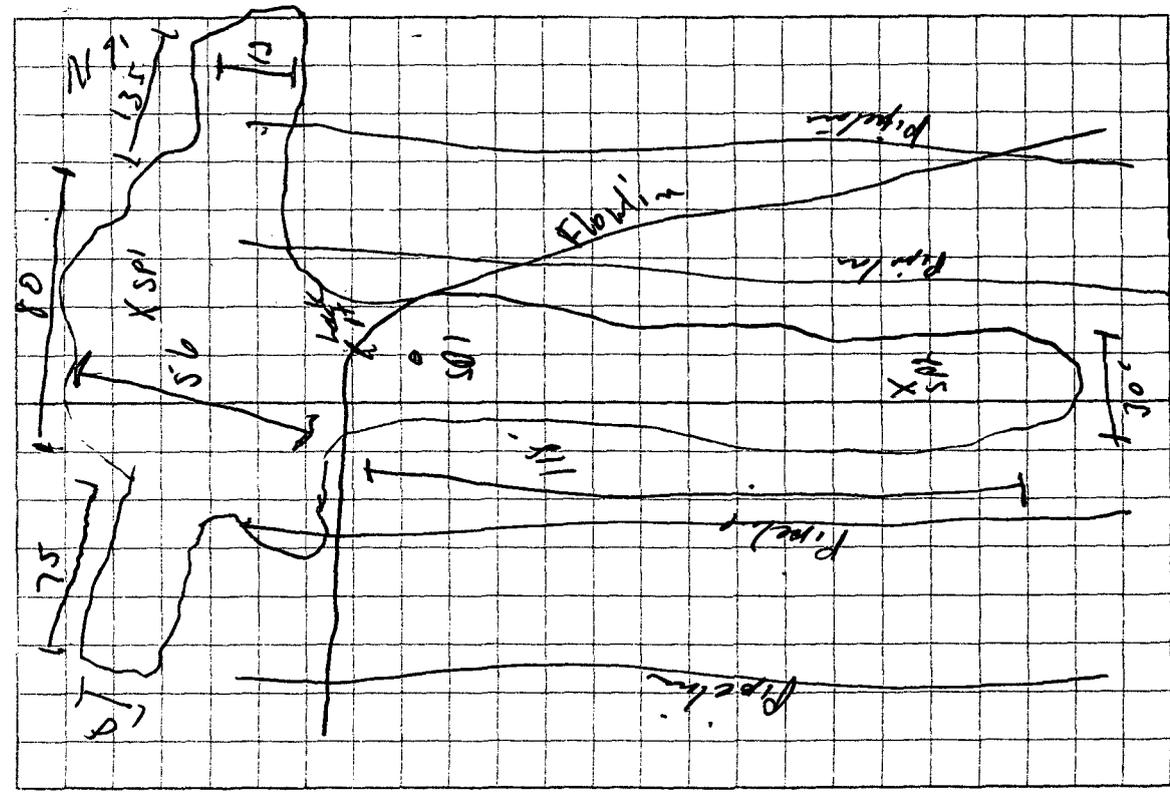
Project / Client

Coreacophilips

Sample #	depth	time	date	field #	odor
SP1-1'	1'	12:20	5-4-04	4560	odor
SP1-3'	3'	12:27	5-4-04	4800	slight
SP1-5'	5'	12:30	5-4-04	4200	none
SP1-10'	10'	12:33	5-4-04	4200	none
SP1-15'	15'	13:00	5-4-04	2600	none
SP1-20'	20'	13:05	5-4-04	2600	none
SP1-25'	25'	13:25	5-4-04	600	none

Additional samples on 5-12-04

Sample #	depth	time	date
SP1-1'	1'		5-12-04
SP2-1'	1'		5-12-04



APPENDIX D

Laboratory Analytical Data



ANALYTICAL REPORT

October 24, 2019

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

ConocoPhillips - Tetra Tech

Sample Delivery Group: L1150129
 Samples Received: 10/15/2019
 Project Number: 212C-MD-01929
 Description: COP EVGSAU 3308-007

Report To: Christinal 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.



Cp: Cover Page 1

Tc: Table of Contents 2

Ss: Sample Summary 4

Cn: Case Narrative 13

Sr: Sample Results 14

BH-1 (0'-1') L1150129-01 14

BH-1 (2'-3') L1150129-02 15

BH-1 (4'-5') L1150129-03 16

BH-1 (6'-7') L1150129-04 17

BH-1 (9'-10') L1150129-05 18

BH-2 (0'-1') L1150129-06 19

BH-2 (2'-3') L1150129-07 20

BH-2 (4'-5') L1150129-08 21

BH-2 (6'-7') L1150129-09 22

BH-2 (9'-10') L1150129-10 23

BH-2 (14'-15') L1150129-11 24

BH-3 (0'-1') L1150129-12 25

BH-3 (2'-3') L1150129-13 26

BH-3 (4'-5') L1150129-14 27

BH-3 (6'-7') L1150129-15 28

BH-3 (9'-10') L1150129-16 29

BH-4 (0'-1') L1150129-17 30

BH-4 (2'-3') L1150129-18 31

BH-4 (4'-5') L1150129-19 32

BH-4 (6'-7') L1150129-20 33

BH-4 (9'-10') L1150129-21 34

BH-4 (14'-15') L1150129-22 35

BH-5 (0'-1') L1150129-23 36

BH-5 (2'-3') L1150129-24 37

BH-5 (4'-5') L1150129-25 38

BH-5 (6'-7') L1150129-26 39

BH-5 (9'-10') L1150129-27 40

BH-5 (14'-15') L1150129-28 41

BH-6 (0'-1') L1150129-29 42

BH-6 (2'-3') L1150129-30 43

BH-6 (4'-5') L1150129-31 44

BH-7 (0'-1') L1150129-32 45

BH-7 (2'-3') L1150129-33 46

BH-7 (4'-5') L1150129-34 47

BH-7 (6'-7') L1150129-35 48



BH-7 (9'-10') L1150129-36	49	
BH-7 (14'-15') L1150129-37	50	
BH-8 (0'-1') L1150129-38	51	
BH-8 (2'-3') L1150129-39	52	
BH-8 (4'-5') L1150129-40	53	
BH-8 (6'-7') L1150129-41	54	
BH-8 (9'-10') L1150129-42	55	
BH-8 (14'-15') L1150129-43	56	
Qc: Quality Control Summary	57	
Total Solids by Method 2540 G-2011	57	
Wet Chemistry by Method 300.0	62	
Volatile Organic Compounds (GC) by Method 8015D/GRO	65	
Volatile Organic Compounds (GC/MS) by Method 8260B	71	
Semi-Volatile Organic Compounds (GC) by Method 8015	75	
Gl: Glossary of Terms	78	
Al: Accreditations & Locations	80	
Sc: Sample Chain of Custody	81	

BH-1 (0'-1') L1150129-01 Solid

Collected by JT
 Collected date/time 10/09/19 10:30
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367010	1	10/23/19 13:23	10/23/19 13:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	5	10/17/19 00:15	10/17/19 12:54	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364933	1.01	10/16/19 08:13	10/19/19 15:15	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367577	1.01	10/16/19 08:13	10/23/19 15:30	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 02:34	KME	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

BH-1 (2'-3') L1150129-02 Solid

Collected by JT
 Collected date/time 10/09/19 10:40
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367010	1	10/23/19 13:23	10/23/19 13:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	1	10/17/19 00:15	10/17/19 13:09	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364933	1	10/16/19 08:13	10/19/19 15:35	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367577	1	10/16/19 08:13	10/23/19 15:50	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 00:09	KME	Mt. Juliet, TN

5 Sr

6 Qc

7 Gl

8 Al

BH-1 (4'-5') L1150129-03 Solid

Collected by JT
 Collected date/time 10/09/19 10:50
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367010	1	10/23/19 13:23	10/23/19 13:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	1	10/17/19 00:15	10/17/19 14:34	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364933	1	10/16/19 08:13	10/19/19 15:55	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367577	1	10/16/19 08:13	10/23/19 16:10	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 00:22	KME	Mt. Juliet, TN

9 Sc

BH-1 (6'-7') L1150129-04 Solid

Collected by JT
 Collected date/time 10/09/19 11:00
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367010	1	10/23/19 13:23	10/23/19 13:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	1	10/17/19 00:15	10/17/19 14:49	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364933	1	10/16/19 08:13	10/19/19 16:16	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367577	1.01	10/16/19 08:13	10/23/19 16:29	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 00:35	KME	Mt. Juliet, TN

BH-1 (9'-10') L1150129-05 Solid

Collected by JT
 Collected date/time 10/09/19 11:10
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367011	1	10/23/19 15:59	10/23/19 16:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	1	10/17/19 00:15	10/17/19 15:05	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364945	1.02	10/16/19 08:13	10/18/19 13:30	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367577	1	10/16/19 08:13	10/23/19 16:49	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 00:49	KME	Mt. Juliet, TN

BH-2 (0'-1') L1150129-06 Solid

Collected by JT
 Collected date/time 10/09/19 11:30
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367011	1	10/23/19 15:59	10/23/19 16:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	100	10/17/19 00:15	10/17/19 16:07	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364945	1	10/16/19 08:13	10/18/19 14:04	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367577	1	10/16/19 08:13	10/23/19 17:08	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	20	10/18/19 15:53	10/19/19 03:26	KME	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

BH-2 (2'-3') L1150129-07 Solid

Collected by JT
 Collected date/time 10/09/19 11:40
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367011	1	10/23/19 15:59	10/23/19 16:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	5	10/17/19 00:15	10/17/19 16:22	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	100	10/16/19 08:13	10/19/19 23:42	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367577	8	10/16/19 08:13	10/23/19 21:39	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	20	10/18/19 15:53	10/19/19 03:39	KME	Mt. Juliet, TN

5 Sr

6 Qc

7 Gl

8 Al

BH-2 (4'-5') L1150129-08 Solid

Collected by JT
 Collected date/time 10/09/19 11:50
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367011	1	10/23/19 15:59	10/23/19 16:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	1	10/17/19 00:15	10/17/19 16:37	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364945	1.02	10/16/19 08:13	10/18/19 14:26	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367577	1	10/16/19 08:13	10/23/19 17:28	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 01:02	KME	Mt. Juliet, TN

9 Sc

BH-2 (6'-7') L1150129-09 Solid

Collected by JT
 Collected date/time 10/09/19 12:00
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367011	1	10/23/19 15:59	10/23/19 16:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	1	10/17/19 00:15	10/17/19 16:53	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364945	1	10/16/19 08:13	10/18/19 15:50	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367577	1	10/16/19 08:13	10/23/19 17:47	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 01:15	KME	Mt. Juliet, TN

BH-2 (9'-10') L1150129-10 Solid

Collected by JT
 Collected date/time 10/09/19 12:10
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367011	1	10/23/19 15:59	10/23/19 16:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	5	10/17/19 00:15	10/17/19 17:39	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364945	1	10/16/19 08:13	10/18/19 16:12	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367577	1	10/16/19 08:13	10/23/19 18:06	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 01:28	KME	Mt. Juliet, TN

BH-2 (14'-15') L1150129-11 Solid

Collected by JT
 Collected date/time 10/09/19 12:20
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367011	1	10/23/19 15:59	10/23/19 16:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	1	10/17/19 00:15	10/17/19 17:55	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364945	1	10/16/19 08:13	10/18/19 16:58	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:13	10/23/19 12:49	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 01:41	KME	Mt. Juliet, TN

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

BH-3 (0'-1') L1150129-12 Solid

Collected by JT
 Collected date/time 10/09/19 12:40
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367011	1	10/23/19 15:59	10/23/19 16:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	5	10/17/19 00:15	10/17/19 18:10	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364945	1	10/16/19 08:13	10/18/19 17:21	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:13	10/23/19 13:10	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 03:13	KME	Mt. Juliet, TN

BH-3 (2'-3') L1150129-13 Solid

Collected by JT
 Collected date/time 10/09/19 12:50
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367011	1	10/23/19 15:59	10/23/19 16:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	5	10/17/19 00:15	10/17/19 18:26	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364945	1	10/16/19 08:13	10/18/19 18:07	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:13	10/23/19 13:30	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 01:54	KME	Mt. Juliet, TN

BH-3 (4'-5') L1150129-14 Solid

Collected by JT
 Collected date/time 10/09/19 13:00
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367011	1	10/23/19 15:59	10/23/19 16:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	1	10/17/19 00:15	10/17/19 18:41	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365975	1.01	10/16/19 08:13	10/20/19 12:00	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:13	10/23/19 13:51	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 02:08	KME	Mt. Juliet, TN

BH-3 (6'-7') L1150129-15 Solid

Collected by JT
 Collected date/time 10/09/19 13:10
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367012	1	10/23/19 15:48	10/23/19 15:58	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	1	10/17/19 00:15	10/17/19 18:56	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365975	1.01	10/16/19 08:13	10/20/19 12:24	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:13	10/23/19 14:12	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365477	1	10/18/19 15:53	10/19/19 02:21	KME	Mt. Juliet, TN

BH-3 (9'-10') L1150129-16 Solid

Collected by JT
 Collected date/time 10/09/19 13:20
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367012	1	10/23/19 15:48	10/23/19 15:58	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1363957	1	10/17/19 00:15	10/17/19 19:12	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365975	1	10/16/19 08:13	10/20/19 12:48	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1.01	10/16/19 08:13	10/23/19 14:32	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 10:25	KME	Mt. Juliet, TN

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

BH-4 (0'-1') L1150129-17 Solid

Collected by JT
 Collected date/time 10/09/19 13:30
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367012	1	10/23/19 15:48	10/23/19 15:58	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 03:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365975	1	10/16/19 08:13	10/20/19 13:12	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:13	10/23/19 14:53	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 12:11	KME	Mt. Juliet, TN

BH-4 (2'-3') L1150129-18 Solid

Collected by JT
 Collected date/time 10/09/19 13:40
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367012	1	10/23/19 15:48	10/23/19 15:58	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 03:53	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365975	1.01	10/16/19 08:13	10/20/19 13:36	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:13	10/23/19 15:14	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 10:38	KME	Mt. Juliet, TN

BH-4 (4'-5') L1150129-19 Solid

Collected by JT
 Collected date/time 10/09/19 13:50
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367012	1	10/23/19 15:48	10/23/19 15:58	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 04:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365975	1	10/16/19 08:13	10/20/19 14:00	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:13	10/23/19 15:34	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 11:17	KME	Mt. Juliet, TN

BH-4 (6'-7') L1150129-20 Solid

Collected by JT
 Collected date/time 10/09/19 14:00
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367012	1	10/23/19 15:48	10/23/19 15:58	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 04:21	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365975	1.01	10/16/19 08:13	10/20/19 14:25	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:13	10/23/19 15:55	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 11:30	KME	Mt. Juliet, TN

BH-4 (9'-10') L1150129-21 Solid

Collected by JT
 Collected date/time 10/09/19 14:10
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367012	1	10/23/19 15:48	10/23/19 15:58	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 04:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365975	1	10/16/19 08:13	10/20/19 14:49	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:13	10/23/19 09:21	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 11:43	KME	Mt. Juliet, TN

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

BH-4 (14'-15') L1150129-22 Solid

Collected by JT
 Collected date/time 10/09/19 14:20
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367012	1	10/23/19 15:48	10/23/19 15:58	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 04:40	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365975	1	10/16/19 08:13	10/20/19 15:13	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:13	10/23/19 09:42	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 11:56	KME	Mt. Juliet, TN

BH-5 (0'-1') L1150129-23 Solid

Collected by JT
 Collected date/time 10/09/19 14:30
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367012	1	10/23/19 15:48	10/23/19 15:58	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 04:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364943	1	10/16/19 08:32	10/19/19 09:04	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:32	10/23/19 10:03	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	5	10/18/19 19:26	10/19/19 14:22	KME	Mt. Juliet, TN

BH-5 (2'-3') L1150129-24 Solid

Collected by JT
 Collected date/time 10/09/19 14:40
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367012	1	10/23/19 15:48	10/23/19 15:58	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 05:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364943	1	10/16/19 08:32	10/19/19 09:28	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:32	10/23/19 10:24	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 12:24	KME	Mt. Juliet, TN

BH-5 (4'-5') L1150129-25 Solid

Collected by JT
 Collected date/time 10/09/19 14:50
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367013	1	10/23/19 15:34	10/23/19 15:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	5	10/18/19 01:10	10/18/19 05:47	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1364943	1.01	10/16/19 08:32	10/19/19 10:16	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:32	10/23/19 10:44	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 12:37	KME	Mt. Juliet, TN

BH-5 (6'-7') L1150129-26 Solid

Collected by JT
 Collected date/time 10/09/19 15:00
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367013	1	10/23/19 15:34	10/23/19 15:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 05:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365975	1	10/16/19 08:32	10/20/19 15:37	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:32	10/23/19 11:05	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 12:50	KME	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

BH-5 (9'-10') L1150129-27 Solid

Collected by JT
 Collected date/time 10/09/19 15:10
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367013	1	10/23/19 15:34	10/23/19 15:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 06:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365975	1	10/16/19 08:32	10/20/19 16:01	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:32	10/23/19 11:26	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 13:03	KME	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

BH-5 (14'-15') L1150129-28 Solid

Collected by JT
 Collected date/time 10/09/19 15:20
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367013	1	10/23/19 15:34	10/23/19 15:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 06:16	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365975	1.01	10/16/19 08:32	10/20/19 16:25	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:32	10/23/19 11:46	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 13:16	KME	Mt. Juliet, TN

9 Sc

BH-6 (0'-1') L1150129-29 Solid

Collected by JT
 Collected date/time 10/09/19 15:30
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367013	1	10/23/19 15:34	10/23/19 15:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 06:25	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365550	1	10/16/19 08:32	10/20/19 17:25	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:32	10/23/19 12:07	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	5	10/18/19 19:26	10/19/19 14:35	KME	Mt. Juliet, TN

BH-6 (2'-3') L1150129-30 Solid

Collected by JT
 Collected date/time 10/09/19 15:40
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367013	1	10/23/19 15:34	10/23/19 15:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	5	10/18/19 01:10	10/18/19 06:35	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365550	1	10/16/19 08:32	10/20/19 17:47	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367888	1	10/16/19 08:32	10/23/19 12:28	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 13:55	KME	Mt. Juliet, TN

BH-6 (4'-5') L1150129-31 Solid

Collected by JT
 Collected date/time 10/09/19 15:50
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367013	1	10/23/19 15:34	10/23/19 15:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 06:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365550	1.01	10/16/19 08:32	10/20/19 18:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1367938	1	10/16/19 08:32	10/23/19 13:30	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 13:29	KME	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

BH-7 (0'-1') L1150129-32 Solid

Collected by JT
 Collected date/time 10/10/19 10:00
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367013	1	10/23/19 15:34	10/23/19 15:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	10	10/18/19 01:10	10/18/19 07:22	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	1.01	10/16/19 08:32	10/20/19 00:02	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1368147	1	10/16/19 08:32	10/24/19 09:53	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	5	10/18/19 19:26	10/19/19 14:48	KME	Mt. Juliet, TN

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

BH-7 (2'-3') L1150129-33 Solid

Collected by JT
 Collected date/time 10/10/19 10:10
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367013	1	10/23/19 15:34	10/23/19 15:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	10	10/18/19 01:10	10/18/19 07:32	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	1	10/16/19 08:32	10/20/19 00:23	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1368147	1.01	10/16/19 08:32	10/24/19 10:11	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365512	1	10/18/19 19:26	10/19/19 13:42	KME	Mt. Juliet, TN

⁹ Sc

BH-7 (4'-5') L1150129-34 Solid

Collected by JT
 Collected date/time 10/10/19 10:20
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367013	1	10/23/19 15:34	10/23/19 15:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 07:41	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	1.01	10/16/19 08:32	10/20/19 00:44	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1368147	1	10/16/19 08:32	10/24/19 10:30	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365515	1	10/19/19 04:32	10/19/19 10:34	FM	Mt. Juliet, TN

BH-7 (6'-7') L1150129-35 Solid

Collected by JT
 Collected date/time 10/10/19 10:30
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367014	1	10/23/19 15:20	10/23/19 15:31	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 07:51	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	1	10/16/19 08:32	10/20/19 01:04	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1368147	1	10/16/19 08:32	10/24/19 10:49	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365515	1	10/19/19 04:32	10/19/19 09:56	FM	Mt. Juliet, TN

BH-7 (9'-10') L1150129-36 Solid

Collected by JT
 Collected date/time 10/10/19 10:40
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367014	1	10/23/19 15:20	10/23/19 15:31	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364316	1	10/18/19 01:10	10/18/19 08:00	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	1.01	10/16/19 08:32	10/20/19 01:25	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1368147	1	10/16/19 08:32	10/24/19 11:08	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365515	1	10/19/19 04:32	10/19/19 10:46	FM	Mt. Juliet, TN

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

BH-7 (14'-15') L1150129-37 Solid

Collected by JT
 Collected date/time 10/10/19 10:50
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367014	1	10/23/19 15:20	10/23/19 15:31	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364664	1	10/17/19 19:10	10/17/19 21:28	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	1	10/16/19 08:32	10/20/19 01:45	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1368147	1	10/16/19 08:32	10/24/19 11:27	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365515	1	10/19/19 04:32	10/19/19 10:59	FM	Mt. Juliet, TN

BH-8 (0'-1') L1150129-38 Solid

Collected by JT
 Collected date/time 10/10/19 11:20
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367014	1	10/23/19 15:20	10/23/19 15:31	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364664	1	10/17/19 19:10	10/17/19 21:37	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	1	10/16/19 08:32	10/20/19 02:06	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1368147	1.01	10/16/19 08:32	10/24/19 11:45	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365515	1	10/19/19 04:32	10/19/19 14:10	FM	Mt. Juliet, TN

BH-8 (2'-3') L1150129-39 Solid

Collected by JT
 Collected date/time 10/10/19 11:30
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367014	1	10/23/19 15:20	10/23/19 15:31	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364664	1	10/17/19 19:10	10/17/19 21:47	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	1	10/16/19 08:32	10/20/19 02:26	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1368147	1	10/16/19 08:32	10/24/19 12:04	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365515	1	10/19/19 04:32	10/19/19 14:23	FM	Mt. Juliet, TN

BH-8 (4'-5') L1150129-40 Solid

Collected by JT
 Collected date/time 10/10/19 11:40
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367014	1	10/23/19 15:20	10/23/19 15:31	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364664	1	10/17/19 19:10	10/17/19 21:56	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	1	10/16/19 08:32	10/20/19 02:47	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1368147	1	10/16/19 08:32	10/24/19 12:23	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365515	1	10/19/19 04:32	10/19/19 11:12	FM	Mt. Juliet, TN

BH-8 (6'-7') L1150129-41 Solid

Collected by JT
 Collected date/time 10/10/19 11:50
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367014	1	10/23/19 15:20	10/23/19 15:31	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364664	1	10/17/19 19:10	10/17/19 22:15	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	1.01	10/16/19 08:32	10/20/19 03:07	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1368147	1.01	10/16/19 08:32	10/24/19 12:42	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365515	1	10/19/19 04:32	10/19/19 11:25	FM	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

BH-8 (9'-10') L1150129-42 Solid

Collected by JT
 Collected date/time 10/10/19 12:00
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367014	1	10/23/19 15:20	10/23/19 15:31	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364664	1	10/17/19 19:10	10/17/19 22:25	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	1	10/16/19 08:32	10/20/19 03:28	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1368147	1	10/16/19 08:32	10/24/19 13:01	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365515	1	10/19/19 04:32	10/19/19 13:57	FM	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

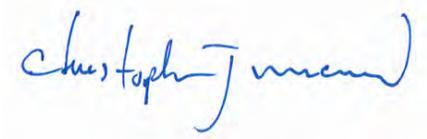
BH-8 (14'-15') L1150129-43 Solid

Collected by JT
 Collected date/time 10/10/19 12:10
 Received date/time 10/15/19 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1367014	1	10/23/19 15:20	10/23/19 15:31	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1364664	1	10/17/19 19:10	10/17/19 22:34	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1365589	1	10/16/19 08:32	10/20/19 03:48	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1368147	1	10/16/19 08:32	10/24/19 13:20	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1365515	1	10/19/19 04:32	10/19/19 11:37	FM	Mt. Juliet, TN

9 Sc

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



Chris McCord
Project Manager

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

Collected date/time: 10/09/19 10:30

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	93.5		1	10/23/2019 13:32	WG1367010

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	1350		4.25	10.0	53.4	5	10/17/2019 12:54	WG1363957

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0234	0.100	0.108	1.01	10/19/2019 15:15	WG1364933
(S) a,a,a-Trifluorotoluene(FID)	98.9				62.0-128		10/19/2019 15:15	WG1364933

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000432	0.00100	0.00108	1.01	10/23/2019 15:30	WG1367577
Toluene	0.0421		0.00135	0.00500	0.00540	1.01	10/23/2019 15:30	WG1367577
Ethylbenzene	U		0.000572	0.00250	0.00270	1.01	10/23/2019 15:30	WG1367577
Total Xylenes	U		0.00516	0.00650	0.00701	1.01	10/23/2019 15:30	WG1367577
(S) Toluene-d8	99.5				75.0-131		10/23/2019 15:30	WG1367577
(S) 4-Bromofluorobenzene	95.7				67.0-138		10/23/2019 15:30	WG1367577
(S) 1,2-Dichloroethane-d4	120				70.0-130		10/23/2019 15:30	WG1367577

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	8.53		1.72	4.00	4.28	1	10/19/2019 02:34	WG1365477
C28-C40 Oil Range	26.6		0.293	4.00	4.28	1	10/19/2019 02:34	WG1365477
(S) o-Terphenyl	87.1				18.0-148		10/19/2019 02:34	WG1365477

Collected date/time: 10/09/19 10:40

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.8		1	10/23/2019 13:32	WG1367010

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	653		0.830	10.0	10.4	1	10/17/2019 13:09	WG1363957

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0226	0.100	0.104	1	10/19/2019 15:35	WG1364933
(S) a,a,a-Trifluorotoluene(FID)	98.9				62.0-128		10/19/2019 15:35	WG1364933

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000417	0.00100	0.00104	1	10/23/2019 15:50	WG1367577
Toluene	0.0438		0.00130	0.00500	0.00522	1	10/23/2019 15:50	WG1367577
Ethylbenzene	U		0.000553	0.00250	0.00261	1	10/23/2019 15:50	WG1367577
Total Xylenes	U		0.00499	0.00650	0.00678	1	10/23/2019 15:50	WG1367577
(S) Toluene-d8	97.8				75.0-131		10/23/2019 15:50	WG1367577
(S) 4-Bromofluorobenzene	96.8				67.0-138		10/23/2019 15:50	WG1367577
(S) 1,2-Dichloroethane-d4	120				70.0-130		10/23/2019 15:50	WG1367577

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1.92	J	1.68	4.00	4.17	1	10/19/2019 00:09	WG1365477
C28-C40 Oil Range	5.16		0.286	4.00	4.17	1	10/19/2019 00:09	WG1365477
(S) o-Terphenyl	89.0				18.0-148		10/19/2019 00:09	WG1365477

Collected date/time: 10/09/19 10:50

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.0		1	10/23/2019 13:32	WG1367010

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	491		0.837	10.0	10.5	1	10/17/2019 14:34	WG1363957

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0229	0.100	0.105	1	10/19/2019 15:55	WG1364933
(S) a,a,a-Trifluorotoluene(FID)	98.9				62.0-128		10/19/2019 15:55	WG1364933

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	0.000605	J	0.000421	0.00100	0.00105	1	10/23/2019 16:10	WG1367577
Toluene	0.0413		0.00132	0.00500	0.00527	1	10/23/2019 16:10	WG1367577
Ethylbenzene	U		0.000558	0.00250	0.00263	1	10/23/2019 16:10	WG1367577
Total Xylenes	U		0.00503	0.00650	0.00684	1	10/23/2019 16:10	WG1367577
(S) Toluene-d8	96.6				75.0-131		10/23/2019 16:10	WG1367577
(S) 4-Bromofluorobenzene	97.2				67.0-138		10/23/2019 16:10	WG1367577
(S) 1,2-Dichloroethane-d4	124				70.0-130		10/23/2019 16:10	WG1367577

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.70	4.00	4.21	1	10/19/2019 00:22	WG1365477
C28-C40 Oil Range	1.34	J	0.289	4.00	4.21	1	10/19/2019 00:22	WG1365477
(S) o-Terphenyl	79.3				18.0-148		10/19/2019 00:22	WG1365477

Collected date/time: 10/09/19 11:00

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	93.1		1	10/23/2019 13:32	WG1367010

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	349		0.854	10.0	10.7	1	10/17/2019 14:49	WG1363957

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0234	J	0.0233	0.100	0.107	1	10/19/2019 16:16	WG1364933
(S) a,a,a-Trifluorotoluene(FID)	99.4				62.0-128		10/19/2019 16:16	WG1364933

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000434	0.00100	0.00108	1.01	10/23/2019 16:29	WG1367577
Toluene	0.0443		0.00136	0.00500	0.00542	1.01	10/23/2019 16:29	WG1367577
Ethylbenzene	U		0.000575	0.00250	0.00272	1.01	10/23/2019 16:29	WG1367577
Total Xylenes	U		0.00518	0.00650	0.00704	1.01	10/23/2019 16:29	WG1367577
(S) Toluene-d8	99.7				75.0-131		10/23/2019 16:29	WG1367577
(S) 4-Bromofluorobenzene	94.9				67.0-138		10/23/2019 16:29	WG1367577
(S) 1,2-Dichloroethane-d4	120				70.0-130		10/23/2019 16:29	WG1367577

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.73	4.00	4.29	1	10/19/2019 00:35	WG1365477
C28-C40 Oil Range	0.499	J	0.294	4.00	4.29	1	10/19/2019 00:35	WG1365477
(S) o-Terphenyl	76.3				18.0-148		10/19/2019 00:35	WG1365477

Collected date/time: 10/09/19 11:10

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	99.0		1	10/23/2019 16:08	WG1367011

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	91.5		0.803	10.0	10.1	1	10/17/2019 15:05	WG1363957

5 Sr

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0658	B J	0.0223	0.100	0.103	1.02	10/18/2019 13:30	WG1364945
(S) a,a,a-Trifluorotoluene(FID)	105				77.0-120		10/18/2019 13:30	WG1364945

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000404	0.00100	0.00101	1	10/23/2019 16:49	WG1367577
Toluene	0.0419		0.00126	0.00500	0.00505	1	10/23/2019 16:49	WG1367577
Ethylbenzene	U		0.000535	0.00250	0.00252	1	10/23/2019 16:49	WG1367577
Total Xylenes	U		0.00483	0.00650	0.00656	1	10/23/2019 16:49	WG1367577
(S) Toluene-d8	97.4				75.0-131		10/23/2019 16:49	WG1367577
(S) 4-Bromofluorobenzene	94.2				67.0-138		10/23/2019 16:49	WG1367577
(S) 1,2-Dichloroethane-d4	120				70.0-130		10/23/2019 16:49	WG1367577

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.63	4.00	4.04	1	10/19/2019 00:49	WG1365477
C28-C40 Oil Range	0.847	J	0.277	4.00	4.04	1	10/19/2019 00:49	WG1365477
(S) o-Terphenyl	79.7				18.0-148		10/19/2019 00:49	WG1365477

Collected date/time: 10/09/19 11:30

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.7		1	10/23/2019 16:08	WG1367011

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	14100		83.1	10.0	1040	100	10/17/2019 16:07	WG1363957

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0648	B J	0.0227	0.100	0.104	1	10/18/2019 14:04	WG1364945
(S) a,a,a-Trifluorotoluene(FID)	103				77.0-120		10/18/2019 14:04	WG1364945

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000418	0.00100	0.00104	1	10/23/2019 17:08	WG1367577
Toluene	0.0438		0.00131	0.00500	0.00522	1	10/23/2019 17:08	WG1367577
Ethylbenzene	U		0.000554	0.00250	0.00261	1	10/23/2019 17:08	WG1367577
Total Xylenes	U		0.00499	0.00650	0.00679	1	10/23/2019 17:08	WG1367577
(S) Toluene-d8	96.9				75.0-131		10/23/2019 17:08	WG1367577
(S) 4-Bromofluorobenzene	94.1				67.0-138		10/23/2019 17:08	WG1367577
(S) 1,2-Dichloroethane-d4	119				70.0-130		10/23/2019 17:08	WG1367577

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	1600		33.6	4.00	83.6	20	10/19/2019 03:26	WG1365477
C28-C40 Oil Range	912		5.72	4.00	83.6	20	10/19/2019 03:26	WG1365477
(S) o-Terphenyl	383	J7			18.0-148		10/19/2019 03:26	WG1365477

Collected date/time: 10/09/19 11:40

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.6		1	10/23/2019 16:08	WG1367011

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	1830		4.16	10.0	52.3	5	10/17/2019 16:22	WG1363957

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	46.3		2.27	0.100	10.5	100	10/19/2019 23:42	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	101				77.0-120		10/19/2019 23:42	WG1365589

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.00335	0.00100	0.00837	8	10/23/2019 21:39	WG1367577
Toluene	0.0502		0.0105	0.00500	0.0418	8	10/23/2019 21:39	WG1367577
Ethylbenzene	0.00649	J	0.00444	0.00250	0.0209	8	10/23/2019 21:39	WG1367577
Total Xylenes	0.142		0.0400	0.00650	0.0544	8	10/23/2019 21:39	WG1367577
(S) Toluene-d8	98.0				75.0-131		10/23/2019 21:39	WG1367577
(S) 4-Bromofluorobenzene	95.8				67.0-138		10/23/2019 21:39	WG1367577
(S) 1,2-Dichloroethane-d4	116				70.0-130		10/23/2019 21:39	WG1367577

- 8 Al
- 9 Sc

Sample Narrative:

L1150129-07 WG1367577: Non-target compounds too high to run at a lower dilution.

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	2420		33.7	4.00	83.7	20	10/19/2019 03:39	WG1365477
C28-C40 Oil Range	1060		5.73	4.00	83.7	20	10/19/2019 03:39	WG1365477
(S) o-Terphenyl	457	J7			18.0-148		10/19/2019 03:39	WG1365477

Collected date/time: 10/09/19 11:50

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	92.1		1	10/23/2019 16:08	WG1367011

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	366		0.863	10.0	10.9	1	10/17/2019 16:37	WG1363957

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0734	<u>B J</u>	0.0240	0.100	0.111	1.02	10/18/2019 14:26	WG1364945
(S) a,a,a-Trifluorotoluene(FID)	105				77.0-120		10/18/2019 14:26	WG1364945

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000434	0.00100	0.00109	1	10/23/2019 17:28	WG1367577
Toluene	0.0473		0.00136	0.00500	0.00543	1	10/23/2019 17:28	WG1367577
Ethylbenzene	U		0.000575	0.00250	0.00271	1	10/23/2019 17:28	WG1367577
Total Xylenes	U		0.00519	0.00650	0.00706	1	10/23/2019 17:28	WG1367577
(S) Toluene-d8	102				75.0-131		10/23/2019 17:28	WG1367577
(S) 4-Bromofluorobenzene	92.3				67.0-138		10/23/2019 17:28	WG1367577
(S) 1,2-Dichloroethane-d4	113				70.0-130		10/23/2019 17:28	WG1367577

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.75	4.00	4.34	1	10/19/2019 01:02	WG1365477
C28-C40 Oil Range	0.940	<u>J</u>	0.297	4.00	4.34	1	10/19/2019 01:02	WG1365477
(S) o-Terphenyl	82.3				18.0-148		10/19/2019 01:02	WG1365477

Collected date/time: 10/09/19 12:00

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	98.6		1	10/23/2019 16:08	WG1367011

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	237		0.807	10.0	10.1	1	10/17/2019 16:53	WG1363957

5 Sr

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0680	B J	0.0220	0.100	0.101	1	10/18/2019 15:50	WG1364945
(S) a,a,a-Trifluorotoluene(FID)	103				77.0-120		10/18/2019 15:50	WG1364945

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000406	0.00100	0.00101	1	10/23/2019 17:47	WG1367577
Toluene	0.0447		0.00127	0.00500	0.00507	1	10/23/2019 17:47	WG1367577
Ethylbenzene	U		0.000538	0.00250	0.00254	1	10/23/2019 17:47	WG1367577
Total Xylenes	U		0.00485	0.00650	0.00659	1	10/23/2019 17:47	WG1367577
(S) Toluene-d8	101				75.0-131		10/23/2019 17:47	WG1367577
(S) 4-Bromofluorobenzene	91.2				67.0-138		10/23/2019 17:47	WG1367577
(S) 1,2-Dichloroethane-d4	111				70.0-130		10/23/2019 17:47	WG1367577

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	5.67		1.63	4.00	4.06	1	10/19/2019 01:15	WG1365477
C28-C40 Oil Range	3.67	J	0.278	4.00	4.06	1	10/19/2019 01:15	WG1365477
(S) o-Terphenyl	88.8				18.0-148		10/19/2019 01:15	WG1365477

Collected date/time: 10/09/19 12:10

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.2		1	10/23/2019 16:08	WG1367011

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	1300		4.18	10.0	52.5	5	10/17/2019 17:39	WG1363957

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0645	<u>B J</u>	0.0228	0.100	0.105	1	10/18/2019 16:12	WG1364945
(S) a,a,a-Trifluorotoluene(FID)	104				77.0-120		10/18/2019 16:12	WG1364945

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000420	0.00100	0.00105	1	10/23/2019 18:06	WG1367577
Toluene	0.0438		0.00131	0.00500	0.00525	1	10/23/2019 18:06	WG1367577
Ethylbenzene	0.00112	<u>J</u>	0.000557	0.00250	0.00263	1	10/23/2019 18:06	WG1367577
Total Xylenes	U		0.00502	0.00650	0.00683	1	10/23/2019 18:06	WG1367577
(S) Toluene-d8	101				75.0-131		10/23/2019 18:06	WG1367577
(S) 4-Bromofluorobenzene	93.5				67.0-138		10/23/2019 18:06	WG1367577
(S) 1,2-Dichloroethane-d4	115				70.0-130		10/23/2019 18:06	WG1367577

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.69	4.00	4.20	1	10/19/2019 01:28	WG1365477
C28-C40 Oil Range	0.453	<u>J</u>	0.288	4.00	4.20	1	10/19/2019 01:28	WG1365477
(S) o-Terphenyl	81.0				18.0-148		10/19/2019 01:28	WG1365477

Collected date/time: 10/09/19 12:20

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.1		1	10/23/2019 16:08	WG1367011

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	37.2		0.811	10.0	10.2	1	10/17/2019 17:55	WG1363957

5 Sr

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0603	B J	0.0221	0.100	0.102	1	10/18/2019 16:58	WG1364945
(S) a,a,a-Trifluorotoluene(FID)	104				77.0-120		10/18/2019 16:58	WG1364945

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000408	0.00100	0.00102	1	10/23/2019 12:49	WG1367888
Toluene	0.0656		0.00127	0.00500	0.00510	1	10/23/2019 12:49	WG1367888
Ethylbenzene	U		0.000540	0.00250	0.00255	1	10/23/2019 12:49	WG1367888
Total Xylenes	U		0.00487	0.00650	0.00663	1	10/23/2019 12:49	WG1367888
(S) Toluene-d8	101				75.0-131		10/23/2019 12:49	WG1367888
(S) 4-Bromofluorobenzene	95.9				67.0-138		10/23/2019 12:49	WG1367888
(S) 1,2-Dichloroethane-d4	102				70.0-130		10/23/2019 12:49	WG1367888

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.64	4.00	4.08	1	10/19/2019 01:41	WG1365477
C28-C40 Oil Range	0.300	J	0.279	4.00	4.08	1	10/19/2019 01:41	WG1365477
(S) o-Terphenyl	86.3				18.0-148		10/19/2019 01:41	WG1365477

Collected date/time: 10/09/19 12:40

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	92.7		1	10/23/2019 16:08	WG1367011

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	890		4.29	10.0	54.0	5	10/17/2019 18:10	WG1363957

5 Sr

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0734	B J	0.0234	0.100	0.108	1	10/18/2019 17:21	WG1364945
(S) a,a,a-Trifluorotoluene(FID)	104				77.0-120		10/18/2019 17:21	WG1364945

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000432	0.00100	0.00108	1	10/23/2019 13:10	WG1367888
Toluene	0.0679		0.00135	0.00500	0.00540	1	10/23/2019 13:10	WG1367888
Ethylbenzene	U		0.000572	0.00250	0.00270	1	10/23/2019 13:10	WG1367888
Total Xylenes	U		0.00516	0.00650	0.00701	1	10/23/2019 13:10	WG1367888
(S) Toluene-d8	103				75.0-131		10/23/2019 13:10	WG1367888
(S) 4-Bromofluorobenzene	92.8				67.0-138		10/23/2019 13:10	WG1367888
(S) 1,2-Dichloroethane-d4	96.8				70.0-130		10/23/2019 13:10	WG1367888

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	135		1.74	4.00	4.32	1	10/19/2019 03:13	WG1365477
C28-C40 Oil Range	142		0.296	4.00	4.32	1	10/19/2019 03:13	WG1365477
(S) o-Terphenyl	76.2				18.0-148		10/19/2019 03:13	WG1365477

Collected date/time: 10/09/19 12:50

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.5		1	10/23/2019 16:08	WG1367011

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	795		4.21	10.0	52.9	5	10/17/2019 18:26	WG1363957

5 Sr

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0737	B J	0.0230	0.100	0.106	1	10/18/2019 18:07	WG1364945
(S) a,a,a-Trifluorotoluene(FID)	103				77.0-120		10/18/2019 18:07	WG1364945

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000423	0.00100	0.00106	1	10/23/2019 13:30	WG1367888
Toluene	0.0633		0.00132	0.00500	0.00529	1	10/23/2019 13:30	WG1367888
Ethylbenzene	U		0.000561	0.00250	0.00265	1	10/23/2019 13:30	WG1367888
Total Xylenes	U		0.00506	0.00650	0.00688	1	10/23/2019 13:30	WG1367888
(S) Toluene-d8	106				75.0-131		10/23/2019 13:30	WG1367888
(S) 4-Bromofluorobenzene	97.9				67.0-138		10/23/2019 13:30	WG1367888
(S) 1,2-Dichloroethane-d4	100				70.0-130		10/23/2019 13:30	WG1367888

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.70	4.00	4.23	1	10/19/2019 01:54	WG1365477
C28-C40 Oil Range	0.561	J	0.290	4.00	4.23	1	10/19/2019 01:54	WG1365477
(S) o-Terphenyl	82.6				18.0-148		10/19/2019 01:54	WG1365477

Collected date/time: 10/09/19 13:00

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.4		1	10/23/2019 16:08	WG1367011

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	23.4	B	0.842	10.0	10.6	1	10/17/2019 18:41	WG1363957

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0232	0.100	0.107	1.01	10/20/2019 12:00	WG1365975
(S) a,a,a-Trifluorotoluene(FID)	95.4				77.0-120		10/20/2019 12:00	WG1365975

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000424	0.00100	0.00106	1	10/23/2019 13:51	WG1367888
Toluene	0.0698		0.00132	0.00500	0.00530	1	10/23/2019 13:51	WG1367888
Ethylbenzene	U		0.000561	0.00250	0.00265	1	10/23/2019 13:51	WG1367888
Total Xylenes	U		0.00506	0.00650	0.00689	1	10/23/2019 13:51	WG1367888
(S) Toluene-d8	104				75.0-131		10/23/2019 13:51	WG1367888
(S) 4-Bromofluorobenzene	97.1				67.0-138		10/23/2019 13:51	WG1367888
(S) 1,2-Dichloroethane-d4	97.1				70.0-130		10/23/2019 13:51	WG1367888

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.71	4.00	4.24	1	10/19/2019 02:08	WG1365477
C28-C40 Oil Range	U		0.290	4.00	4.24	1	10/19/2019 02:08	WG1365477
(S) o-Terphenyl	71.1				18.0-148		10/19/2019 02:08	WG1365477

Collected date/time: 10/09/19 13:10

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	88.4		1	10/23/2019 15:58	WG1367012

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	59.5		0.900	10.0	11.3	1	10/17/2019 18:56	WG1363957

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0248	0.100	0.114	1.01	10/20/2019 12:24	WG1365975
(S) a,a,a-Trifluorotoluene(FID)	95.8				77.0-120		10/20/2019 12:24	WG1365975

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000453	0.00100	0.00113	1	10/23/2019 14:12	WG1367888
Toluene	0.00759		0.00141	0.00500	0.00566	1	10/23/2019 14:12	WG1367888
Ethylbenzene	U		0.000600	0.00250	0.00283	1	10/23/2019 14:12	WG1367888
Total Xylenes	U		0.00541	0.00650	0.00735	1	10/23/2019 14:12	WG1367888
(S) Toluene-d8	102				75.0-131		10/23/2019 14:12	WG1367888
(S) 4-Bromofluorobenzene	95.1				67.0-138		10/23/2019 14:12	WG1367888
(S) 1,2-Dichloroethane-d4	90.9				70.0-130		10/23/2019 14:12	WG1367888

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.82	4.00	4.53	1	10/19/2019 02:21	WG1365477
C28-C40 Oil Range	U		0.310	4.00	4.53	1	10/19/2019 02:21	WG1365477
(S) o-Terphenyl	67.2				18.0-148		10/19/2019 02:21	WG1365477

Collected date/time: 10/09/19 13:20

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.2		1	10/23/2019 15:58	WG1367012

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	70.9		0.853	10.0	10.7	1	10/17/2019 19:12	WG1363957

5 Sr

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0233	0.100	0.107	1	10/20/2019 12:48	WG1365975
(S) a,a,a-Trifluorotoluene(FID)	95.0				77.0-120		10/20/2019 12:48	WG1365975

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000434	0.00100	0.00108	1.01	10/23/2019 14:32	WG1367888
Toluene	0.00561		0.00136	0.00500	0.00542	1.01	10/23/2019 14:32	WG1367888
Ethylbenzene	U		0.000575	0.00250	0.00272	1.01	10/23/2019 14:32	WG1367888
Total Xylenes	U		0.00518	0.00650	0.00704	1.01	10/23/2019 14:32	WG1367888
(S) Toluene-d8	107				75.0-131		10/23/2019 14:32	WG1367888
(S) 4-Bromofluorobenzene	95.5				67.0-138		10/23/2019 14:32	WG1367888
(S) 1,2-Dichloroethane-d4	98.4				70.0-130		10/23/2019 14:32	WG1367888

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.73	4.00	4.29	1	10/19/2019 10:25	WG1365512
C28-C40 Oil Range	1.14	J	0.294	4.00	4.29	1	10/19/2019 10:25	WG1365512
(S) o-Terphenyl	76.3				18.0-148		10/19/2019 10:25	WG1365512

Collected date/time: 10/09/19 13:30

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.3		1	10/23/2019 15:58	WG1367012

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	38.0	B	0.852	10.0	10.7	1	10/18/2019 03:44	WG1364316

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0233	0.100	0.107	1	10/20/2019 13:12	WG1365975
(S) a,a,a-Trifluorotoluene(FID)	95.3				77.0-120		10/20/2019 13:12	WG1365975

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000429	0.00100	0.00107	1	10/23/2019 14:53	WG1367888
Toluene	0.00491	J	0.00134	0.00500	0.00536	1	10/23/2019 14:53	WG1367888
Ethylbenzene	U		0.000568	0.00250	0.00268	1	10/23/2019 14:53	WG1367888
Total Xylenes	U		0.00512	0.00650	0.00697	1	10/23/2019 14:53	WG1367888
(S) Toluene-d8	106				75.0-131		10/23/2019 14:53	WG1367888
(S) 4-Bromofluorobenzene	98.1				67.0-138		10/23/2019 14:53	WG1367888
(S) 1,2-Dichloroethane-d4	95.1				70.0-130		10/23/2019 14:53	WG1367888

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	12.9		1.73	4.00	4.29	1	10/19/2019 12:11	WG1365512
C28-C40 Oil Range	35.9		0.294	4.00	4.29	1	10/19/2019 12:11	WG1365512
(S) o-Terphenyl	67.6				18.0-148		10/19/2019 12:11	WG1365512

Collected date/time: 10/09/19 13:40

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.0		1	10/23/2019 15:58	WG1367012

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	226		0.855	10.0	10.8	1	10/18/2019 03:53	WG1364316

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0236	0.100	0.109	1.01	10/20/2019 13:36	WG1365975
(S) a,a,a-Trifluorotoluene(FID)	94.4				77.0-120		10/20/2019 13:36	WG1365975

5 Sr

6 Qc

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000430	0.00100	0.00108	1	10/23/2019 15:14	WG1367888
Toluene	0.00498	J	0.00134	0.00500	0.00538	1	10/23/2019 15:14	WG1367888
Ethylbenzene	U		0.000570	0.00250	0.00269	1	10/23/2019 15:14	WG1367888
Total Xylenes	U		0.00514	0.00650	0.00699	1	10/23/2019 15:14	WG1367888
(S) Toluene-d8	104				75.0-131		10/23/2019 15:14	WG1367888
(S) 4-Bromofluorobenzene	94.7				67.0-138		10/23/2019 15:14	WG1367888
(S) 1,2-Dichloroethane-d4	94.1				70.0-130		10/23/2019 15:14	WG1367888

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.73	4.00	4.30	1	10/19/2019 10:38	WG1365512
C28-C40 Oil Range	5.42		0.295	4.00	4.30	1	10/19/2019 10:38	WG1365512
(S) o-Terphenyl	75.2				18.0-148		10/19/2019 10:38	WG1365512

Collected date/time: 10/09/19 13:50

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.9		1	10/23/2019 15:58	WG1367012

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	281		0.838	10.0	10.5	1	10/18/2019 04:12	WG1364316

5 Sr

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0229	0.100	0.105	1	10/20/2019 14:00	WG1365975
(S) a,a,a-Trifluorotoluene(FID)	95.8				77.0-120		10/20/2019 14:00	WG1365975

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000422	0.00100	0.00105	1	10/23/2019 15:34	WG1367888
Toluene	0.00458	J	0.00132	0.00500	0.00527	1	10/23/2019 15:34	WG1367888
Ethylbenzene	U		0.000559	0.00250	0.00263	1	10/23/2019 15:34	WG1367888
Total Xylenes	U		0.00504	0.00650	0.00685	1	10/23/2019 15:34	WG1367888
(S) Toluene-d8	103				75.0-131		10/23/2019 15:34	WG1367888
(S) 4-Bromofluorobenzene	95.8				67.0-138		10/23/2019 15:34	WG1367888
(S) 1,2-Dichloroethane-d4	100				70.0-130		10/23/2019 15:34	WG1367888

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.70	4.00	4.22	1	10/19/2019 11:17	WG1365512
C28-C40 Oil Range	0.291	J	0.289	4.00	4.22	1	10/19/2019 11:17	WG1365512
(S) o-Terphenyl	80.2				18.0-148		10/19/2019 11:17	WG1365512

Collected date/time: 10/09/19 14:00

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.4		1	10/23/2019 15:58	WG1367012

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	315		0.834	10.0	10.5	1	10/18/2019 04:21	WG1364316

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0230	0.100	0.106	1.01	10/20/2019 14:25	WG1365975
(S) a,a,a-Trifluorotoluene(FID)	96.0				77.0-120		10/20/2019 14:25	WG1365975

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000419	0.00100	0.00105	1	10/23/2019 15:55	WG1367888
Toluene	0.00464	J	0.00131	0.00500	0.00524	1	10/23/2019 15:55	WG1367888
Ethylbenzene	U		0.000556	0.00250	0.00262	1	10/23/2019 15:55	WG1367888
Total Xylenes	U		0.00501	0.00650	0.00682	1	10/23/2019 15:55	WG1367888
(S) Toluene-d8	103				75.0-131		10/23/2019 15:55	WG1367888
(S) 4-Bromofluorobenzene	96.9				67.0-138		10/23/2019 15:55	WG1367888
(S) 1,2-Dichloroethane-d4	95.6				70.0-130		10/23/2019 15:55	WG1367888

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.69	4.00	4.19	1	10/19/2019 11:30	WG1365512
C28-C40 Oil Range	0.609	J	0.287	4.00	4.19	1	10/19/2019 11:30	WG1365512
(S) o-Terphenyl	65.0				18.0-148		10/19/2019 11:30	WG1365512

Collected date/time: 10/09/19 14:10

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.6		1	10/23/2019 15:58	WG1367012

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	125		0.841	10.0	10.6	1	10/18/2019 04:31	WG1364316

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0229	0.100	0.106	1	10/20/2019 14:49	WG1365975
(S) a,a,a-Trifluorotoluene(FID)	95.6				77.0-120		10/20/2019 14:49	WG1365975

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000423	0.00100	0.00106	1	10/23/2019 09:21	WG1367888
Toluene	0.00534		0.00132	0.00500	0.00529	1	10/23/2019 09:21	WG1367888
Ethylbenzene	U		0.000560	0.00250	0.00264	1	10/23/2019 09:21	WG1367888
Total Xylenes	U		0.00505	0.00650	0.00687	1	10/23/2019 09:21	WG1367888
(S) Toluene-d8	103				75.0-131		10/23/2019 09:21	WG1367888
(S) 4-Bromofluorobenzene	97.1				67.0-138		10/23/2019 09:21	WG1367888
(S) 1,2-Dichloroethane-d4	101				70.0-130		10/23/2019 09:21	WG1367888

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.70	4.00	4.23	1	10/19/2019 11:43	WG1365512
C28-C40 Oil Range	0.302	J	0.290	4.00	4.23	1	10/19/2019 11:43	WG1365512
(S) o-Terphenyl	76.0				18.0-148		10/19/2019 11:43	WG1365512

Collected date/time: 10/09/19 14:20

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.7		1	10/23/2019 15:58	WG1367012

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	11.7	B	0.823	10.0	10.3	1	10/18/2019 04:40	WG1364316

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0225	0.100	0.103	1	10/20/2019 15:13	WG1365975
(S) a,a,a-Trifluorotoluene(FID)	95.9				77.0-120		10/20/2019 15:13	WG1365975

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000414	0.00100	0.00103	1	10/23/2019 09:42	WG1367888
Toluene	0.00443	J	0.00129	0.00500	0.00517	1	10/23/2019 09:42	WG1367888
Ethylbenzene	U		0.000548	0.00250	0.00259	1	10/23/2019 09:42	WG1367888
Total Xylenes	U		0.00495	0.00650	0.00672	1	10/23/2019 09:42	WG1367888
(S) Toluene-d8	103				75.0-131		10/23/2019 09:42	WG1367888
(S) 4-Bromofluorobenzene	94.7				67.0-138		10/23/2019 09:42	WG1367888
(S) 1,2-Dichloroethane-d4	101				70.0-130		10/23/2019 09:42	WG1367888

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.67	4.00	4.14	1	10/19/2019 11:56	WG1365512
C28-C40 Oil Range	0.430	J	0.283	4.00	4.14	1	10/19/2019 11:56	WG1365512
(S) o-Terphenyl	77.7				18.0-148		10/19/2019 11:56	WG1365512

Collected date/time: 10/09/19 14:30

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.9		1	10/23/2019 15:58	WG1367012

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	786	V	0.829	10.0	10.4	1	10/18/2019 04:50	WG1364316

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0226	0.100	0.104	1	10/19/2019 09:04	WG1364943
(S) a,a,a-Trifluorotoluene(FID)	92.8				77.0-120		10/19/2019 09:04	WG1364943

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000417	0.00100	0.00104	1	10/23/2019 10:03	WG1367888
Toluene	0.00544		0.00130	0.00500	0.00521	1	10/23/2019 10:03	WG1367888
Ethylbenzene	U		0.000552	0.00250	0.00261	1	10/23/2019 10:03	WG1367888
Total Xylenes	U		0.00498	0.00650	0.00678	1	10/23/2019 10:03	WG1367888
(S) Toluene-d8	104				75.0-131		10/23/2019 10:03	WG1367888
(S) 4-Bromofluorobenzene	98.2				67.0-138		10/23/2019 10:03	WG1367888
(S) 1,2-Dichloroethane-d4	98.9				70.0-130		10/23/2019 10:03	WG1367888

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	152		8.39	4.00	20.8	5	10/19/2019 14:22	WG1365512
C28-C40 Oil Range	304		1.43	4.00	20.8	5	10/19/2019 14:22	WG1365512
(S) o-Terphenyl	55.2				18.0-148		10/19/2019 14:22	WG1365512

Collected date/time: 10/09/19 14:40

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.2		1	10/23/2019 15:58	WG1367012

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	568		0.844	10.0	10.6	1	10/18/2019 05:38	WG1364316

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0230	0.100	0.106	1	10/19/2019 09:28	WG1364943
(S) a,a,a-Trifluorotoluene(FID)	94.3				77.0-120		10/19/2019 09:28	WG1364943

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000425	0.00100	0.00106	1	10/23/2019 10:24	WG1367888
Toluene	0.00507	J	0.00133	0.00500	0.00531	1	10/23/2019 10:24	WG1367888
Ethylbenzene	U		0.000563	0.00250	0.00265	1	10/23/2019 10:24	WG1367888
Total Xylenes	U		0.00507	0.00650	0.00690	1	10/23/2019 10:24	WG1367888
(S) Toluene-d8	105				75.0-131		10/23/2019 10:24	WG1367888
(S) 4-Bromofluorobenzene	94.8				67.0-138		10/23/2019 10:24	WG1367888
(S) 1,2-Dichloroethane-d4	101				70.0-130		10/23/2019 10:24	WG1367888

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	2.98	J	1.71	4.00	4.25	1	10/19/2019 12:24	WG1365512
C28-C40 Oil Range	7.65		0.291	4.00	4.25	1	10/19/2019 12:24	WG1365512
(S) o-Terphenyl	69.6				18.0-148		10/19/2019 12:24	WG1365512

Collected date/time: 10/09/19 14:50

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	83.5		1	10/23/2019 15:44	WG1367013

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	1580		4.76	10.0	59.9	5	10/18/2019 05:47	WG1364316

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0262	0.100	0.121	1.01	10/19/2019 10:16	WG1364943
(S) a,a,a-Trifluorotoluene(FID)	94.9				77.0-120		10/19/2019 10:16	WG1364943

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000479	0.00100	0.00120	1	10/23/2019 10:44	WG1367888
Toluene	0.00528	J	0.00150	0.00500	0.00599	1	10/23/2019 10:44	WG1367888
Ethylbenzene	U		0.000635	0.00250	0.00299	1	10/23/2019 10:44	WG1367888
Total Xylenes	U		0.00572	0.00650	0.00778	1	10/23/2019 10:44	WG1367888
(S) Toluene-d8	103				75.0-131		10/23/2019 10:44	WG1367888
(S) 4-Bromofluorobenzene	95.5				67.0-138		10/23/2019 10:44	WG1367888
(S) 1,2-Dichloroethane-d4	97.0				70.0-130		10/23/2019 10:44	WG1367888

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.93	4.00	4.79	1	10/19/2019 12:37	WG1365512
C28-C40 Oil Range	1.78	J	0.328	4.00	4.79	1	10/19/2019 12:37	WG1365512
(S) o-Terphenyl	73.4				18.0-148		10/19/2019 12:37	WG1365512

Collected date/time: 10/09/19 15:00

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	98.0		1	10/23/2019 15:44	WG1367013

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	453		0.811	10.0	10.2	1	10/18/2019 05:57	WG1364316

5 Sr

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0221	0.100	0.102	1	10/20/2019 15:37	WG1365975
(S) a,a,a-Trifluorotoluene(FID)	95.9				77.0-120		10/20/2019 15:37	WG1365975

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000408	0.00100	0.00102	1	10/23/2019 11:05	WG1367888
Toluene	0.00477	J	0.00128	0.00500	0.00510	1	10/23/2019 11:05	WG1367888
Ethylbenzene	U		0.000541	0.00250	0.00255	1	10/23/2019 11:05	WG1367888
Total Xylenes	U		0.00488	0.00650	0.00663	1	10/23/2019 11:05	WG1367888
(S) Toluene-d8	104				75.0-131		10/23/2019 11:05	WG1367888
(S) 4-Bromofluorobenzene	98.5				67.0-138		10/23/2019 11:05	WG1367888
(S) 1,2-Dichloroethane-d4	99.7				70.0-130		10/23/2019 11:05	WG1367888

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.64	4.00	4.08	1	10/19/2019 12:50	WG1365512
C28-C40 Oil Range	1.33	J	0.280	4.00	4.08	1	10/19/2019 12:50	WG1365512
(S) o-Terphenyl	85.2				18.0-148		10/19/2019 12:50	WG1365512

Collected date/time: 10/09/19 15:10

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	97.3		1	10/23/2019 15:44	WG1367013

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	318		0.817	10.0	10.3	1	10/18/2019 06:06	WG1364316

5 Sr

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0223	0.100	0.103	1	10/20/2019 16:01	WG1365975
(S) a,a,a-Trifluorotoluene(FID)	97.0				77.0-120		10/20/2019 16:01	WG1365975

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000411	0.00100	0.00103	1	10/23/2019 11:26	WG1367888
Toluene	0.00450	J	0.00128	0.00500	0.00514	1	10/23/2019 11:26	WG1367888
Ethylbenzene	U		0.000545	0.00250	0.00257	1	10/23/2019 11:26	WG1367888
Total Xylenes	U		0.00491	0.00650	0.00668	1	10/23/2019 11:26	WG1367888
(S) Toluene-d8	102				75.0-131		10/23/2019 11:26	WG1367888
(S) 4-Bromofluorobenzene	96.9				67.0-138		10/23/2019 11:26	WG1367888
(S) 1,2-Dichloroethane-d4	101				70.0-130		10/23/2019 11:26	WG1367888

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.65	4.00	4.11	1	10/19/2019 13:03	WG1365512
C28-C40 Oil Range	0.839	J	0.281	4.00	4.11	1	10/19/2019 13:03	WG1365512
(S) o-Terphenyl	77.0				18.0-148		10/19/2019 13:03	WG1365512

Collected date/time: 10/09/19 15:20

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	96.0		1	10/23/2019 15:44	WG1367013

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	396		0.828	10.0	10.4	1	10/18/2019 06:16	WG1364316

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0228	0.100	0.105	1.01	10/20/2019 16:25	WG1365975
(S) a,a,a-Trifluorotoluene(FID)	96.2				77.0-120		10/20/2019 16:25	WG1365975

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000417	0.00100	0.00104	1	10/23/2019 11:46	WG1367888
Toluene	0.00438	J	0.00130	0.00500	0.00521	1	10/23/2019 11:46	WG1367888
Ethylbenzene	U		0.000552	0.00250	0.00260	1	10/23/2019 11:46	WG1367888
Total Xylenes	U		0.00498	0.00650	0.00677	1	10/23/2019 11:46	WG1367888
(S) Toluene-d8	107				75.0-131		10/23/2019 11:46	WG1367888
(S) 4-Bromofluorobenzene	98.2				67.0-138		10/23/2019 11:46	WG1367888
(S) 1,2-Dichloroethane-d4	92.4				70.0-130		10/23/2019 11:46	WG1367888

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.68	4.00	4.17	1	10/19/2019 13:16	WG1365512
C28-C40 Oil Range	0.772	J	0.285	4.00	4.17	1	10/19/2019 13:16	WG1365512
(S) o-Terphenyl	79.6				18.0-148		10/19/2019 13:16	WG1365512

Collected date/time: 10/09/19 15:30

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.7		1	10/23/2019 15:44	WG1367013

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	19.7	B	0.822	10.0	10.3	1	10/18/2019 06:25	WG1364316

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0784	B J J3	0.0224	0.100	0.103	1	10/20/2019 17:25	WG1365550
(S) a,a,a-Trifluorotoluene(FID)	105				77.0-120		10/20/2019 17:25	WG1365550

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000414	0.00100	0.00103	1	10/23/2019 12:07	WG1367888
Toluene	0.00476	J	0.00129	0.00500	0.00517	1	10/23/2019 12:07	WG1367888
Ethylbenzene	U		0.000548	0.00250	0.00259	1	10/23/2019 12:07	WG1367888
Total Xylenes	U		0.00494	0.00650	0.00672	1	10/23/2019 12:07	WG1367888
(S) Toluene-d8	103				75.0-131		10/23/2019 12:07	WG1367888
(S) 4-Bromofluorobenzene	96.9				67.0-138		10/23/2019 12:07	WG1367888
(S) 1,2-Dichloroethane-d4	100				70.0-130		10/23/2019 12:07	WG1367888

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	57.3		8.32	4.00	20.7	5	10/19/2019 14:35	WG1365512
C28-C40 Oil Range	191		1.42	4.00	20.7	5	10/19/2019 14:35	WG1365512
(S) o-Terphenyl	91.4				18.0-148		10/19/2019 14:35	WG1365512

Collected date/time: 10/09/19 15:40

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.4		1	10/23/2019 15:44	WG1367013

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	1050		4.40	10.0	55.3	5	10/18/2019 06:35	WG1364316

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0701	B J	0.0240	0.100	0.111	1	10/20/2019 17:47	WG1365550
(S) a,a,a-Trifluorotoluene(FID)	104				77.0-120		10/20/2019 17:47	WG1365550

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000442	0.00100	0.00111	1	10/23/2019 12:28	WG1367888
Toluene	0.00656		0.00138	0.00500	0.00553	1	10/23/2019 12:28	WG1367888
Ethylbenzene	U		0.000586	0.00250	0.00276	1	10/23/2019 12:28	WG1367888
Total Xylenes	U		0.00529	0.00650	0.00719	1	10/23/2019 12:28	WG1367888
(S) Toluene-d8	110				75.0-131		10/23/2019 12:28	WG1367888
(S) 4-Bromofluorobenzene	101				67.0-138		10/23/2019 12:28	WG1367888
(S) 1,2-Dichloroethane-d4	103				70.0-130		10/23/2019 12:28	WG1367888

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	27.9		1.78	4.00	4.42	1	10/19/2019 13:55	WG1365512
C28-C40 Oil Range	67.9		0.303	4.00	4.42	1	10/19/2019 13:55	WG1365512
(S) o-Terphenyl	80.2				18.0-148		10/19/2019 13:55	WG1365512

Collected date/time: 10/09/19 15:50

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.8		1	10/23/2019 15:44	WG1367013

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	835		0.839	10.0	10.6	1	10/18/2019 06:44	WG1364316

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0745	B J	0.0231	0.100	0.107	1.01	10/20/2019 18:10	WG1365550
(S) a,a,a-Trifluorotoluene(FID)	104				77.0-120		10/20/2019 18:10	WG1365550

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000422	0.00100	0.00106	1	10/23/2019 13:30	WG1367938
Toluene	0.00433	J	0.00132	0.00500	0.00528	1	10/23/2019 13:30	WG1367938
Ethylbenzene	U		0.000559	0.00250	0.00264	1	10/23/2019 13:30	WG1367938
Total Xylenes	U		0.00504	0.00650	0.00686	1	10/23/2019 13:30	WG1367938
(S) Toluene-d8	100				75.0-131		10/23/2019 13:30	WG1367938
(S) 4-Bromofluorobenzene	95.6				67.0-138		10/23/2019 13:30	WG1367938
(S) 1,2-Dichloroethane-d4	113				70.0-130		10/23/2019 13:30	WG1367938

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	9.61		1.70	4.00	4.22	1	10/19/2019 13:29	WG1365512
C28-C40 Oil Range	22.9		0.289	4.00	4.22	1	10/19/2019 13:29	WG1365512
(S) o-Terphenyl	82.0				18.0-148		10/19/2019 13:29	WG1365512

Collected date/time: 10/10/19 10:00

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	90.0		1	10/23/2019 15:44	WG1367013

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	4040		8.84	10.0	111	10	10/18/2019 07:22	WG1364316

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0248	J	0.0244	0.100	0.112	1.01	10/20/2019 00:02	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	98.6				77.0-120		10/20/2019 00:02	WG1365589

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000445	0.00100	0.00111	1	10/24/2019 09:53	WG1368147
Toluene	0.00495	B J	0.00139	0.00500	0.00556	1	10/24/2019 09:53	WG1368147
Ethylbenzene	U		0.000589	0.00250	0.00278	1	10/24/2019 09:53	WG1368147
Total Xylenes	U		0.00531	0.00650	0.00722	1	10/24/2019 09:53	WG1368147
(S) Toluene-d8	96.2				75.0-131		10/24/2019 09:53	WG1368147
(S) 4-Bromofluorobenzene	96.9				67.0-138		10/24/2019 09:53	WG1368147
(S) 1,2-Dichloroethane-d4	124				70.0-130		10/24/2019 09:53	WG1368147

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	143		8.95	4.00	22.2	5	10/19/2019 14:48	WG1365512
C28-C40 Oil Range	242		1.52	4.00	22.2	5	10/19/2019 14:48	WG1365512
(S) o-Terphenyl	58.4				18.0-148		10/19/2019 14:48	WG1365512

Collected date/time: 10/10/19 10:10

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	92.3		1	10/23/2019 15:44	WG1367013

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	1850		8.61	10.0	108	10	10/18/2019 07:32	WG1364316

5 Sr

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0235	0.100	0.108	1	10/20/2019 00:23	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	98.9				77.0-120		10/20/2019 00:23	WG1365589

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000437	0.00100	0.00109	1.01	10/24/2019 10:11	WG1368147
Toluene	0.00498	B J	0.00137	0.00500	0.00547	1.01	10/24/2019 10:11	WG1368147
Ethylbenzene	U		0.000580	0.00250	0.00274	1.01	10/24/2019 10:11	WG1368147
Total Xylenes	U		0.00523	0.00650	0.00710	1.01	10/24/2019 10:11	WG1368147
(S) Toluene-d8	97.6				75.0-131		10/24/2019 10:11	WG1368147
(S) 4-Bromofluorobenzene	95.8				67.0-138		10/24/2019 10:11	WG1368147
(S) 1,2-Dichloroethane-d4	124				70.0-130		10/24/2019 10:11	WG1368147

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	7.62		1.74	4.00	4.33	1	10/19/2019 13:42	WG1365512
C28-C40 Oil Range	15.3		0.297	4.00	4.33	1	10/19/2019 13:42	WG1365512
(S) o-Terphenyl	78.3				18.0-148		10/19/2019 13:42	WG1365512

Collected date/time: 10/10/19 10:20

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.8		1	10/23/2019 15:44	WG1367013

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	454		0.876	10.0	11.0	1	10/18/2019 07:41	WG1364316

5 Sr

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0241	0.100	0.111	1.01	10/20/2019 00:44	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	99.1				77.0-120		10/20/2019 00:44	WG1365589

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000441	0.00100	0.00110	1	10/24/2019 10:30	WG1368147
Toluene	0.00510	B J	0.00138	0.00500	0.00551	1	10/24/2019 10:30	WG1368147
Ethylbenzene	U		0.000584	0.00250	0.00275	1	10/24/2019 10:30	WG1368147
Total Xylenes	U		0.00527	0.00650	0.00716	1	10/24/2019 10:30	WG1368147
(S) Toluene-d8	98.8				75.0-131		10/24/2019 10:30	WG1368147
(S) 4-Bromofluorobenzene	93.6				67.0-138		10/24/2019 10:30	WG1368147
(S) 1,2-Dichloroethane-d4	118				70.0-130		10/24/2019 10:30	WG1368147

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.77	4.00	4.41	1	10/19/2019 10:34	WG1365515
C28-C40 Oil Range	U		0.302	4.00	4.41	1	10/19/2019 10:34	WG1365515
(S) o-Terphenyl	83.9				18.0-148		10/19/2019 10:34	WG1365515

Collected date/time: 10/10/19 10:30

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.8		1	10/23/2019 15:31	WG1367014

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	264		0.885	10.0	11.1	1	10/18/2019 07:51	WG1364316

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0242	0.100	0.111	1	10/20/2019 01:04	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	99.5				77.0-120		10/20/2019 01:04	WG1365589

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000445	0.00100	0.00111	1	10/24/2019 10:49	WG1368147
Toluene	0.00440	B J	0.00139	0.00500	0.00557	1	10/24/2019 10:49	WG1368147
Ethylbenzene	U		0.000590	0.00250	0.00278	1	10/24/2019 10:49	WG1368147
Total Xylenes	U		0.00532	0.00650	0.00724	1	10/24/2019 10:49	WG1368147
(S) Toluene-d8	97.2				75.0-131		10/24/2019 10:49	WG1368147
(S) 4-Bromofluorobenzene	97.4				67.0-138		10/24/2019 10:49	WG1368147
(S) 1,2-Dichloroethane-d4	127				70.0-130		10/24/2019 10:49	WG1368147

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.79	4.00	4.45	1	10/19/2019 09:56	WG1365515
C28-C40 Oil Range	U		0.305	4.00	4.45	1	10/19/2019 09:56	WG1365515
(S) o-Terphenyl	83.8				18.0-148		10/19/2019 09:56	WG1365515

Collected date/time: 10/10/19 10:40

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.0		1	10/23/2019 15:31	WG1367014

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	72.9		0.846	10.0	10.6	1	10/18/2019 08:00	WG1364316

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0233	0.100	0.107	1.01	10/20/2019 01:25	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	99.3				77.0-120		10/20/2019 01:25	WG1365589

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000426	0.00100	0.00106	1	10/24/2019 11:08	WG1368147
Toluene	0.00445	B J	0.00133	0.00500	0.00532	1	10/24/2019 11:08	WG1368147
Ethylbenzene	U		0.000564	0.00250	0.00266	1	10/24/2019 11:08	WG1368147
Total Xylenes	U		0.00509	0.00650	0.00692	1	10/24/2019 11:08	WG1368147
(S) Toluene-d8	97.8				75.0-131		10/24/2019 11:08	WG1368147
(S) 4-Bromofluorobenzene	97.2				67.0-138		10/24/2019 11:08	WG1368147
(S) 1,2-Dichloroethane-d4	122				70.0-130		10/24/2019 11:08	WG1368147

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.71	4.00	4.26	1	10/19/2019 10:46	WG1365515
C28-C40 Oil Range	U		0.292	4.00	4.26	1	10/19/2019 10:46	WG1365515
(S) o-Terphenyl	80.1				18.0-148		10/19/2019 10:46	WG1365515

Collected date/time: 10/10/19 10:50

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.5		1	10/23/2019 15:31	WG1367014

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	155		0.860	10.0	10.8	1	10/17/2019 21:28	WG1364664

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0235	0.100	0.108	1	10/20/2019 01:45	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	99.7				77.0-120		10/20/2019 01:45	WG1365589

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000432	0.00100	0.00108	1	10/24/2019 11:27	WG1368147
Toluene	0.00454	B J	0.00135	0.00500	0.00540	1	10/24/2019 11:27	WG1368147
Ethylbenzene	U		0.000573	0.00250	0.00270	1	10/24/2019 11:27	WG1368147
Total Xylenes	U		0.00517	0.00650	0.00703	1	10/24/2019 11:27	WG1368147
(S) Toluene-d8	97.2				75.0-131		10/24/2019 11:27	WG1368147
(S) 4-Bromofluorobenzene	94.6				67.0-138		10/24/2019 11:27	WG1368147
(S) 1,2-Dichloroethane-d4	119				70.0-130		10/24/2019 11:27	WG1368147

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.74	4.00	4.32	1	10/19/2019 10:59	WG1365515
C28-C40 Oil Range	U		0.296	4.00	4.32	1	10/19/2019 10:59	WG1365515
(S) o-Terphenyl	86.7				18.0-148		10/19/2019 10:59	WG1365515

Collected date/time: 10/10/19 11:20

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	91.2		1	10/23/2019 15:31	WG1367014

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	53.7		0.872	10.0	11.0	1	10/17/2019 21:37	WG1364664

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0238	0.100	0.110	1	10/20/2019 02:06	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	99.4				77.0-120		10/20/2019 02:06	WG1365589

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000443	0.00100	0.00111	1.01	10/24/2019 11:45	WG1368147
Toluene	0.00529	B J	0.00138	0.00500	0.00554	1.01	10/24/2019 11:45	WG1368147
Ethylbenzene	U		0.000587	0.00250	0.00278	1.01	10/24/2019 11:45	WG1368147
Total Xylenes	U		0.00530	0.00650	0.00720	1.01	10/24/2019 11:45	WG1368147
(S) Toluene-d8	94.8				75.0-131		10/24/2019 11:45	WG1368147
(S) 4-Bromofluorobenzene	95.1				67.0-138		10/24/2019 11:45	WG1368147
(S) 1,2-Dichloroethane-d4	127				70.0-130		10/24/2019 11:45	WG1368147

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	4.84		1.77	4.00	4.39	1	10/19/2019 14:10	WG1365515
C28-C40 Oil Range	19.6		0.301	4.00	4.39	1	10/19/2019 14:10	WG1365515
(S) o-Terphenyl	73.5				18.0-148		10/19/2019 14:10	WG1365515

Collected date/time: 10/10/19 11:30

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.0		1	10/23/2019 15:31	WG1367014

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	50.1		0.837	10.0	10.5	1	10/17/2019 21:47	WG1364664

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0228	0.100	0.105	1	10/20/2019 02:26	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	99.4				77.0-120		10/20/2019 02:26	WG1365589

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000421	0.00100	0.00105	1	10/24/2019 12:04	WG1368147
Toluene	0.00417	<u>B J</u>	0.00132	0.00500	0.00526	1	10/24/2019 12:04	WG1368147
Ethylbenzene	U		0.000558	0.00250	0.00263	1	10/24/2019 12:04	WG1368147
Total Xylenes	U		0.00503	0.00650	0.00684	1	10/24/2019 12:04	WG1368147
(S) Toluene-d8	96.7				75.0-131		10/24/2019 12:04	WG1368147
(S) 4-Bromofluorobenzene	96.7				67.0-138		10/24/2019 12:04	WG1368147
(S) 1,2-Dichloroethane-d4	128				70.0-130		10/24/2019 12:04	WG1368147

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.03	<u>J</u>	1.69	4.00	4.21	1	10/19/2019 14:23	WG1365515
C28-C40 Oil Range	9.03		0.288	4.00	4.21	1	10/19/2019 14:23	WG1365515
(S) o-Terphenyl	85.3				18.0-148		10/19/2019 14:23	WG1365515

Collected date/time: 10/10/19 11:40

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.7		1	10/23/2019 15:31	WG1367014

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	59.9	J3	0.831	10.0	10.5	1	10/17/2019 21:56	WG1364664

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0227	0.100	0.105	1	10/20/2019 02:47	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	99.6				77.0-120		10/20/2019 02:47	WG1365589

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000418	0.00100	0.00105	1	10/24/2019 12:23	WG1368147
Toluene	0.00402	B J	0.00131	0.00500	0.00523	1	10/24/2019 12:23	WG1368147
Ethylbenzene	U		0.000554	0.00250	0.00261	1	10/24/2019 12:23	WG1368147
Total Xylenes	U		0.00500	0.00650	0.00680	1	10/24/2019 12:23	WG1368147
(S) Toluene-d8	99.3				75.0-131		10/24/2019 12:23	WG1368147
(S) 4-Bromofluorobenzene	94.3				67.0-138		10/24/2019 12:23	WG1368147
(S) 1,2-Dichloroethane-d4	125				70.0-130		10/24/2019 12:23	WG1368147

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.68	4.00	4.18	1	10/19/2019 11:12	WG1365515
C28-C40 Oil Range	U		0.286	4.00	4.18	1	10/19/2019 11:12	WG1365515
(S) o-Terphenyl	78.2				18.0-148		10/19/2019 11:12	WG1365515

Collected date/time: 10/10/19 11:50

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	96.1		1	10/23/2019 15:31	WG1367014

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Chloride	505		0.828	10.0	10.4	1	10/17/2019 22:15	WG1364664

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0228	0.100	0.105	1.01	10/20/2019 03:07	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	99.4				77.0-120		10/20/2019 03:07	WG1365589

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000421	0.00100	0.00105	1.01	10/24/2019 12:42	WG1368147
Toluene	0.00474	B J	0.00131	0.00500	0.00526	1.01	10/24/2019 12:42	WG1368147
Ethylbenzene	U		0.000557	0.00250	0.00263	1.01	10/24/2019 12:42	WG1368147
Total Xylenes	U		0.00503	0.00650	0.00683	1.01	10/24/2019 12:42	WG1368147
(S) Toluene-d8	98.3				75.0-131		10/24/2019 12:42	WG1368147
(S) 4-Bromofluorobenzene	93.9				67.0-138		10/24/2019 12:42	WG1368147
(S) 1,2-Dichloroethane-d4	129				70.0-130		10/24/2019 12:42	WG1368147

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.68	4.00	4.16	1	10/19/2019 11:25	WG1365515
C28-C40 Oil Range	U		0.285	4.00	4.16	1	10/19/2019 11:25	WG1365515
(S) o-Terphenyl	73.3				18.0-148		10/19/2019 11:25	WG1365515

Collected date/time: 10/10/19 12:00

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.0		1	10/23/2019 15:31	WG1367014

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	641		0.855	10.0	10.7	1	10/17/2019 22:25	WG1364664

5 Sr

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0233	0.100	0.107	1	10/20/2019 03:28	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	99.8				77.0-120		10/20/2019 03:28	WG1365589

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000430	0.00100	0.00107	1	10/24/2019 13:01	WG1368147
Toluene	0.00444	B J	0.00134	0.00500	0.00537	1	10/24/2019 13:01	WG1368147
Ethylbenzene	U		0.000570	0.00250	0.00269	1	10/24/2019 13:01	WG1368147
Total Xylenes	U		0.00514	0.00650	0.00699	1	10/24/2019 13:01	WG1368147
(S) Toluene-d8	97.0				75.0-131		10/24/2019 13:01	WG1368147
(S) 4-Bromofluorobenzene	97.8				67.0-138		10/24/2019 13:01	WG1368147
(S) 1,2-Dichloroethane-d4	131	J1			70.0-130		10/24/2019 13:01	WG1368147

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.73	4.00	4.30	1	10/19/2019 13:57	WG1365515
C28-C40 Oil Range	U		0.295	4.00	4.30	1	10/19/2019 13:57	WG1365515
(S) o-Terphenyl	77.5				18.0-148		10/19/2019 13:57	WG1365515

Collected date/time: 10/10/19 12:10

L1150129

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.9		1	10/23/2019 15:31	WG1367014

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Chloride	72.0		0.813	10.0	10.2	1	10/17/2019 22:34	WG1364664

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0222	0.100	0.102	1	10/20/2019 03:48	WG1365589
(S) a,a,a-Trifluorotoluene(FID)	99.6				77.0-120		10/20/2019 03:48	WG1365589

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000409	0.00100	0.00102	1	10/24/2019 13:20	WG1368147
Toluene	0.00446	B J	0.00128	0.00500	0.00511	1	10/24/2019 13:20	WG1368147
Ethylbenzene	U		0.000542	0.00250	0.00255	1	10/24/2019 13:20	WG1368147
Total Xylenes	U		0.00488	0.00650	0.00664	1	10/24/2019 13:20	WG1368147
(S) Toluene-d8	95.1				75.0-131		10/24/2019 13:20	WG1368147
(S) 4-Bromofluorobenzene	94.3				67.0-138		10/24/2019 13:20	WG1368147
(S) 1,2-Dichloroethane-d4	128				70.0-130		10/24/2019 13:20	WG1368147

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.65	4.00	4.09	1	10/19/2019 11:37	WG1365515
C28-C40 Oil Range	U		0.280	4.00	4.09	1	10/19/2019 11:37	WG1365515
(S) o-Terphenyl	81.2				18.0-148		10/19/2019 11:37	WG1365515

Total Solids by Method 2540 G-2011

[L1150129-01,02,03,04](#)

Method Blank (MB)

(MB) R3464447-1 10/23/19 13:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00400			

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

L1150123-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1150123-08 10/23/19 13:32 • (DUP) R3464447-3 10/23/19 13:32

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	76.7	76.6	1	0.0949		10

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3464447-2 10/23/19 13:32

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

Total Solids by Method 2540 G-2011

[L1150129-05,06,07,08,09,10,11,12,13,14](#)

Method Blank (MB)

(MB) R3464531-1 10/23/19 16:08

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	%		%	%
Total Solids	0.00800			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1150129-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1150129-13 10/23/19 16:08 • (DUP) R3464531-3 10/23/19 16:08

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	%	%		%		%
Total Solids	94.5	95.5	1	1.06		10

Laboratory Control Sample (LCS)

(LCS) R3464531-2 10/23/19 16:08

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

Total Solids by Method 2540 G-2011

[L1150129-15,16,17,18,19,20,21,22,23,24](#)

Method Blank (MB)

(MB) R3464524-1 10/23/19 15:58

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1150129-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1150129-24 10/23/19 15:58 • (DUP) R3464524-3 10/23/19 15:58

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Total Solids	94.2	93.9	1	0.256		10

Laboratory Control Sample (LCS)

(LCS) R3464524-2 10/23/19 15:58

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.2	100	85.0-115	

Total Solids by Method 2540 G-2011

[L1150129-25,26,27,28,29,30,31,32,33,34](#)

Method Blank (MB)

(MB) R3464518-1 10/23/19 15:44

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	%		%	%
Total Solids	0.00600			

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1150129-26 Original Sample (OS) • Duplicate (DUP)

(OS) L1150129-26 10/23/19 15:44 • (DUP) R3464518-3 10/23/19 15:44

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	%	%		%		%
Total Solids	98.0	98.0	1	0.00398		10

Laboratory Control Sample (LCS)

(LCS) R3464518-2 10/23/19 15:44

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
	%	%	%	%	
Total Solids	50.0	49.5	99.0	85.0-115	

Total Solids by Method 2540 G-2011

[L1150129-35,36,37,38,39,40,41,42,43](#)

Method Blank (MB)

(MB) R3464512-1 10/23/19 15:31

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	%		%	%
Total Solids	0.00500			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

L1150129-35 Original Sample (OS) • Duplicate (DUP)

(OS) L1150129-35 10/23/19 15:31 • (DUP) R3464512-3 10/23/19 15:31

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	%	%		%		%
Total Solids	89.8	90.3	1	0.471		10

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3464512-2 10/23/19 15:31

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

Wet Chemistry by Method 300.0

[L1150129-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16](#)

Method Blank (MB)

(MB) R3462091-1 10/17/19 09:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	3.14	↓	0.795	10.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1148806-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1148806-01 10/17/19 10:34 • (DUP) R3462091-3 10/17/19 10:50

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	25.8	15.4	1	50.5	P1	20

L1150129-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1150129-16 10/17/19 19:12 • (DUP) R3462091-8 10/17/19 19:27

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	70.9	62.5	1	12.6		20

Laboratory Control Sample (LCS)

(LCS) R3462091-2 10/17/19 09:47

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	208	104	90.0-110	

L1150129-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150129-06 10/17/19 15:20 • (MS) R3462091-6 10/17/19 15:36 • (MSD) R3462091-7 10/17/19 15:51

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	522	15400	15100	15200	0.000	0.000	1	80.0-120	E V	E V	0.630	20

Wet Chemistry by Method 300.0

[L1150129-17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36](#)

Method Blank (MB)

(MB) R3462345-1 10/18/19 02:47

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	4.55	↓	0.795	10.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1150129-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1150129-18 10/18/19 03:53 • (DUP) R3462345-3 10/18/19 04:02

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	226	212	1	6.40		20

L1150129-31 Original Sample (OS) • Duplicate (DUP)

(OS) L1150129-31 10/18/19 06:44 • (DUP) R3462345-6 10/18/19 07:13

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	835	872	1	4.34		20

Laboratory Control Sample (LCS)

(LCS) R3462345-2 10/18/19 02:57

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	211	105	90.0-110	

L1150129-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150129-23 10/18/19 04:50 • (MS) R3462345-4 10/18/19 05:19 • (MSD) R3462345-5 10/18/19 05:28

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	521	786	132	134	0.000	0.000	.1	80.0-120	<u>E V</u>	<u>E V</u>	1.63	20

Wet Chemistry by Method 300.0

[L1150129-37,38,39,40,41,42,43](#)

Method Blank (MB)

(MB) R3462290-1 10/17/19 20:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	4.71	J	0.795	10.0

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1150129-40 Original Sample (OS) • Duplicate (DUP)

(OS) L1150129-40 10/17/19 21:56 • (DUP) R3462290-3 10/17/19 22:06

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	59.9	43.5	1	31.6	J3	20

L1150137-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1150137-13 10/18/19 01:35 • (DUP) R3462290-6 10/18/19 01:45

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	42.9	41.9	1	2.37		20

Laboratory Control Sample (LCS)

(LCS) R3462290-2 10/17/19 20:58

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	212	106	90.0-110	

L1150137-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150137-07 10/18/19 00:00 • (MS) R3462290-4 10/18/19 00:10 • (MSD) R3462290-5 10/18/19 00:19

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	534	80.7	629	606	103	98.3	1	80.0-120			3.76	20

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

[L1150129-01,02,03,04](#)

Method Blank (MB)

(MB) R3463179-3 10/19/19 08:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	99.7			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3463179-2 10/19/19 08:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.93	108	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			106	77.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1150129-23,24,25](#)

Method Blank (MB)

(MB) R3463326-2 10/19/19 01:22

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3463326-1 10/19/19 00:09

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.69	122	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			105	77.0-120	

L1149584-68 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1149584-68 10/19/19 04:35 • (MS) R3463326-3 10/19/19 10:40 • (MSD) R3463326-4 10/19/19 11:04

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TPH (GC/FID) Low Fraction	1380	ND	1070	1470	70.5	99.5	250	10.0-151		J3	31.5	28
(S) a,a,a-Trifluorotoluene(FID)					103	104		77.0-120				

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

[L1150129-05,06,08,09,10,11,12,13](#)

Method Blank (MB)

(MB) R3463293-2 10/18/19 11:53

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0656	↓	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3463293-1 10/18/19 11:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.65	103	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			107	77.0-120	

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

[L1150129-29,30,31](#)

Method Blank (MB)

(MB) R3463029-2 10/20/19 14:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0731	<u>J</u>	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	106			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

Laboratory Control Sample (LCS)

(LCS) R3463029-1 10/20/19 13:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.45	99.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			103	77.0-120	

5 Sr

6 Qc

7 Gl

L1150129-29 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150129-29 10/20/19 17:25 • (MS) R3463029-3 10/20/19 23:24 • (MSD) R3463029-4 10/20/19 23:46

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.69	0.0784	1.22	2.19	20.1	37.2	1	10.0-151	<u>J3</u>		57.0	28
(S) a,a,a-Trifluorotoluene(FID)					101	90.9		77.0-120				

8 Al

9 Sc

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

[L1150129-07,32,33,34,35,36,37,38,39,40,41,42,43](#)

Method Blank (MB)

(MB) R3463765-2 10/19/19 20:48

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

Laboratory Control Sample (LCS)

(LCS) R3463765-1 10/19/19 19:38

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.14	93.5	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			102	77.0-120	

L1150129-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150129-07 10/19/19 23:42 • (MS) R3463765-3 10/20/19 05:33 • (MSD) R3463765-4 10/20/19 05:54

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	575	46.3	589	602	94.3	96.5	100	10.0-151			2.11	28
(S) a,a,a-Trifluorotoluene(FID)					108	109		77.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1150129-14,15,16,17,18,19,20,21,22,26,27,28](#)

Method Blank (MB)

(MB) R3463627-3 10/20/19 10:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120

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

(LCS) R3463627-1 10/20/19 08:37 • (LCSD) R3463627-2 10/20/19 09:01

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	4.47	5.10	81.3	92.7	72.0-127			13.2	20
(S) a,a,a-Trifluorotoluene(FID)				101	101	77.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1150129-01,02,03,04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R3464295-2 10/23/19 15:11

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	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	96.4			67.0-138
(S) 1,2-Dichloroethane-d4	113			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3464295-1 10/23/19 14:13

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.122	97.6	70.0-123	
Ethylbenzene	0.125	0.117	93.6	74.0-126	
Toluene	0.125	0.0955	76.4	75.0-121	
Xylenes, Total	0.375	0.342	91.2	72.0-127	
(S) Toluene-d8			95.6	75.0-131	
(S) 4-Bromofluorobenzene			97.4	67.0-138	
(S) 1,2-Dichloroethane-d4			127	70.0-130	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1150129-11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30](#)

Method Blank (MB)

(MB) R3464224-3 10/23/19 06:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	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	96.2			67.0-138
(S) 1,2-Dichloroethane-d4	102			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

(LCS) R3464224-1 10/23/19 05:31 • (LCSD) R3464224-2 10/23/19 05:52

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.136	0.128	109	102	70.0-123			6.06	20
Ethylbenzene	0.125	0.131	0.122	105	97.6	74.0-126			7.11	20
Toluene	0.125	0.123	0.112	98.4	89.6	75.0-121			9.36	20
Xylenes, Total	0.375	0.337	0.308	89.9	82.1	72.0-127			8.99	20
(S) Toluene-d8				104	103	75.0-131				
(S) 4-Bromofluorobenzene				100	96.8	67.0-138				
(S) 1,2-Dichloroethane-d4				106	107	70.0-130				

6 Qc

7 Gl

8 Al

9 Sc

L1150129-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150129-11 10/23/19 12:49 • (MS) R3464224-4 10/23/19 16:15 • (MSD) R3464224-5 10/23/19 16:36

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.127	U	0.117	0.122	92.0	96.0	1	10.0-149			4.26	37
Ethylbenzene	0.127	U	0.111	0.122	87.2	96.0	1	10.0-160			9.61	38
Toluene	0.127	0.0656	0.159	0.175	73.4	86.2	1	10.0-156			9.76	38
Xylenes, Total	0.382	U	0.273	0.310	71.5	81.1	1	10.0-160			12.6	38
(S) Toluene-d8					102	100		75.0-131				
(S) 4-Bromofluorobenzene					98.1	95.2		67.0-138				
(S) 1,2-Dichloroethane-d4					106	105		70.0-130				

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

[L1150129-31](#)

Method Blank (MB)

(MB) R3464169-3 10/23/19 09:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	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	97.8			75.0-131
(S) 4-Bromofluorobenzene	97.2			67.0-138
(S) 1,2-Dichloroethane-d4	121			70.0-130

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

(LCS) R3464169-1 10/23/19 08:28 • (LCSD) R3464169-2 10/23/19 08:46

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.112	0.116	89.6	92.8	70.0-123			3.51	20
Ethylbenzene	0.125	0.113	0.113	90.4	90.4	74.0-126			0.000	20
Toluene	0.125	0.114	0.113	91.2	90.4	75.0-121			0.881	20
Xylenes, Total	0.375	0.372	0.378	99.2	101	72.0-127			1.60	20
(S) Toluene-d8				97.5	95.4	75.0-131				
(S) 4-Bromofluorobenzene				96.9	94.9	67.0-138				
(S) 1,2-Dichloroethane-d4				118	124	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1150129-32,33,34,35,36,37,38,39,40,41,42,43](#)

Method Blank (MB)

(MB) R3464753-3 10/24/19 08:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	0.00165	↓	0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	95.3			75.0-131
(S) 4-Bromofluorobenzene	95.6			67.0-138
(S) 1,2-Dichloroethane-d4	121			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

(LCS) R3464753-1 10/24/19 06:45 • (LCSD) R3464753-2 10/24/19 07:03

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.107	0.108	85.6	86.4	70.0-123			0.930	20
Ethylbenzene	0.125	0.113	0.105	90.4	84.0	74.0-126			7.34	20
Toluene	0.125	0.108	0.106	86.4	84.8	75.0-121			1.87	20
Xylenes, Total	0.375	0.352	0.350	93.9	93.3	72.0-127			0.570	20
(S) Toluene-d8				95.6	94.0	75.0-131				
(S) 4-Bromofluorobenzene				96.9	97.5	67.0-138				
(S) 1,2-Dichloroethane-d4				119	124	70.0-130				

6 Qc

7 Gl

8 Al

9 Sc

L1149492-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1149492-03 10/24/19 08:18 • (MS) R3464753-4 10/24/19 16:09 • (MSD) R3464753-5 10/24/19 16:28

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.125	ND	0.103	0.109	82.4	87.2	1	10.0-149			5.66	37
Ethylbenzene	0.125	ND	0.0963	0.108	77.0	86.4	1	10.0-160			11.5	38
Toluene	0.125	ND	0.104	0.109	83.2	87.2	1	10.0-156			4.69	38
Xylenes, Total	0.375	ND	0.327	0.354	87.2	94.4	1	10.0-160			7.93	38
(S) Toluene-d8					94.4	95.3		75.0-131				
(S) 4-Bromofluorobenzene					93.9	96.6		67.0-138				
(S) 1,2-Dichloroethane-d4					126	128		70.0-130				

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1150129-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15](#)

Method Blank (MB)

(MB) R3462667-1 10/18/19 23:10

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	58.6			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3462667-2 10/18/19 23:26

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	42.6	85.2	50.0-150	
(S) o-Terphenyl			80.2	18.0-148	

L1150129-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150129-01 10/19/19 02:34 • (MS) R3462667-3 10/19/19 02:47 • (MSD) R3462667-4 10/19/19 03:00

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	53.4	8.53	50.6	49.8	78.6	77.2	1	50.0-150			1.49	20
(S) o-Terphenyl					56.8	56.6		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1150129-16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33](#)

Method Blank (MB)

(MB) R3462885-1 10/19/19 09:45

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	83.3			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3462885-2 10/19/19 09:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	37.9	75.8	50.0-150	
(S) o-Terphenyl			68.6	18.0-148	

L1150129-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150129-18 10/19/19 10:38 • (MS) R3462885-3 10/19/19 10:51 • (MSD) R3462885-4 10/19/19 11:04

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	53.8	U	43.2	51.0	80.4	94.8	1	50.0-150			16.4	20
(S) o-Terphenyl					66.8	80.6		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1150129-34,35,36,37,38,39,40,41,42,43](#)

Method Blank (MB)

(MB) R3462800-1 10/19/19 09:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	88.3			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3462800-2 10/19/19 09:43

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	43.1	86.2	50.0-150	
(S) o-Terphenyl			107	18.0-148	

L1150129-35 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150129-35 10/19/19 09:56 • (MS) R3462800-3 10/19/19 10:08 • (MSD) R3462800-4 10/19/19 10:21

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	53.2	U	46.9	44.2	88.1	83.2	1	50.0-150			5.87	20
(S) o-Terphenyl					96.7	91.7		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

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

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.

Qualifier	Description
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
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

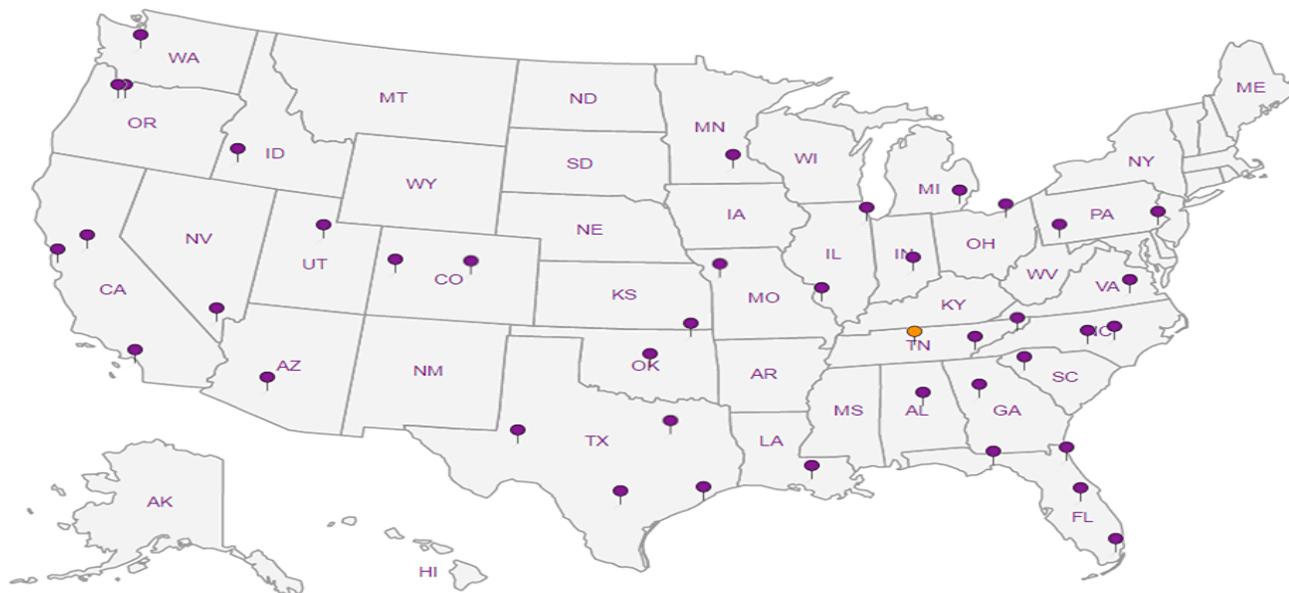
Third Party Federal Accreditations

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.



1
Cp

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Tc

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Ss

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Pace Analytical National Center for Testing & Innovation Cooler Receipt Form

Client:	COPPETRA	1150129
Cooler Received/Opened On:	10/15/19	Temperature: 0.2
Received By:	Hailey Melson	
Signature:	<i>Hailey Melson</i>	

	NP	Yes	No
Receipt Check List			
COC Seal Present / Intact?	<input checked="" type="checkbox"/>		
COC Signed / Accurate?		<input checked="" type="checkbox"/>	
Bottles arrive intact?		<input checked="" type="checkbox"/>	
Correct bottles used?		<input checked="" type="checkbox"/>	
Sufficient volume sent?			
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			



ANALYTICAL REPORT

June 08, 2020



ConocoPhillips - Tetra Tech

Sample Delivery Group: L1223379
 Samples Received: 05/29/2020
 Project Number: 212C-MD-01929
 Description: COP EVGSAU 3308-007

Report To: Christinal 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.



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BH-20-1W (0-1) L1223379-01 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 08:00
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486307	1	06/03/20 22:07	06/03/20 22:18	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1485960	1	06/04/20 21:20	06/05/20 00:43	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1485299	1	05/30/20 10:41	06/01/20 17:17	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1485238	1	05/30/20 10:41	06/01/20 15:46	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1484968	1	06/02/20 07:56	06/05/20 14:45	KME	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

BH-20-1W (2-3) L1223379-02 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 08:05
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486307	1	06/03/20 22:07	06/03/20 22:18	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1485960	1	06/04/20 21:20	06/05/20 00:58	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1485299	1	05/30/20 10:41	06/01/20 16:21	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1485238	1	05/30/20 10:41	06/01/20 16:05	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1484968	1	06/02/20 07:56	06/03/20 07:04	KME	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

BH-20-1W (4-5) L1223379-03 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 08:10
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486307	1	06/03/20 22:07	06/03/20 22:18	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1485960	1	06/04/20 21:20	06/05/20 01:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1485299	1	05/30/20 10:41	06/01/20 17:40	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1485238	1	05/30/20 10:41	06/01/20 16:24	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1484968	1	06/02/20 07:56	06/03/20 06:01	KME	Mt. Juliet, TN

9 Sc

BH-20-1W (6-7) L1223379-04 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 08:20
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486307	1	06/03/20 22:07	06/03/20 22:18	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1485960	1	06/04/20 21:20	06/05/20 01:28	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1485299	1	05/30/20 10:41	06/01/20 18:02	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1485238	1	05/30/20 10:41	06/01/20 16:43	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1484968	1	06/02/20 07:56	06/03/20 06:17	KME	Mt. Juliet, TN

BH-20-1W (9-10) L1223379-05 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 08:30
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486307	1	06/03/20 22:07	06/03/20 22:18	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1485960	1	06/04/20 21:20	06/05/20 01:58	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1485339	1	05/30/20 10:41	06/01/20 14:38	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1485238	1	05/30/20 10:41	06/01/20 17:02	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1484968	1	06/02/20 07:56	06/03/20 06:33	KME	Mt. Juliet, TN

BH-20-2W (0-1) L1223379-06 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 09:00
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486307	1	06/03/20 22:07	06/03/20 22:18	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1485960	1	06/04/20 21:20	06/05/20 02:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1485339	1	05/30/20 10:41	06/01/20 15:27	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1485238	1	05/30/20 10:41	06/01/20 17:21	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1484968	1	06/02/20 07:56	06/03/20 06:48	KME	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

BH-20-2W (2-3) L1223379-07 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 09:05
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486309	1	06/03/20 21:45	06/03/20 21:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1485960	1	06/04/20 21:20	06/05/20 02:28	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1485339	1	05/30/20 10:41	06/01/20 15:48	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1485238	1	05/30/20 10:41	06/01/20 17:40	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1485512	1	06/02/20 12:46	06/02/20 19:56	KME	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

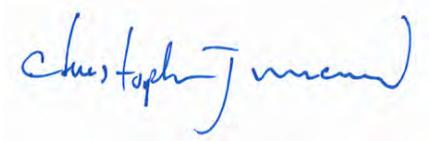
BH-20-2W (4-5) L1223379-08 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 09:10
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486309	1	06/03/20 21:45	06/03/20 21:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1485960	1	06/04/20 21:20	06/05/20 03:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1485339	1	05/30/20 10:41	06/01/20 17:38	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1485238	1	05/30/20 10:41	06/01/20 17:59	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1485512	1	06/02/20 12:46	06/02/20 20:09	KME	Mt. Juliet, TN

9 Sc

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



Chris McCord
Project Manager

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

Collected date/time: 05/21/20 08:00

L1223379

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.4		1	06/03/2020 22:18	WG1486307

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.64	21.0	1	06/05/2020 00:43	WG1485960

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0813	B J	0.0227	0.105	1	06/01/2020 17:17	WG1485299
(S) a,a,a-Trifluorotoluene(FID)	94.4			77.0-120		06/01/2020 17:17	WG1485299

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000489	0.00105	1	06/01/2020 15:46	WG1485238
Toluene	U		0.00136	0.00524	1	06/01/2020 15:46	WG1485238
Ethylbenzene	U		0.000772	0.00262	1	06/01/2020 15:46	WG1485238
Total Xylenes	U		0.000922	0.00681	1	06/01/2020 15:46	WG1485238
(S) Toluene-d8	105			75.0-131		06/01/2020 15:46	WG1485238
(S) 4-Bromofluorobenzene	92.4			67.0-138		06/01/2020 15:46	WG1485238
(S) 1,2-Dichloroethane-d4	79.4			70.0-130		06/01/2020 15:46	WG1485238

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	10.6		1.69	4.19	1	06/05/2020 14:45	WG1484968
C28-C40 Oil Range	20.4	B	0.287	4.19	1	06/05/2020 14:45	WG1484968
(S) o-Terphenyl	129			18.0-148		06/05/2020 14:45	WG1484968

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.1		1	06/03/2020 22:18	WG1486307

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	18.2	J	9.38	20.4	1	06/05/2020 00:58	WG1485960

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0567	B J	0.0221	0.102	1	06/01/2020 16:21	WG1485299
(S) a,a,a-Trifluorotoluene(FID)	92.9			77.0-120		06/01/2020 16:21	WG1485299

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000476	0.00102	1	06/01/2020 16:05	WG1485238
Toluene	U		0.00133	0.00510	1	06/01/2020 16:05	WG1485238
Ethylbenzene	U		0.000751	0.00255	1	06/01/2020 16:05	WG1485238
Total Xylenes	U		0.000897	0.00663	1	06/01/2020 16:05	WG1485238
(S) Toluene-d8	107			75.0-131		06/01/2020 16:05	WG1485238
(S) 4-Bromofluorobenzene	93.7			67.0-138		06/01/2020 16:05	WG1485238
(S) 1,2-Dichloroethane-d4	78.1			70.0-130		06/01/2020 16:05	WG1485238

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.64	4.08	1	06/03/2020 07:04	WG1484968
C28-C40 Oil Range	1.65	B J	0.279	4.08	1	06/03/2020 07:04	WG1484968
(S) o-Terphenyl	70.9			18.0-148		06/03/2020 07:04	WG1484968

Collected date/time: 05/21/20 08:10

L1223379

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.3		1	06/03/2020 22:18	WG1486307

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

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	47.6		9.45	20.5	1	06/05/2020 01:13	WG1485960

- 5 Sr
- 6 Qc
- 7 Gl

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	0.0497	BJ	0.0223	0.103	1	06/01/2020 17:40	WG1485299
(S) a,a,a-Trifluorotoluene(FID)	96.0			77.0-120		06/01/2020 17:40	WG1485299

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		0.000480	0.00103	1	06/01/2020 16:24	WG1485238
Toluene	U		0.00134	0.00514	1	06/01/2020 16:24	WG1485238
Ethylbenzene	U		0.000757	0.00257	1	06/01/2020 16:24	WG1485238
Total Xylenes	U		0.000904	0.00668	1	06/01/2020 16:24	WG1485238
(S) Toluene-d8	106			75.0-131		06/01/2020 16:24	WG1485238
(S) 4-Bromofluorobenzene	92.7			67.0-138		06/01/2020 16:24	WG1485238
(S) 1,2-Dichloroethane-d4	75.9			70.0-130		06/01/2020 16:24	WG1485238

- 8 Al
- 9 Sc

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	06/03/2020 06:01	WG1484968
C28-C40 Oil Range	1.32	BJ	0.282	4.11	1	06/03/2020 06:01	WG1484968
(S) o-Terphenyl	67.7			18.0-148		06/03/2020 06:01	WG1484968

Collected date/time: 05/21/20 08:20

L1223379

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.6		1	06/03/2020 22:18	WG1486307

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	175		9.62	20.9	1	06/05/2020 01:28	WG1485960

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0463	B J	0.0227	0.105	1	06/01/2020 18:02	WG1485299
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120		06/01/2020 18:02	WG1485299

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000488	0.00105	1	06/01/2020 16:43	WG1485238
Toluene	U		0.00136	0.00523	1	06/01/2020 16:43	WG1485238
Ethylbenzene	U		0.000771	0.00261	1	06/01/2020 16:43	WG1485238
Total Xylenes	U		0.000920	0.00680	1	06/01/2020 16:43	WG1485238
(S) Toluene-d8	108			75.0-131		06/01/2020 16:43	WG1485238
(S) 4-Bromofluorobenzene	93.0			67.0-138		06/01/2020 16:43	WG1485238
(S) 1,2-Dichloroethane-d4	75.9			70.0-130		06/01/2020 16:43	WG1485238

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.68	4.18	1	06/03/2020 06:17	WG1484968
C28-C40 Oil Range	U		0.287	4.18	1	06/03/2020 06:17	WG1484968
(S) o-Terphenyl	72.0			18.0-148		06/03/2020 06:17	WG1484968

Collected date/time: 05/21/20 08:30

L1223379

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.9		1	06/03/2020 22:18	WG1486307

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	191		9.59	20.9	1	06/05/2020 01:58	WG1485960

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0226	0.104	1	06/01/2020 14:38	WG1485339
(S) a,a,a-Trifluorotoluene(FID)	102			77.0-120		06/01/2020 14:38	WG1485339

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000487	0.00104	1	06/01/2020 17:02	WG1485238
Toluene	U		0.00136	0.00521	1	06/01/2020 17:02	WG1485238
Ethylbenzene	U		0.000768	0.00261	1	06/01/2020 17:02	WG1485238
Total Xylenes	U		0.000918	0.00678	1	06/01/2020 17:02	WG1485238
(S) Toluene-d8	107			75.0-131		06/01/2020 17:02	WG1485238
(S) 4-Bromofluorobenzene	92.6			67.0-138		06/01/2020 17:02	WG1485238
(S) 1,2-Dichloroethane-d4	72.6			70.0-130		06/01/2020 17:02	WG1485238

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.68	4.17	1	06/03/2020 06:33	WG1484968
C28-C40 Oil Range	U		0.286	4.17	1	06/03/2020 06:33	WG1484968
(S) o-Terphenyl	67.8			18.0-148		06/03/2020 06:33	WG1484968

Collected date/time: 05/21/20 09:00

L1223379

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	96.8		1	06/03/2020 22:18	WG1486307

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	128		9.51	20.7	1	06/05/2020 02:13	WG1485960

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	06/01/2020 15:27	WG1485339
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		06/01/2020 15:27	WG1485339

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000483	0.00103	1	06/01/2020 17:21	WG1485238
Toluene	U		0.00134	0.00517	1	06/01/2020 17:21	WG1485238
Ethylbenzene	U		0.000762	0.00258	1	06/01/2020 17:21	WG1485238
Total Xylenes	U		0.000909	0.00672	1	06/01/2020 17:21	WG1485238
(S) Toluene-d8	107			75.0-131		06/01/2020 17:21	WG1485238
(S) 4-Bromofluorobenzene	93.1			67.0-138		06/01/2020 17:21	WG1485238
(S) 1,2-Dichloroethane-d4	73.8			70.0-130		06/01/2020 17:21	WG1485238

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	2.58	J	1.66	4.13	1	06/03/2020 06:48	WG1484968
C28-C40 Oil Range	5.61	B	0.283	4.13	1	06/03/2020 06:48	WG1484968
(S) o-Terphenyl	70.0			18.0-148		06/03/2020 06:48	WG1484968

Collected date/time: 05/21/20 09:05

L1223379

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.8		1	06/03/2020 21:57	WG1486309

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	315		9.40	20.4	1	06/05/2020 02:28	WG1485960

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	06/01/2020 15:48	WG1485339
(S) a,a,a-Trifluorotoluene(FID)	97.4			77.0-120		06/01/2020 15:48	WG1485339

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000477	0.00102	1	06/01/2020 17:40	WG1485238
Toluene	U		0.00133	0.00511	1	06/01/2020 17:40	WG1485238
Ethylbenzene	U		0.000753	0.00256	1	06/01/2020 17:40	WG1485238
Total Xylenes	U		0.000900	0.00664	1	06/01/2020 17:40	WG1485238
(S) Toluene-d8	108			75.0-131		06/01/2020 17:40	WG1485238
(S) 4-Bromofluorobenzene	92.4			67.0-138		06/01/2020 17:40	WG1485238
(S) 1,2-Dichloroethane-d4	73.8			70.0-130		06/01/2020 17:40	WG1485238

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.65	4.09	1	06/02/2020 19:56	WG1485512
C28-C40 Oil Range	3.02	<u>BJ</u>	0.280	4.09	1	06/02/2020 19:56	WG1485512
(S) o-Terphenyl	75.8			18.0-148		06/02/2020 19:56	WG1485512

Collected date/time: 05/21/20 09:10

L1223379

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.7		1	06/03/2020 21:57	WG1486309

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	278		9.62	20.9	1	06/05/2020 03:13	WG1485960

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	06/01/2020 17:38	WG1485339
(S) a,a,a-Trifluorotoluene(FID)	106			77.0-120		06/01/2020 17:38	WG1485339

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000488	0.00105	1	06/01/2020 17:59	WG1485238
Toluene	U		0.00136	0.00523	1	06/01/2020 17:59	WG1485238
Ethylbenzene	U		0.000770	0.00261	1	06/01/2020 17:59	WG1485238
Total Xylenes	U		0.000920	0.00679	1	06/01/2020 17:59	WG1485238
(S) Toluene-d8	108			75.0-131		06/01/2020 17:59	WG1485238
(S) 4-Bromofluorobenzene	92.9			67.0-138		06/01/2020 17:59	WG1485238
(S) 1,2-Dichloroethane-d4	78.6			70.0-130		06/01/2020 17:59	WG1485238

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.68	4.18	1	06/02/2020 20:09	WG1485512
C28-C40 Oil Range	0.839	<u>BJ</u>	0.286	4.18	1	06/02/2020 20:09	WG1485512
(S) o-Terphenyl	70.0			18.0-148		06/02/2020 20:09	WG1485512

Total Solids by Method 2540 G-2011

[L1223379-01,02,03,04,05,06](#)

Method Blank (MB)

(MB) R3535059-1 06/03/20 22:18

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1223377-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1223377-03 06/03/20 22:18 • (DUP) R3535059-3 06/03/20 22:18

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	92.7	92.5	1	0.259		10

Laboratory Control Sample (LCS)

(LCS) R3535059-2 06/03/20 22:18

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

Total Solids by Method 2540 G-2011

[L1223379-07,08](#)

Method Blank (MB)

(MB) R3535057-1 06/03/20 21:57

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	%		%	%
Total Solids	0.00100			

1 Cp

2 Tc

3 Ss

Original Sample (OS) • Duplicate (DUP)

(OS) • (DUP) R3535057-3 06/03/20 21:57

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
		%		%		%
Total Solids		93.9	1	0.947		10

4 Cn

5 Sr

Laboratory Control Sample (LCS)

(LCS) R3535057-2 06/03/20 21:57

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

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

L1223379-01,02,03,04,05,06,07,08

Method Blank (MB)

(MB) R3535396-1 06/04/20 23:59

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		9.20	20.0

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1223379-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1223379-04 06/05/20 01:28 • (DUP) R3535396-3 06/05/20 01:43

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	175	174	1	0.587		20

L1223380-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1223380-08 06/05/20 06:12 • (DUP) R3535396-6 06/05/20 06:27

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	24.0	25.2	1	4.90		20

Laboratory Control Sample (LCS)

(LCS) R3535396-2 06/05/20 00:14

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	206	103	90.0-110	

L1223379-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1223379-08 06/05/20 03:13 • (MS) R3535396-4 06/05/20 03:28 • (MSD) R3535396-5 06/05/20 03:43

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	523	278	817	804	103	101	1	80.0-120			1.66	20

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

[L1223379-01,02,03,04](#)

Method Blank (MB)

(MB) R3534835-2 06/01/20 12:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPH (GC/FID) Low Fraction	0.0462	↓	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	96.5			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3534835-1 06/01/20 11:42

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.06	92.0	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			101	77.0-120	

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3534835-3 06/01/20 23:50 • (MSD) R3534835-4 06/02/20 00:12

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TPH (GC/FID) Low Fraction	2750		4800	4990	93.1	100	500	10.0-151			3.88	28
(S) a,a,a-Trifluorotoluene(FID)					115	116		77.0-120				

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

[L1223379-05.06.07.08](#)

Method Blank (MB)

(MB) R3534748-2 06/01/20 12:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3534748-1 06/01/20 11:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.46	81.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			95.4	77.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1223379-01,02,03,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3534254-3 06/01/20 12:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	0.00145	↓	0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	110			75.0-131
(S) 4-Bromofluorobenzene	93.9			67.0-138
(S) 1,2-Dichloroethane-d4	81.3			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

(LCS) R3534254-1 06/01/20 09:12 • (LCSD) R3534254-2 06/01/20 09:30

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.113	0.110	90.4	88.0	70.0-123			2.69	20
Ethylbenzene	0.125	0.116	0.110	92.8	88.0	74.0-126			5.31	20
Toluene	0.125	0.118	0.115	94.4	92.0	75.0-121			2.58	20
Xylenes, Total	0.375	0.362	0.345	96.5	92.0	72.0-127			4.81	20
(S) Toluene-d8				99.8	100	75.0-131				
(S) 4-Bromofluorobenzene				97.2	94.9	67.0-138				
(S) 1,2-Dichloroethane-d4				95.6	91.9	70.0-130				

6 Qc

7 Gl

8 Al

9 Sc

L1223379-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1223379-03 06/01/20 16:24 • (MS) R3534254-4 06/01/20 20:30 • (MSD) R3534254-5 06/01/20 20:49

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.128	U	0.0924	0.101	71.9	78.7	1	10.0-149			9.03	37
Ethylbenzene	0.128	U	0.0938	0.103	73.0	80.0	1	10.0-160			9.10	38
Toluene	0.128	U	0.105	0.115	81.6	89.6	1	10.0-156			9.35	38
Xylenes, Total	0.385	U	0.298	0.328	77.3	85.1	1	10.0-160			9.52	38
(S) Toluene-d8					107	105		75.0-131				
(S) 4-Bromofluorobenzene					92.4	92.7		67.0-138				
(S) 1,2-Dichloroethane-d4					76.6	80.2		70.0-130				

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1223379-01,02,03,04,05,06](#)

Method Blank (MB)

(MB) R3534522-1 06/03/20 04:25

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	2.60	J	0.274	4.00
(S) o-Terphenyl	68.2			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3534522-2 06/03/20 04:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	34.6	69.2	50.0-150	
(S) o-Terphenyl			59.0	18.0-148	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1223379-07.08](#)

Method Blank (MB)

(MB) R3534383-1 06/02/20 19:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	0.428	J	0.274	4.00
(S) o-Terphenyl	64.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3534383-2 06/02/20 19:43

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	36.6	73.2	50.0-150	
(S) o-Terphenyl			84.1	18.0-148	

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3534744-1 06/03/20 18:16 • (MSD) R3534744-2 06/03/20 18:30

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg		mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	53.7		355	355	120	120	5	50.0-150			0.000	20
(S) o-Terphenyl					56.9	62.2		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
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

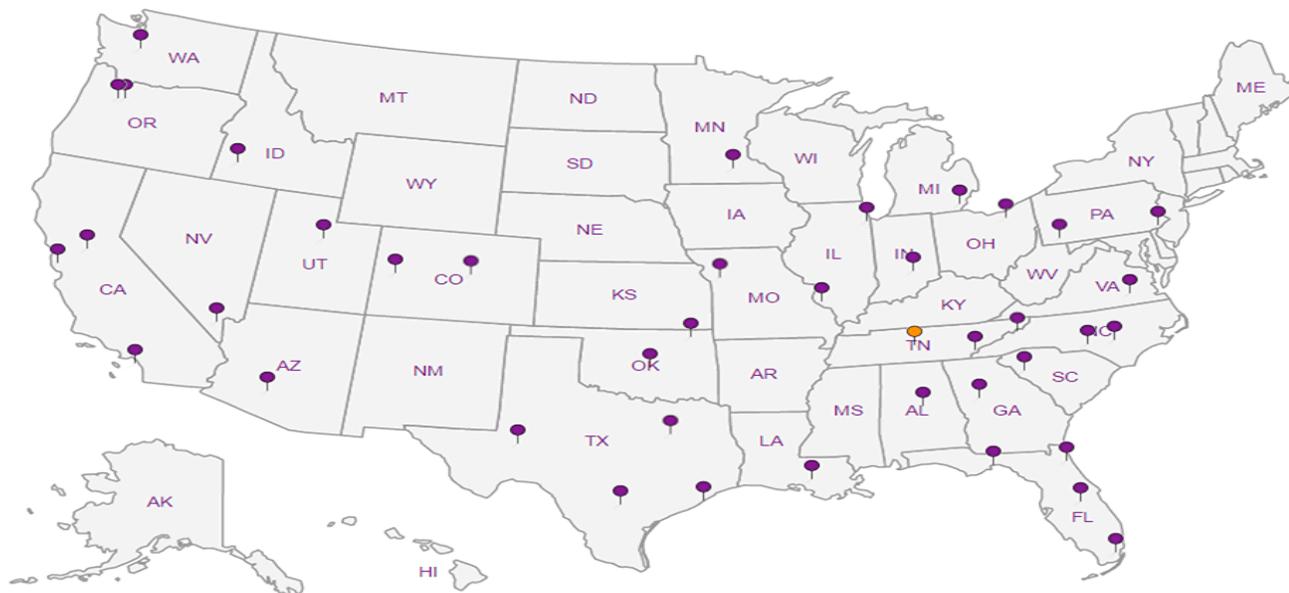
Third Party Federal Accreditations

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.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Pace Analytical National Center for Testing & Innovation Cooler Receipt Form			
Client:	Copetra	122319	
Cooler Received/Opened On:	5/29/20	Temperature:	Amb
Received By:	Lakeacher Webster		
Signature:	<i>L. Webster</i>		
Receipt Check List			
	NP	Yes	No
COC Seal Present / Intact?		/	
COC Signed / Accurate?		/	
Bottles arrive intact?		/	
Correct bottles used?		/	
Sufficient volume sent?		/	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			



ANALYTICAL REPORT

June 10, 2020



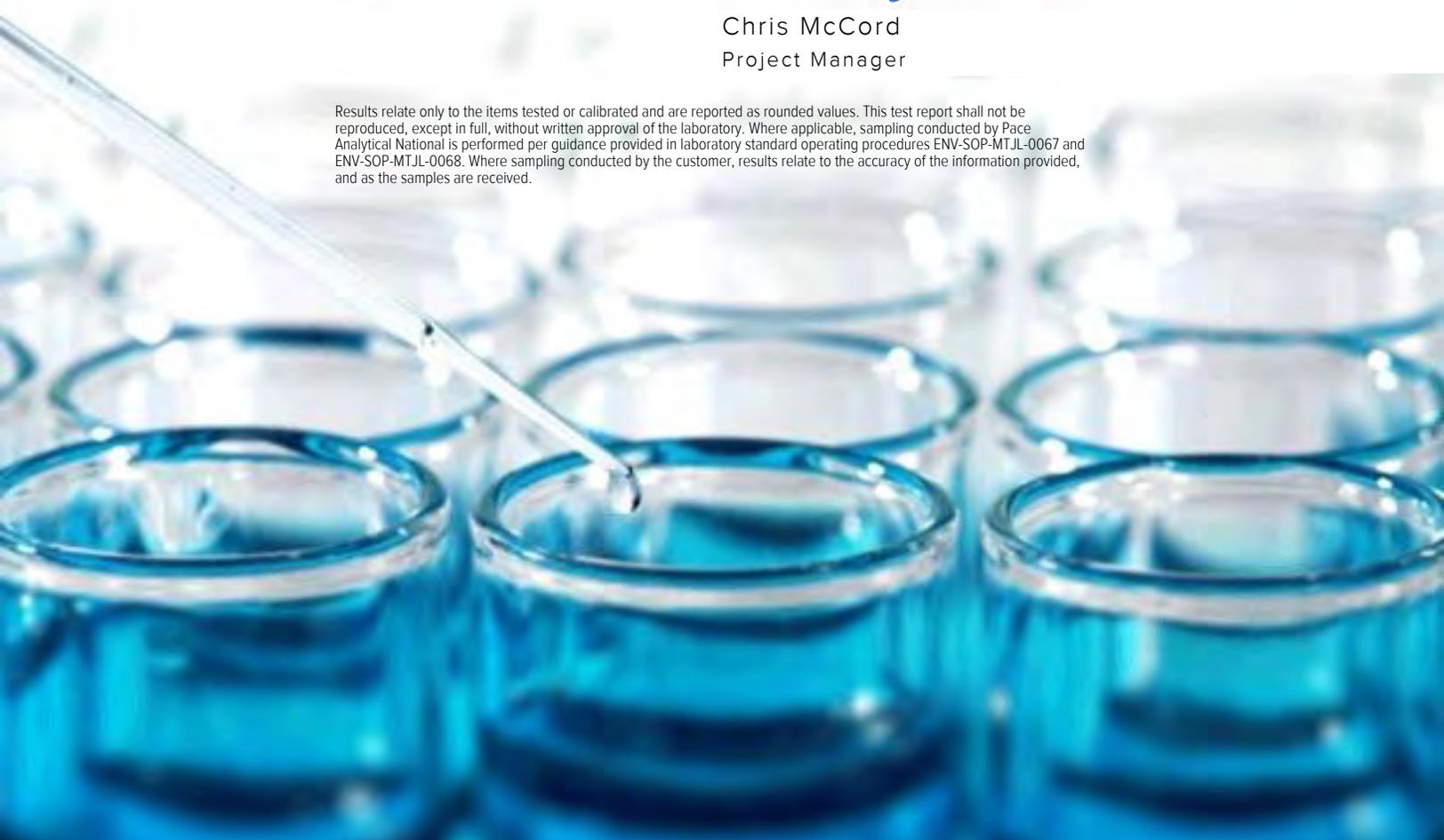
ConocoPhillips - Tetra Tech

Sample Delivery Group: L1223523
 Samples Received: 05/29/2020
 Project Number: 212C-MD-01576
 Description: EVGSAU 3366-029
 Site: LEA COUNTY, NM
 Report To: Christian Lull
 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.



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SAMPLE SUMMARY

BH-20-1 (0-1) L1223523-01 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 14:00
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486415	1	06/04/20 14:11	06/04/20 14:19	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486008	1	06/03/20 09:34	06/03/20 17:53	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1485898	1	06/02/20 08:39	06/03/20 09:18	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:39	06/03/20 00:25	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 23:47	KME	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

BH-20-1 (2-3) L1223523-02 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 14:05
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486415	1	06/04/20 14:11	06/04/20 14:19	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486008	5	06/03/20 09:34	06/03/20 18:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1485898	1	06/02/20 08:39	06/03/20 09:42	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:39	06/03/20 00:46	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 23:21	KME	Mt. Juliet, TN

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

BH-20-1 (4-5) L1223523-03 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 14:10
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486415	1	06/04/20 14:11	06/04/20 14:19	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486008	1	06/03/20 09:34	06/03/20 18:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1485898	1	06/02/20 08:39	06/03/20 10:06	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:39	06/03/20 01:06	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 20:42	KME	Mt. Juliet, TN

⁹ Sc

BH-20-1 (6-7) L1223523-04 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 14:15
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486415	1	06/04/20 14:11	06/04/20 14:19	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486008	5	06/03/20 09:34	06/03/20 18:40	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486356	1	06/02/20 08:39	06/03/20 16:01	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:39	06/03/20 01:26	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 20:56	KME	Mt. Juliet, TN

BH-20-1 (9-10) L1223523-05 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 14:20
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486419	1	06/04/20 18:06	06/04/20 18:21	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486008	1	06/03/20 09:34	06/03/20 18:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486356	1	06/02/20 08:39	06/03/20 16:25	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486515	1	06/02/20 08:39	06/03/20 15:21	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 21:09	KME	Mt. Juliet, TN

SAMPLE SUMMARY

BH-20-1 (14-15) L1223523-06 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 14:30
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486419	1	06/04/20 18:06	06/04/20 18:21	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486008	1	06/03/20 09:34	06/03/20 18:59	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486356	1	06/02/20 08:39	06/03/20 16:49	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:39	06/03/20 02:07	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 21:22	KME	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

BH-20-2 (0-1) L1223523-07 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 14:50
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486419	1	06/04/20 18:06	06/04/20 18:21	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486008	5	06/03/20 09:34	06/03/20 19:18	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486356	1	06/02/20 08:39	06/03/20 17:12	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:39	06/03/20 02:28	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	5	06/03/20 05:20	06/04/20 00:26	KME	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

BH-20-2 (2-3) L1223523-08 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 15:00
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486419	1	06/04/20 18:06	06/04/20 18:21	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	5	06/02/20 22:30	06/03/20 02:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486242	1	06/02/20 08:39	06/03/20 09:55	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:39	06/03/20 02:48	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 23:34	KME	Mt. Juliet, TN

9 Sc

BH-20-2 (4-5) L1223523-09 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 15:05
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486420	1	06/04/20 17:43	06/04/20 18:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	5	06/02/20 22:30	06/03/20 02:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486242	1	06/02/20 08:39	06/03/20 10:18	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:39	06/03/20 03:08	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 23:08	KME	Mt. Juliet, TN

BH-20-2 (6-7) L1223523-10 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 15:10
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486420	1	06/04/20 17:43	06/04/20 18:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	5	06/02/20 22:30	06/03/20 03:14	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486242	1	06/02/20 08:39	06/03/20 10:40	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:39	06/03/20 03:29	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 22:54	KME	Mt. Juliet, TN

SAMPLE SUMMARY

BH-20-2 (9-10) L1223523-11 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 15:20
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486420	1	06/04/20 17:43	06/04/20 18:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	5	06/02/20 22:30	06/03/20 03:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486242	1	06/02/20 08:39	06/03/20 11:02	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:39	06/03/20 03:49	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 21:35	KME	Mt. Juliet, TN

1
Cp

2
Tc

3
Ss

4
Cn

BH-20-2 (14-15) L1223523-12 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 15:30
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486420	1	06/04/20 17:43	06/04/20 18:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	5	06/02/20 22:30	06/03/20 03:48	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486242	1	06/02/20 08:39	06/03/20 11:25	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:39	06/03/20 04:09	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 21:49	KME	Mt. Juliet, TN

5
Sr

6
Qc

7
Gl

8
Al

BH-20-2 (19-20) L1223523-13 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 15:40
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486420	1	06/04/20 17:43	06/04/20 18:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	10	06/02/20 22:30	06/03/20 04:05	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486589	1	06/02/20 08:39	06/03/20 16:06	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:39	06/03/20 04:30	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 22:02	KME	Mt. Juliet, TN

9
Sc

BH-20-2 (24-25) L1223523-14 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 15:50
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486420	1	06/04/20 17:43	06/04/20 18:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	5	06/02/20 22:30	06/03/20 05:47	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486242	1	06/02/20 08:49	06/03/20 12:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:49	06/03/20 04:50	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 22:15	KME	Mt. Juliet, TN

BH-20-2 (29-30) L1223523-15 Solid

Collected by: Joe Tyler
 Collected date/time: 05/20/20 16:10
 Received date/time: 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486420	1	06/04/20 17:43	06/04/20 18:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	10	06/02/20 22:30	06/03/20 06:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486242	1	06/02/20 08:49	06/03/20 12:32	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:49	06/03/20 05:10	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 22:28	KME	Mt. Juliet, TN

BH-20-2 (39-40) L1223523-16 Solid

Collected by Joe Tyler
 Collected date/time 05/20/20 16:30
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486420	1	06/04/20 17:43	06/04/20 18:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	1	06/02/20 22:30	06/03/20 06:20	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486242	1	06/02/20 08:49	06/03/20 12:54	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:49	06/03/20 05:31	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486068	1	06/03/20 05:20	06/03/20 22:41	KME	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

BH-20-3 (0-1) L1223523-17 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 10:00
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486420	1	06/04/20 17:43	06/04/20 18:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	1	06/02/20 22:30	06/03/20 06:37	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486611	1	06/02/20 08:49	06/04/20 09:57	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:49	06/03/20 05:51	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486508	1	06/03/20 19:01	06/08/20 02:30	JN	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

BH-20-3 (2-3) L1223523-18 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 10:05
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486420	1	06/04/20 17:43	06/04/20 18:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	1	06/02/20 22:30	06/03/20 06:54	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486611	1	06/02/20 08:49	06/04/20 10:21	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:49	06/03/20 06:11	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486508	1	06/03/20 19:01	06/08/20 22:24	DMG	Mt. Juliet, TN

9 Sc

BH-20-3 (4-5) L1223523-19 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 10:10
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486421	1	06/04/20 17:24	06/04/20 17:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	1	06/02/20 22:30	06/03/20 07:11	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486611	1	06/02/20 08:49	06/04/20 10:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:49	06/03/20 06:32	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486508	1	06/03/20 19:01	06/08/20 00:31	JN	Mt. Juliet, TN

BH-20-4 (0-1) L1223523-20 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 10:40
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486421	1	06/04/20 17:24	06/04/20 17:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	1	06/02/20 22:30	06/03/20 07:28	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486611	1	06/02/20 08:49	06/04/20 11:09	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486129	1	06/02/20 08:49	06/03/20 06:52	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486508	1	06/03/20 19:01	06/08/20 02:56	JN	Mt. Juliet, TN

BH-20-4 (2-3) L1223523-21 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 10:45
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486421	1	06/04/20 17:24	06/04/20 17:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	1	06/02/20 22:30	06/03/20 07:45	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486611	1	06/02/20 08:49	06/04/20 11:33	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486258	1	06/02/20 08:49	06/03/20 09:37	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486508	1	06/03/20 19:01	06/08/20 02:43	JN	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

BH-20-4 (4-5) L1223523-22 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 10:50
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486421	1	06/04/20 17:24	06/04/20 17:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	1	06/02/20 22:30	06/03/20 08:36	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486611	1	06/02/20 08:49	06/04/20 11:57	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486258	1	06/02/20 08:49	06/03/20 09:56	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486508	1	06/03/20 19:01	06/08/20 00:44	JN	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

BH-20-5 (0-1) L1223523-23 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 11:30
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486421	1	06/04/20 17:24	06/04/20 17:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	1	06/02/20 22:30	06/03/20 08:53	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486617	1	06/02/20 08:49	06/04/20 01:24	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486258	1	06/02/20 08:49	06/03/20 10:15	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486508	10	06/03/20 19:01	06/08/20 03:36	JN	Mt. Juliet, TN

9 Sc

BH-20-5 (2-3) L1223523-24 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 11:35
 Received date/time 05/29/20 09:00

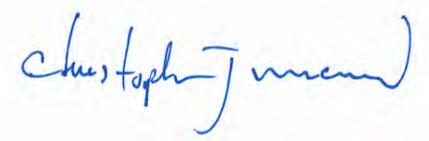
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486421	1	06/04/20 17:24	06/04/20 17:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	1	06/02/20 22:30	06/03/20 09:10	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486617	1	06/02/20 08:49	06/04/20 01:44	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486294	1	06/02/20 08:49	06/03/20 10:13	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486508	1	06/03/20 19:01	06/08/20 03:10	JN	Mt. Juliet, TN

BH-20-5 (4-5) L1223523-25 Solid

Collected by Joe Tyler
 Collected date/time 05/21/20 11:40
 Received date/time 05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1486421	1	06/04/20 17:24	06/04/20 17:36	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1486010	1	06/02/20 22:30	06/03/20 09:26	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1486617	1	06/02/20 08:49	06/04/20 02:05	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1486294	1	06/02/20 08:49	06/03/20 10:33	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1486508	1	06/03/20 19:01	06/08/20 00:57	JN	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1488541	1	06/09/20 04:05	06/09/20 13:28	JN	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

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

Collected date/time: 05/20/20 14:00

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	93.6		1	06/04/2020 14:19	WG1486415

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	232		9.83	21.4	1	06/03/2020 17:53	WG1486008

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	06/03/2020 09:18	WG1485898
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		06/03/2020 09:18	WG1485898

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000499	0.00107	1	06/03/2020 00:25	WG1486129
Toluene	U		0.00139	0.00534	1	06/03/2020 00:25	WG1486129
Ethylbenzene	U		0.000787	0.00267	1	06/03/2020 00:25	WG1486129
Total Xylenes	U		0.000940	0.00694	1	06/03/2020 00:25	WG1486129
(S) Toluene-d8	113			75.0-131		06/03/2020 00:25	WG1486129
(S) 4-Bromofluorobenzene	87.7			67.0-138		06/03/2020 00:25	WG1486129
(S) 1,2-Dichloroethane-d4	110			70.0-130		06/03/2020 00:25	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	25.4		1.72	4.27	1	06/03/2020 23:47	WG1486068
C28-C40 Oil Range	69.9		0.293	4.27	1	06/03/2020 23:47	WG1486068
(S) o-Terphenyl	77.8			18.0-148		06/03/2020 23:47	WG1486068

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.4		1	06/04/2020 14:19	WG1486415

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	1170		50.9	111	5	06/03/2020 18:02	WG1486008

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0240	0.111	1	06/03/2020 09:42	WG1485898
(S) a,a,a-Trifluorotoluene(FID)	99.3			77.0-120		06/03/2020 09:42	WG1485898

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000517	0.00111	1	06/03/2020 00:46	WG1486129
Toluene	U		0.00144	0.00553	1	06/03/2020 00:46	WG1486129
Ethylbenzene	U		0.000815	0.00277	1	06/03/2020 00:46	WG1486129
Total Xylenes	U		0.000974	0.00719	1	06/03/2020 00:46	WG1486129
(S) Toluene-d8	115			75.0-131		06/03/2020 00:46	WG1486129
(S) 4-Bromofluorobenzene	98.6			67.0-138		06/03/2020 00:46	WG1486129
(S) 1,2-Dichloroethane-d4	109			70.0-130		06/03/2020 00:46	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	5.17		1.78	4.43	1	06/03/2020 23:21	WG1486068
C28-C40 Oil Range	12.6		0.303	4.43	1	06/03/2020 23:21	WG1486068
(S) o-Terphenyl	71.0			18.0-148		06/03/2020 23:21	WG1486068

Collected date/time: 05/20/20 14:10

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.8		1	06/04/2020 14:19	WG1486415

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	574		9.50	20.7	1	06/03/2020 18:31	WG1486008

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	06/03/2020 10:06	WG1485898
(S) a,a,a-Trifluorotoluene(FID)	96.8			77.0-120		06/03/2020 10:06	WG1485898

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000482	0.00103	1	06/03/2020 01:06	WG1486129
Toluene	U		0.00134	0.00516	1	06/03/2020 01:06	WG1486129
Ethylbenzene	U		0.000761	0.00258	1	06/03/2020 01:06	WG1486129
Total Xylenes	U		0.000909	0.00671	1	06/03/2020 01:06	WG1486129
(S) Toluene-d8	120			75.0-131		06/03/2020 01:06	WG1486129
(S) 4-Bromofluorobenzene	103			67.0-138		06/03/2020 01:06	WG1486129
(S) 1,2-Dichloroethane-d4	111			70.0-130		06/03/2020 01:06	WG1486129

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.66	4.13	1	06/03/2020 20:42	WG1486068
C28-C40 Oil Range	2.60	J	0.283	4.13	1	06/03/2020 20:42	WG1486068
(S) o-Terphenyl	86.8			18.0-148		06/03/2020 20:42	WG1486068

Collected date/time: 05/20/20 14:15

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.5		1	06/04/2020 14:19	WG1486415

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	1870		50.3	109	5	06/03/2020 18:40	WG1486008

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0237	0.109	1	06/03/2020 16:01	WG1486356
(S) a,a,a-Trifluorotoluene(FID)	99.9			77.0-120		06/03/2020 16:01	WG1486356

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000510	0.00109	1	06/03/2020 01:26	WG1486129
Toluene	U		0.00142	0.00546	1	06/03/2020 01:26	WG1486129
Ethylbenzene	U		0.000806	0.00273	1	06/03/2020 01:26	WG1486129
Total Xylenes	U		0.000962	0.00710	1	06/03/2020 01:26	WG1486129
(S) Toluene-d8	116			75.0-131		06/03/2020 01:26	WG1486129
(S) 4-Bromofluorobenzene	98.7			67.0-138		06/03/2020 01:26	WG1486129
(S) 1,2-Dichloroethane-d4	110			70.0-130		06/03/2020 01:26	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.76	4.37	1	06/03/2020 20:56	WG1486068
C28-C40 Oil Range	0.632	J	0.299	4.37	1	06/03/2020 20:56	WG1486068
(S) o-Terphenyl	65.0			18.0-148		06/03/2020 20:56	WG1486068

Collected date/time: 05/20/20 14:20

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.9		1	06/04/2020 18:21	WG1486419

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	375		9.70	21.1	1	06/03/2020 18:50	WG1486008

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0229	0.105	1	06/03/2020 16:25	WG1486356
(S) a,a,a-Trifluorotoluene(FID)	97.5			77.0-120		06/03/2020 16:25	WG1486356

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000492	0.00105	1	06/03/2020 15:21	WG1486515
Toluene	U		0.00137	0.00527	1	06/03/2020 15:21	WG1486515
Ethylbenzene	U		0.000777	0.00264	1	06/03/2020 15:21	WG1486515
Total Xylenes	0.00111	J	0.000928	0.00685	1	06/03/2020 15:21	WG1486515
(S) Toluene-d8	108			75.0-131		06/03/2020 15:21	WG1486515
(S) 4-Bromofluorobenzene	118			67.0-138		06/03/2020 15:21	WG1486515
(S) 1,2-Dichloroethane-d4	77.3			70.0-130		06/03/2020 15:21	WG1486515

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.70	4.22	1	06/03/2020 21:09	WG1486068
C28-C40 Oil Range	0.958	J	0.289	4.22	1	06/03/2020 21:09	WG1486068
(S) o-Terphenyl	62.2			18.0-148		06/03/2020 21:09	WG1486068

Collected date/time: 05/20/20 14:30

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	96.9		1	06/04/2020 18:21	WG1486419

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	124		9.50	20.6	1	06/03/2020 18:59	WG1486008

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	06/03/2020 16:49	WG1486356
(S) a,a,a-Trifluorotoluene(FID)	98.4			77.0-120		06/03/2020 16:49	WG1486356

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000482	0.00103	1	06/03/2020 02:07	WG1486129
Toluene	U		0.00134	0.00516	1	06/03/2020 02:07	WG1486129
Ethylbenzene	U		0.000761	0.00258	1	06/03/2020 02:07	WG1486129
Total Xylenes	U		0.000908	0.00671	1	06/03/2020 02:07	WG1486129
(S) Toluene-d8	116			75.0-131		06/03/2020 02:07	WG1486129
(S) 4-Bromofluorobenzene	97.8			67.0-138		06/03/2020 02:07	WG1486129
(S) 1,2-Dichloroethane-d4	110			70.0-130		06/03/2020 02:07	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.66	4.13	1	06/03/2020 21:22	WG1486068
C28-C40 Oil Range	U		0.283	4.13	1	06/03/2020 21:22	WG1486068
(S) o-Terphenyl	73.3			18.0-148		06/03/2020 21:22	WG1486068

Collected date/time: 05/20/20 14:50

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	93.1		1	06/04/2020 18:21	WG1486419

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	1290		49.4	107	5	06/03/2020 19:18	WG1486008

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0233	0.107	1	06/03/2020 17:12	WG1486356
(S) a,a,a-Trifluorotoluene(FID)	95.8			77.0-120		06/03/2020 17:12	WG1486356

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000502	0.00107	1	06/03/2020 02:28	WG1486129
Toluene	U		0.00140	0.00537	1	06/03/2020 02:28	WG1486129
Ethylbenzene	U		0.000792	0.00269	1	06/03/2020 02:28	WG1486129
Total Xylenes	U		0.000946	0.00698	1	06/03/2020 02:28	WG1486129
(S) Toluene-d8	114			75.0-131		06/03/2020 02:28	WG1486129
(S) 4-Bromofluorobenzene	98.7			67.0-138		06/03/2020 02:28	WG1486129
(S) 1,2-Dichloroethane-d4	110			70.0-130		06/03/2020 02:28	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	351		8.65	21.5	5	06/04/2020 00:26	WG1486068
C28-C40 Oil Range	750		1.47	21.5	5	06/04/2020 00:26	WG1486068
(S) o-Terphenyl	106			18.0-148		06/04/2020 00:26	WG1486068

Collected date/time: 05/20/20 15:00

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.3		1	06/04/2020 18:21	WG1486419

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

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	1320		50.9	111	5	06/03/2020 02:24	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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	0.0623	B J	0.0240	0.111	1	06/03/2020 09:55	WG1486242
(S) a,a,a-Trifluorotoluene(FID)	98.9			77.0-120		06/03/2020 09:55	WG1486242

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		0.000517	0.00111	1	06/03/2020 02:48	WG1486129
Toluene	U		0.00144	0.00554	1	06/03/2020 02:48	WG1486129
Ethylbenzene	U		0.000816	0.00277	1	06/03/2020 02:48	WG1486129
Total Xylenes	U		0.000974	0.00720	1	06/03/2020 02:48	WG1486129
(S) Toluene-d8	113			75.0-131		06/03/2020 02:48	WG1486129
(S) 4-Bromofluorobenzene	97.9			67.0-138		06/03/2020 02:48	WG1486129
(S) 1,2-Dichloroethane-d4	112			70.0-130		06/03/2020 02:48	WG1486129

- 8 Al
- 9 Sc

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	30.5		1.78	4.43	1	06/03/2020 23:34	WG1486068
C28-C40 Oil Range	63.0		0.303	4.43	1	06/03/2020 23:34	WG1486068
(S) o-Terphenyl	52.4			18.0-148		06/03/2020 23:34	WG1486068

Collected date/time: 05/20/20 15:05

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	97.0		1	06/04/2020 18:01	WG1486420

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	1160		47.4	103	5	06/03/2020 02:57	WG1486010

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0572	B J	0.0224	0.103	1	06/03/2020 10:18	WG1486242
(S) a,a,a-Trifluorotoluene(FID)	99.0			77.0-120		06/03/2020 10:18	WG1486242

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000481	0.00103	1	06/03/2020 03:08	WG1486129
Toluene	U		0.00134	0.00515	1	06/03/2020 03:08	WG1486129
Ethylbenzene	U		0.000760	0.00258	1	06/03/2020 03:08	WG1486129
Total Xylenes	U		0.000907	0.00670	1	06/03/2020 03:08	WG1486129
(S) Toluene-d8	184	J1		75.0-131		06/03/2020 03:08	WG1486129
(S) 4-Bromofluorobenzene	99.0			67.0-138		06/03/2020 03:08	WG1486129
(S) 1,2-Dichloroethane-d4	109			70.0-130		06/03/2020 03:08	WG1486129

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	9.63		1.66	4.12	1	06/03/2020 23:08	WG1486068
C28-C40 Oil Range	16.9		0.282	4.12	1	06/03/2020 23:08	WG1486068
(S) o-Terphenyl	72.3			18.0-148		06/03/2020 23:08	WG1486068

Collected date/time: 05/20/20 15:10

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	97.7		1	06/04/2020 18:01	WG1486420

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	875		47.1	102	5	06/03/2020 03:14	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0487	<u>BJ</u>	0.0222	0.102	1	06/03/2020 10:40	WG1486242
(S) a,a,a-Trifluorotoluene(FID)	99.1			77.0-120		06/03/2020 10:40	WG1486242

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000478	0.00102	1	06/03/2020 03:29	WG1486129
Toluene	U		0.00133	0.00512	1	06/03/2020 03:29	WG1486129
Ethylbenzene	U		0.000754	0.00256	1	06/03/2020 03:29	WG1486129
Total Xylenes	U		0.000901	0.00665	1	06/03/2020 03:29	WG1486129
(S) Toluene-d8	113			75.0-131		06/03/2020 03:29	WG1486129
(S) 4-Bromofluorobenzene	97.9			67.0-138		06/03/2020 03:29	WG1486129
(S) 1,2-Dichloroethane-d4	112			70.0-130		06/03/2020 03:29	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	2.07	<u>J</u>	1.65	4.09	1	06/03/2020 22:54	WG1486068
C28-C40 Oil Range	3.00	<u>J</u>	0.280	4.09	1	06/03/2020 22:54	WG1486068
(S) o-Terphenyl	67.4			18.0-148		06/03/2020 22:54	WG1486068

Collected date/time: 05/20/20 15:20

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	99.2		1	06/04/2020 18:01	WG1486420

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	781		46.4	101	5	06/03/2020 03:31	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0540	<u>B J</u>	0.0219	0.101	1	06/03/2020 11:02	WG1486242
(S) a,a,a-Trifluorotoluene(FID)	99.2			77.0-120		06/03/2020 11:02	WG1486242

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000471	0.00101	1	06/03/2020 03:49	WG1486129
Toluene	U		0.00131	0.00504	1	06/03/2020 03:49	WG1486129
Ethylbenzene	U		0.000743	0.00252	1	06/03/2020 03:49	WG1486129
Total Xylenes	U		0.000887	0.00655	1	06/03/2020 03:49	WG1486129
(S) Toluene-d8	136	<u>J1</u>		75.0-131		06/03/2020 03:49	WG1486129
(S) 4-Bromofluorobenzene	72.0			67.0-138		06/03/2020 03:49	WG1486129
(S) 1,2-Dichloroethane-d4	110			70.0-130		06/03/2020 03:49	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.62	4.03	1	06/03/2020 21:35	WG1486068
C28-C40 Oil Range	0.975	<u>J</u>	0.276	4.03	1	06/03/2020 21:35	WG1486068
(S) o-Terphenyl	75.1			18.0-148		06/03/2020 21:35	WG1486068

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.8		1	06/04/2020 18:01	WG1486420

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	1630		48.0	104	5	06/03/2020 03:48	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0646	<u>B J</u>	0.0226	0.104	1	06/03/2020 11:25	WG1486242
(S) a,a,a-Trifluorotoluene(FID)	99.5			77.0-120		06/03/2020 11:25	WG1486242

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000487	0.00104	1	06/03/2020 04:09	WG1486129
Toluene	U		0.00136	0.00522	1	06/03/2020 04:09	WG1486129
Ethylbenzene	U		0.000769	0.00261	1	06/03/2020 04:09	WG1486129
Total Xylenes	U		0.000918	0.00678	1	06/03/2020 04:09	WG1486129
(S) Toluene-d8	171	<u>J1</u>		75.0-131		06/03/2020 04:09	WG1486129
(S) 4-Bromofluorobenzene	88.2			67.0-138		06/03/2020 04:09	WG1486129
(S) 1,2-Dichloroethane-d4	109			70.0-130		06/03/2020 04:09	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.68	4.17	1	06/03/2020 21:49	WG1486068
C28-C40 Oil Range	0.623	<u>J</u>	0.286	4.17	1	06/03/2020 21:49	WG1486068
(S) o-Terphenyl	70.0			18.0-148		06/03/2020 21:49	WG1486068

Collected date/time: 05/20/20 15:40

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	84.6		1	06/04/2020 18:01	WG1486420

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	2600		109	236	10	06/03/2020 04:05	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0257	0.118	1	06/03/2020 16:06	WG1486589
(S) a,a,a-Trifluorotoluene(FID)	102			77.0-120		06/03/2020 16:06	WG1486589

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000552	0.00118	1	06/03/2020 04:30	WG1486129
Toluene	U		0.00154	0.00591	1	06/03/2020 04:30	WG1486129
Ethylbenzene	U		0.000871	0.00296	1	06/03/2020 04:30	WG1486129
Total Xylenes	U		0.00104	0.00769	1	06/03/2020 04:30	WG1486129
(S) Toluene-d8	115			75.0-131		06/03/2020 04:30	WG1486129
(S) 4-Bromofluorobenzene	95.4			67.0-138		06/03/2020 04:30	WG1486129
(S) 1,2-Dichloroethane-d4	102			70.0-130		06/03/2020 04:30	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.90	4.73	1	06/03/2020 22:02	WG1486068
C28-C40 Oil Range	U		0.324	4.73	1	06/03/2020 22:02	WG1486068
(S) o-Terphenyl	68.4			18.0-148		06/03/2020 22:02	WG1486068

Collected date/time: 05/20/20 15:50

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	96.9		1	06/04/2020 18:01	WG1486420

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	1670		47.4	103	5	06/03/2020 05:47	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0537	B J	0.0224	0.103	1	06/03/2020 12:10	WG1486242
(S) a,a,a-Trifluorotoluene(FID)	98.9			77.0-120		06/03/2020 12:10	WG1486242

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000482	0.00103	1	06/03/2020 04:50	WG1486129
Toluene	U		0.00134	0.00516	1	06/03/2020 04:50	WG1486129
Ethylbenzene	U		0.000760	0.00258	1	06/03/2020 04:50	WG1486129
Total Xylenes	U		0.000908	0.00670	1	06/03/2020 04:50	WG1486129
(S) Toluene-d8	123			75.0-131		06/03/2020 04:50	WG1486129
(S) 4-Bromofluorobenzene	105			67.0-138		06/03/2020 04:50	WG1486129
(S) 1,2-Dichloroethane-d4	110			70.0-130		06/03/2020 04:50	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.66	4.13	1	06/03/2020 22:15	WG1486068
C28-C40 Oil Range	0.781	J	0.283	4.13	1	06/03/2020 22:15	WG1486068
(S) o-Terphenyl	70.4			18.0-148		06/03/2020 22:15	WG1486068

Collected date/time: 05/20/20 16:10

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.1		1	06/04/2020 18:01	WG1486420

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	2420		97.8	213	10	06/03/2020 06:03	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0697	<u>BJ</u>	0.0231	0.106	1	06/03/2020 12:32	WG1486242
(S) a,a,a-Trifluorotoluene(FID)	98.9			77.0-120		06/03/2020 12:32	WG1486242

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000497	0.00106	1	06/03/2020 05:10	WG1486129
Toluene	U		0.00138	0.00532	1	06/03/2020 05:10	WG1486129
Ethylbenzene	U		0.000784	0.00266	1	06/03/2020 05:10	WG1486129
Total Xylenes	U		0.000936	0.00691	1	06/03/2020 05:10	WG1486129
(S) Toluene-d8	115			75.0-131		06/03/2020 05:10	WG1486129
(S) 4-Bromofluorobenzene	98.4			67.0-138		06/03/2020 05:10	WG1486129
(S) 1,2-Dichloroethane-d4	111			70.0-130		06/03/2020 05:10	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	1.85	<u>J</u>	1.71	4.25	1	06/03/2020 22:28	WG1486068
C28-C40 Oil Range	2.35	<u>J</u>	0.291	4.25	1	06/03/2020 22:28	WG1486068
(S) o-Terphenyl	68.4			18.0-148		06/03/2020 22:28	WG1486068

Collected date/time: 05/20/20 16:30

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.8		1	06/04/2020 18:01	WG1486420

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	400		9.60	20.9	1	06/03/2020 06:20	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0552	<u>B J</u>	0.0227	0.104	1	06/03/2020 12:54	WG1486242
(S) a,a,a-Trifluorotoluene(FID)	98.8			77.0-120		06/03/2020 12:54	WG1486242

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000487	0.00104	1	06/03/2020 05:31	WG1486129
Toluene	U		0.00136	0.00522	1	06/03/2020 05:31	WG1486129
Ethylbenzene	U		0.000769	0.00261	1	06/03/2020 05:31	WG1486129
Total Xylenes	U		0.000919	0.00679	1	06/03/2020 05:31	WG1486129
(S) Toluene-d8	138	<u>J1</u>		75.0-131		06/03/2020 05:31	WG1486129
(S) 4-Bromofluorobenzene	87.4			67.0-138		06/03/2020 05:31	WG1486129
(S) 1,2-Dichloroethane-d4	111			70.0-130		06/03/2020 05:31	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.85	<u>J</u>	1.68	4.18	1	06/03/2020 22:41	WG1486068
C28-C40 Oil Range	5.37		0.286	4.18	1	06/03/2020 22:41	WG1486068
(S) o-Terphenyl	68.9			18.0-148		06/03/2020 22:41	WG1486068

Collected date/time: 05/21/20 10:00

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.4		1	06/04/2020 18:01	WG1486420

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	93.0		9.75	21.2	1	06/03/2020 06:37	WG1486010

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	06/04/2020 09:57	WG1486611
(S) a,a,a-Trifluorotoluene(FID)	94.4			77.0-120		06/04/2020 09:57	WG1486611

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000495	0.00106	1	06/03/2020 05:51	WG1486129
Toluene	U		0.00138	0.00530	1	06/03/2020 05:51	WG1486129
Ethylbenzene	U		0.000781	0.00265	1	06/03/2020 05:51	WG1486129
Total Xylenes	U		0.000932	0.00689	1	06/03/2020 05:51	WG1486129
(S) Toluene-d8	113			75.0-131		06/03/2020 05:51	WG1486129
(S) 4-Bromofluorobenzene	99.2			67.0-138		06/03/2020 05:51	WG1486129
(S) 1,2-Dichloroethane-d4	109			70.0-130		06/03/2020 05:51	WG1486129

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	9.77		1.71	4.24	1	06/08/2020 02:30	WG1486508
C28-C40 Oil Range	19.3		0.290	4.24	1	06/08/2020 02:30	WG1486508
(S) o-Terphenyl	118			18.0-148		06/08/2020 02:30	WG1486508

Collected date/time: 05/21/20 10:05

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	96.9		1	06/04/2020 18:01	WG1486420

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	20.7		9.50	20.6	1	06/03/2020 06:54	WG1486010

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	06/04/2020 10:21	WG1486611
(S) a,a,a-Trifluorotoluene(FID)	99.0			77.0-120		06/04/2020 10:21	WG1486611

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000482	0.00103	1	06/03/2020 06:11	WG1486129
Toluene	U		0.00134	0.00516	1	06/03/2020 06:11	WG1486129
Ethylbenzene	U		0.000761	0.00258	1	06/03/2020 06:11	WG1486129
Total Xylenes	U		0.000908	0.00671	1	06/03/2020 06:11	WG1486129
(S) Toluene-d8	122			75.0-131		06/03/2020 06:11	WG1486129
(S) 4-Bromofluorobenzene	123			67.0-138		06/03/2020 06:11	WG1486129
(S) 1,2-Dichloroethane-d4	108			70.0-130		06/03/2020 06:11	WG1486129

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	4.86		1.66	4.13	1	06/08/2020 22:24	WG1486508
C28-C40 Oil Range	10.4		0.283	4.13	1	06/08/2020 22:24	WG1486508
(S) o-Terphenyl	122			18.0-148		06/08/2020 22:24	WG1486508

Collected date/time: 05/21/20 10:10

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.1		1	06/04/2020 17:36	WG1486421

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

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	65.5		9.57	20.8	1	06/03/2020 07:11	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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		0.0226	0.104	1	06/04/2020 10:45	WG1486611
(S) a,a,a-Trifluorotoluene(FID)	95.4			77.0-120		06/04/2020 10:45	WG1486611

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		0.000486	0.00104	1	06/03/2020 06:32	WG1486129
Toluene	U		0.00135	0.00520	1	06/03/2020 06:32	WG1486129
Ethylbenzene	U		0.000767	0.00260	1	06/03/2020 06:32	WG1486129
Total Xylenes	U		0.000916	0.00676	1	06/03/2020 06:32	WG1486129
(S) Toluene-d8	117			75.0-131		06/03/2020 06:32	WG1486129
(S) 4-Bromofluorobenzene	69.8			67.0-138		06/03/2020 06:32	WG1486129
(S) 1,2-Dichloroethane-d4	109			70.0-130		06/03/2020 06:32	WG1486129

- 8 Al
- 9 Sc

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	2.47	J	1.68	4.16	1	06/08/2020 00:31	WG1486508
C28-C40 Oil Range	2.47	J	0.285	4.16	1	06/08/2020 00:31	WG1486508
(S) o-Terphenyl	121			18.0-148		06/08/2020 00:31	WG1486508

Collected date/time: 05/21/20 10:40

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	98.6		1	06/04/2020 17:36	WG1486421

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	27.8		9.33	20.3	1	06/03/2020 07:28	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0913	J	0.0220	0.101	1	06/04/2020 11:09	WG1486611
(S) a,a,a-Trifluorotoluene(FID)	96.7			77.0-120		06/04/2020 11:09	WG1486611

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000474	0.00101	1	06/03/2020 06:52	WG1486129
Toluene	U		0.00132	0.00507	1	06/03/2020 06:52	WG1486129
Ethylbenzene	U		0.000747	0.00254	1	06/03/2020 06:52	WG1486129
Total Xylenes	U		0.000892	0.00659	1	06/03/2020 06:52	WG1486129
(S) Toluene-d8	115			75.0-131		06/03/2020 06:52	WG1486129
(S) 4-Bromofluorobenzene	61.5	J2		67.0-138		06/03/2020 06:52	WG1486129
(S) 1,2-Dichloroethane-d4	110			70.0-130		06/03/2020 06:52	WG1486129

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	12.6		1.63	4.06	1	06/08/2020 02:56	WG1486508
C28-C40 Oil Range	25.1		0.278	4.06	1	06/08/2020 02:56	WG1486508
(S) o-Terphenyl	139			18.0-148		06/08/2020 02:56	WG1486508

Collected date/time: 05/21/20 10:45

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.3		1	06/04/2020 17:36	WG1486421

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	19.8	J	9.45	20.5	1	06/03/2020 07:45	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	06/04/2020 11:33	WG1486611
(S) a,a,a-Trifluorotoluene(FID)	97.8			77.0-120		06/04/2020 11:33	WG1486611

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000480	0.00103	1	06/03/2020 09:37	WG1486258
Toluene	U		0.00134	0.00514	1	06/03/2020 09:37	WG1486258
Ethylbenzene	U		0.000757	0.00257	1	06/03/2020 09:37	WG1486258
Total Xylenes	U		0.000904	0.00668	1	06/03/2020 09:37	WG1486258
(S) Toluene-d8	104			75.0-131		06/03/2020 09:37	WG1486258
(S) 4-Bromofluorobenzene	89.1			67.0-138		06/03/2020 09:37	WG1486258
(S) 1,2-Dichloroethane-d4	105			70.0-130		06/03/2020 09:37	WG1486258

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	7.70		1.65	4.11	1	06/08/2020 02:43	WG1486508
C28-C40 Oil Range	21.1		0.281	4.11	1	06/08/2020 02:43	WG1486508
(S) o-Terphenyl	130			18.0-148		06/08/2020 02:43	WG1486508

Collected date/time: 05/21/20 10:50

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.3		1	06/04/2020 17:36	WG1486421

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	273		9.46	20.6	1	06/03/2020 08:36	WG1486010

5 Sr

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	06/04/2020 11:57	WG1486611
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		06/04/2020 11:57	WG1486611

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000480	0.00103	1	06/03/2020 09:56	WG1486258
Toluene	U		0.00134	0.00514	1	06/03/2020 09:56	WG1486258
Ethylbenzene	U		0.000758	0.00257	1	06/03/2020 09:56	WG1486258
Total Xylenes	U		0.000905	0.00668	1	06/03/2020 09:56	WG1486258
(S) Toluene-d8	104			75.0-131		06/03/2020 09:56	WG1486258
(S) 4-Bromofluorobenzene	87.5			67.0-138		06/03/2020 09:56	WG1486258
(S) 1,2-Dichloroethane-d4	99.9			70.0-130		06/03/2020 09:56	WG1486258

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.07	J	1.66	4.11	1	06/08/2020 00:44	WG1486508
C28-C40 Oil Range	2.52	J	0.282	4.11	1	06/08/2020 00:44	WG1486508
(S) o-Terphenyl	98.1			18.0-148		06/08/2020 00:44	WG1486508

Collected date/time: 05/21/20 11:30

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.3		1	06/04/2020 17:36	WG1486421

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	20.2	J	9.56	20.8	1	06/03/2020 08:53	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0262	J	0.0225	0.104	1	06/04/2020 01:24	WG1486617
(S) a,a,a-Trifluorotoluene(FID)	98.8			77.0-120		06/04/2020 01:24	WG1486617

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000485	0.00104	1	06/03/2020 10:15	WG1486258
Toluene	U		0.00135	0.00519	1	06/03/2020 10:15	WG1486258
Ethylbenzene	U		0.000766	0.00260	1	06/03/2020 10:15	WG1486258
Total Xylenes	U		0.000914	0.00675	1	06/03/2020 10:15	WG1486258
(S) Toluene-d8	104			75.0-131		06/03/2020 10:15	WG1486258
(S) 4-Bromofluorobenzene	88.2			67.0-138		06/03/2020 10:15	WG1486258
(S) 1,2-Dichloroethane-d4	98.9			70.0-130		06/03/2020 10:15	WG1486258

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	605		16.7	41.6	10	06/08/2020 03:36	WG1486508
C28-C40 Oil Range	977		2.85	41.6	10	06/08/2020 03:36	WG1486508
(S) o-Terphenyl	198	J1		18.0-148		06/08/2020 03:36	WG1486508

Sample Narrative:

L1223523-23 WG1486508: Surrogate failure due to matrix interference

Collected date/time: 05/21/20 11:35

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.8		1	06/04/2020 17:36	WG1486421

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

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	U		9.50	20.7	1	06/03/2020 09:10	WG1486010

- 5 Sr
- 6 Qc
- 7 Gl

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	06/04/2020 01:44	WG1486617
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-120		06/04/2020 01:44	WG1486617

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		0.000482	0.00103	1	06/03/2020 10:13	WG1486294
Toluene	U		0.00134	0.00516	1	06/03/2020 10:13	WG1486294
Ethylbenzene	U		0.000761	0.00258	1	06/03/2020 10:13	WG1486294
Total Xylenes	U		0.000909	0.00671	1	06/03/2020 10:13	WG1486294
(S) Toluene-d8	99.6			75.0-131		06/03/2020 10:13	WG1486294
(S) 4-Bromofluorobenzene	94.9			67.0-138		06/03/2020 10:13	WG1486294
(S) 1,2-Dichloroethane-d4	94.1			70.0-130		06/03/2020 10:13	WG1486294

- 8 Al
- 9 Sc

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	22.6		1.66	4.13	1	06/08/2020 03:10	WG1486508
C28-C40 Oil Range	38.6		0.283	4.13	1	06/08/2020 03:10	WG1486508
(S) o-Terphenyl	130			18.0-148		06/08/2020 03:10	WG1486508

Collected date/time: 05/21/20 11:40

L1223523

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.3		1	06/04/2020 17:36	WG1486421

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.55	20.8	1	06/03/2020 09:26	WG1486010

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0225	0.104	1	06/04/2020 02:05	WG1486617
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		06/04/2020 02:05	WG1486617

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000485	0.00104	1	06/03/2020 10:33	WG1486294
Toluene	U		0.00135	0.00519	1	06/03/2020 10:33	WG1486294
Ethylbenzene	U		0.000765	0.00260	1	06/03/2020 10:33	WG1486294
Total Xylenes	U		0.000914	0.00675	1	06/03/2020 10:33	WG1486294
(S) Toluene-d8	98.4			75.0-131		06/03/2020 10:33	WG1486294
(S) 4-Bromofluorobenzene	95.2			67.0-138		06/03/2020 10:33	WG1486294
(S) 1,2-Dichloroethane-d4	92.9			70.0-130		06/03/2020 10:33	WG1486294

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.09	J	1.67	4.15	1	06/08/2020 00:57	WG1486508
C10-C28 Diesel Range	U	Q	1.67	4.15	1	06/09/2020 13:28	WG1488541
C28-C40 Oil Range	5.18		0.284	4.15	1	06/08/2020 00:57	WG1486508
C28-C40 Oil Range	1.13	J Q	0.284	4.15	1	06/09/2020 13:28	WG1488541
(S) o-Terphenyl	115			18.0-148		06/08/2020 00:57	WG1486508
(S) o-Terphenyl	63.5			18.0-148		06/09/2020 13:28	WG1488541

Sample Narrative:

L1223523-25 WG1486508, WG1488541: Duplicate Analysis performed due to contamination. Results don't confirm; both analyses reported

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

Total Solids by Method 2540 G-2011

[L1223523-01,02,03,04](#)

Method Blank (MB)

(MB) R3535378-1 06/04/20 14:19

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000			

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1223485-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1223485-24 06/04/20 14:19 • (DUP) R3535378-3 06/04/20 14:19

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	85.9	85.4	1	0.523		10

Laboratory Control Sample (LCS)

(LCS) R3535378-2 06/04/20 14:19

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

Total Solids by Method 2540 G-2011

[L1223523-05.06.07.08](#)

Method Blank (MB)

(MB) R3535553-1 06/04/20 18:21

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	%		%	%
Total Solids	0.00100			

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Original Sample (OS) • Duplicate (DUP)

(OS) • (DUP) R3535553-3 06/04/20 18:21

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
		%		%		%
Total Solids		93.6	1	0.111		10

Laboratory Control Sample (LCS)

(LCS) R3535553-2 06/04/20 18:21

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

Total Solids by Method 2540 G-2011

[L1223523-09,10,11,12,13,14,15,16,17,18](#)

Method Blank (MB)

(MB) R3535512-1 06/04/20 18:01

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1223523-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1223523-10 06/04/20 18:01 • (DUP) R3535512-3 06/04/20 18:01

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Total Solids	97.7	97.9	1	0.148		10

Laboratory Control Sample (LCS)

(LCS) R3535512-2 06/04/20 18:01

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.1	100	85.0-115	

W01486421
Total Solids by Method 2540 G-2011

[L1223523-19,20,21,22,23,24,25](#)

Method Blank (MB)

(MB) R3535509-1 06/04/20 17:36

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000			

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1223523-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1223523-20 06/04/20 17:36 • (DUP) R3535509-3 06/04/20 17:36

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	98.6	98.7	1	0.118		10

Laboratory Control Sample (LCS)

(LCS) R3535509-2 06/04/20 17:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	49.7	99.4	85.0-115	

Wet Chemistry by Method 300.0

[L1223523-01,02,03,04,05,06,07](#)

Method Blank (MB)

(MB) R3534872-1 06/03/20 14:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		9.20	20.0

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1223384-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1223384-22 06/03/20 15:30 • (DUP) R3534872-3 06/03/20 15:39

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	83.5	86.3	1	3.27		20

L1223523-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1223523-06 06/03/20 18:59 • (DUP) R3534872-6 06/03/20 19:09

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	124	119	1	3.69		20

Laboratory Control Sample (LCS)

(LCS) R3534872-2 06/03/20 14:42

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	187	93.7	90.0-110	

L1223384-25 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1223384-25 06/03/20 16:08 • (MS) R3534872-4 06/03/20 16:37 • (MSD) R3534872-5 06/03/20 16:46

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	544	27.1	548	559	95.6	97.8	1	80.0-120			2.13	20

Wet Chemistry by Method 300.0

Method Blank (MB)

(MB) R3534486-1 06/03/20 01:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		9.20	20.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1223523-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1223523-08 06/03/20 02:24 • (DUP) R3534486-3 06/03/20 02:40

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	1320	1350	5	2.47		20

L1223768-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1223768-02 06/03/20 10:00 • (DUP) R3534486-6 06/03/20 10:17

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	57.3	54.7	1	4.48		20

Laboratory Control Sample (LCS)

(LCS) R3534486-2 06/03/20 01:47

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	205	103	90.0-110	

L1223523-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1223523-14 06/03/20 04:22 • (MS) R3534486-4 06/03/20 05:13 • (MSD) R3534486-5 06/03/20 05:30

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	516	1850	2410	2300	110	88.1	1	80.0-120	E	E	4.81	20

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

[L1223523-01,02,03](#)

Method Blank (MB)

(MB) R3534484-2 06/02/20 23:24

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3534484-1 06/02/20 22:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.81	106	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			105	77.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1223523-08,09,10,11,12,14,15,16](#)

Method Blank (MB)

(MB) R3534476-2 06/03/20 08:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPH (GC/FID) Low Fraction	0.0483	↓	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3534476-1 06/03/20 07:18

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.59	102	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			107	77.0-120	

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3534476-3 06/03/20 17:31 • (MSD) R3534476-4 06/03/20 17:53

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TPH (GC/FID) Low Fraction	129		80.6	82.7	76.0	78.0	25	10.0-151			2.57	28
(S) a,a,a-Trifluorotoluene(FID)					105	105		77.0-120				

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

[L1223523-04.05.06.07](#)

Method Blank (MB)

(MB) R3534732-2 06/03/20 15:13

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	97.8			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3534732-1 06/03/20 14:25

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.42	98.5	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			107	77.0-120	

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3534732-3 06/04/20 00:00 • (MSD) R3534732-4 06/04/20 00:24

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TPH (GC/FID) Low Fraction	2.58		1.78	1.84	82.8	85.6	1	10.0-151			3.31	28
(S) a,a,a-Trifluorotoluene(FID)					107	107		77.0-120				

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

[L1223523-13](#)

Method Blank (MB)

(MB) R3534704-3 06/03/20 12:24

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3534704-2 06/03/20 11:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.84	106	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			101	77.0-120	

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

[L1223523-17,18,19,20,21,22](#)

Method Blank (MB)

(MB) R3534893-2 06/04/20 02:24

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	99.1			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3534893-1 06/04/20 01:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.24	77.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			107	77.0-120	

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3534893-3 06/04/20 12:21 • (MSD) R3534893-4 06/04/20 12:45

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TPH (GC/FID) Low Fraction	129	92.9	64.5	96.5	67.0	25	10.0-151		J3		36.1	28
(S) a,a,a-Trifluorotoluene(FID)				108	109		77.0-120					

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

[L1223523-23,24,25](#)

Method Blank (MB)

(MB) R3534993-2 06/04/20 00:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3534993-1 06/04/20 00:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.81	106	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			99.9	77.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

L1223523-01,02,03,04,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) R3534611-2 06/03/20 00:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	119			75.0-131
(S) 4-Bromofluorobenzene	81.1			67.0-138
(S) 1,2-Dichloroethane-d4	111			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3534611-1 06/02/20 22:55

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.105	84.0	70.0-123	
Ethylbenzene	0.125	0.111	88.8	74.0-126	
Toluene	0.125	0.107	85.6	75.0-121	
Xylenes, Total	0.375	0.321	85.6	72.0-127	
(S) Toluene-d8			109	75.0-131	
(S) 4-Bromofluorobenzene			98.3	67.0-138	
(S) 1,2-Dichloroethane-d4			117	70.0-130	

L1223523-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1223523-20 06/03/20 06:52 • (MS) R3534611-3 06/03/20 07:12 • (MSD) R3534611-4 06/03/20 07:49

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.127	U	0.111	0.161	87.2	127	1	10.0-149		J3	37.3	37
Ethylbenzene	0.127	U	0.123	0.120	96.8	94.4	1	10.0-160			2.51	38
Toluene	0.127	U	0.166	0.0960	131	75.8	1	10.0-156		J3	53.6	38
Xylenes, Total	0.380	U	0.302	0.349	79.5	91.7	1	10.0-160			14.3	38
(S) Toluene-d8					161	91.8		75.0-131	J1			
(S) 4-Bromofluorobenzene					85.1	101		67.0-138				
(S) 1,2-Dichloroethane-d4					113	161		70.0-130		J1		

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

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

[L1223523-21,22,23](#)

Method Blank (MB)

(MB) R3534502-2 06/03/20 08:47

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	106			75.0-131
(S) 4-Bromofluorobenzene	84.7			67.0-138
(S) 1,2-Dichloroethane-d4	96.2			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3534502-1 06/03/20 07:50

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.109	87.2	70.0-123	
Ethylbenzene	0.125	0.101	80.8	74.0-126	
Toluene	0.125	0.102	81.6	75.0-121	
Xylenes, Total	0.375	0.283	75.5	72.0-127	
(S) Toluene-d8			98.6	75.0-131	
(S) 4-Bromofluorobenzene			93.7	67.0-138	
(S) 1,2-Dichloroethane-d4			109	70.0-130	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

L1223523-24,25

Method Blank (MB)

(MB) R3534949-1 06/03/20 08:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	101			75.0-131
(S) 4-Bromofluorobenzene	94.7			67.0-138
(S) 1,2-Dichloroethane-d4	92.0			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3534949-2 06/03/20 08:59

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.113	90.4	70.0-123	
Ethylbenzene	0.125	0.122	97.6	74.0-126	
Toluene	0.125	0.106	84.8	75.0-121	
Xylenes, Total	0.375	0.354	94.4	72.0-127	
(S) Toluene-d8			94.3	75.0-131	
(S) 4-Bromofluorobenzene			96.8	67.0-138	
(S) 1,2-Dichloroethane-d4			102	70.0-130	

L1223420-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1223420-05 06/03/20 15:55 • (MS) R3534949-3 06/03/20 16:34 • (MSD) R3534949-4 06/03/20 16:53

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.132	U	0.0933	0.111	70.9	84.0	1	10.0-149			16.9	37
Ethylbenzene	0.132	U	0.0995	0.123	75.6	93.6	1	10.0-160			21.3	38
Toluene	0.132	U	0.0957	0.112	72.7	84.8	1	10.0-156			15.3	38
Xylenes, Total	0.395	U	0.262	0.315	66.4	79.7	1	10.0-160			18.2	38
(S) Toluene-d8					97.8	98.1		75.0-131				
(S) 4-Bromofluorobenzene					92.4	92.3		67.0-138				
(S) 1,2-Dichloroethane-d4					81.6	76.7		70.0-130				

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

[L1223523-05](#)

Method Blank (MB)

(MB) R3534692-2 06/03/20 09:01

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	107			75.0-131
(S) 4-Bromofluorobenzene	73.0			67.0-138
(S) 1,2-Dichloroethane-d4	80.3			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3534692-1 06/03/20 07:45

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.111	88.8	70.0-123	
Ethylbenzene	0.125	0.111	88.8	74.0-126	
Toluene	0.125	0.105	84.0	75.0-121	
Xylenes, Total	0.375	0.286	76.3	72.0-127	
(S) Toluene-d8			93.1	75.0-131	
(S) 4-Bromofluorobenzene			108	67.0-138	
(S) 1,2-Dichloroethane-d4			94.0	70.0-130	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1223523-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16](#)

Method Blank (MB)

(MB) R3534745-1 06/03/20 16:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	65.9			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3534745-2 06/03/20 16:30

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	39.6	79.2	50.0-150	
(S) o-Terphenyl			90.8	18.0-148	

L1223523-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1223523-01 06/03/20 23:47 • (MS) R3534745-3 06/04/20 00:00 • (MSD) R3534745-4 06/04/20 00:13

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	53.4	25.4	70.9	65.8	85.2	75.6	1	50.0-150			7.50	20
(S) o-Terphenyl					67.6	77.2		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1223523-17,18,19,20,21,22,23,24,25](#)

Method Blank (MB)

(MB) R3535684-1 06/05/20 13:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	94.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3535684-2 06/05/20 13:20

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	42.6	85.2	50.0-150	
(S) o-Terphenyl			76.9	18.0-148	

L1223523-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1223523-18 06/08/20 22:24 • (MS) R3536391-1 06/08/20 22:37 • (MSD) R3536391-2 06/08/20 22:51

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	51.3	4.86	58.7	60.3	105	109	1	50.0-150			2.60	20
(S) o-Terphenyl					112	105		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1223523-25](#)

Method Blank (MB)

(MB) R3536639-1 06/09/20 11:39

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	65.5			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3536639-2 06/09/20 11:52

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	36.8	73.6	50.0-150	
(S) o-Terphenyl			61.1	18.0-148	

L1224474-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1224474-07 06/09/20 19:00 • (MS) R3536639-3 06/09/20 19:14 • (MSD) R3536639-4 06/09/20 19:27

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	55.7	U	35.1	39.8	63.0	71.0	1	50.0-150			12.6	20
(S) o-Terphenyl					46.1	58.7		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
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.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
Q	Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
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

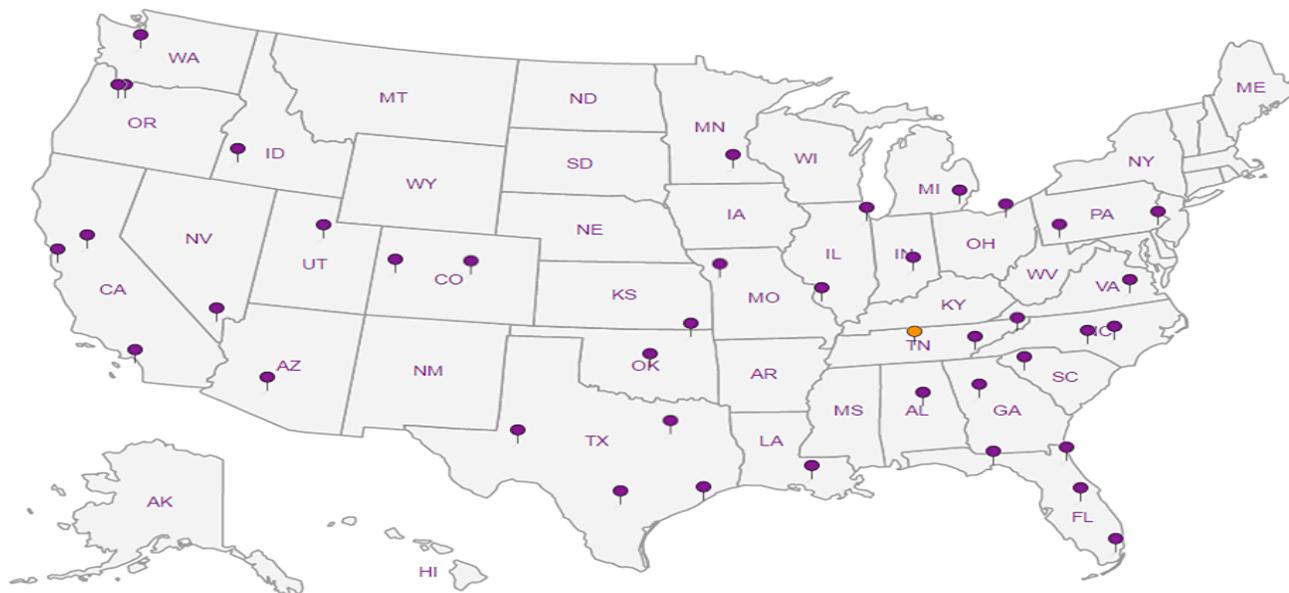
Third Party Federal Accreditations

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.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Pace Analytical National Center for Testing & Innovation Cooler Receipt Form			
Client: COPTETRA	L1223523		
Cooler Received/Opened On: 5 1291 20	Temperature:	10	
Received By: Paul Minnich			
Signature: 			
Receipt Check List			
	NP	Yes	No
COC Seal Present / Intact?	✓		
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable:			
VOA Zero headspace?			
Preservation Correct / Checked?			

APPENDIX E

Photographic Documentation



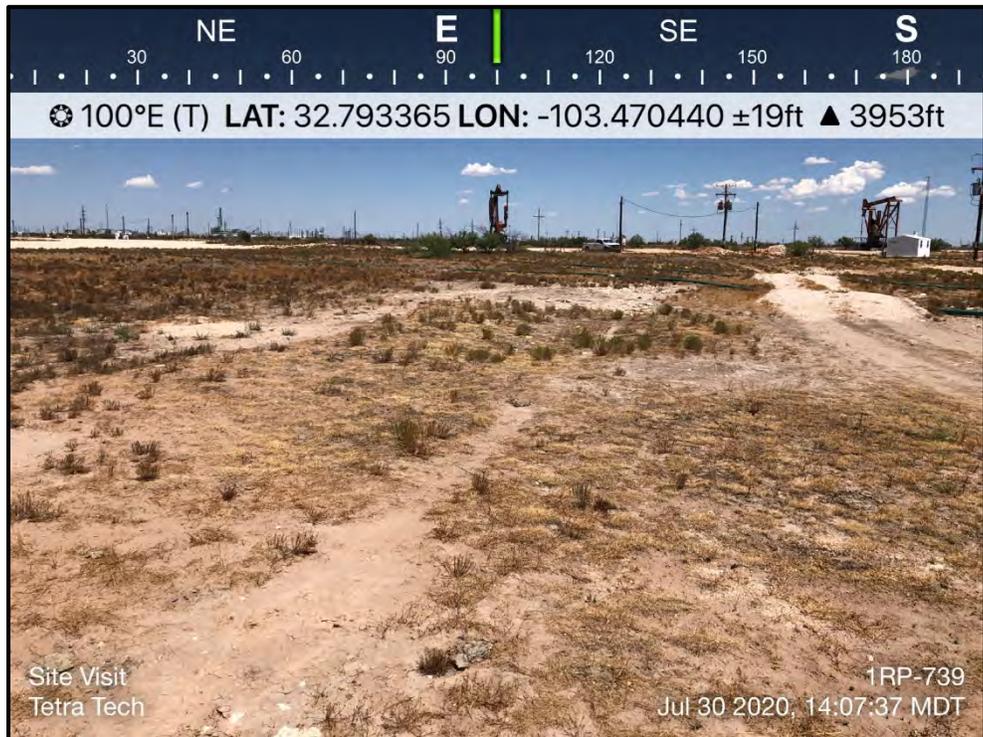
TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northeast of flowline release area. Note soil pile on left.	1
	SITE NAME	EVGSAU 3366-029 Flowline Release	7/30/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northeast of flowline release area. Note well pad in the background.	2
	SITE NAME	EVGSAU 3366-029 Flowline Release	7/30/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northwest of flowline release area.	3
	SITE NAME	EVGSAU 3366-029 Flowline Release	7/30/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing east of flowline release area. Note pole-mounted transformers in the background.	4
	SITE NAME	EVGSAU 3366-029 Flowline Release	7/30/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northwest of flowline release area.	5
	SITE NAME	EVGSAU 3366-029 Flowline Release	7/30/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northeast of flowline release area.	6
	SITE NAME	EVGSAU 3366-029 Flowline Release	7/30/2020

APPENDIX F NMSLO Seed Mixture Details



A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Lea County, New Mexico



September 24, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map (1RP-739: EVGSAU 3366-029 Flowline)



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lea County, New Mexico
 Survey Area Data: Version 17, Jun 8, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

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Map Unit Legend (1RP-739: EVGSAU 3366-029 Flowline)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KU	Kimbrough-Lea complex, dry, 0 to 3 percent slopes	0.5	100.0%
Totals for Area of Interest		0.5	100.0%

Map Unit Descriptions (1RP-739: EVGSAU 3366-029 Flowline)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

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delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

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Lea County, New Mexico

KU—Kimbrough-Lea complex, dry, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tw46
Elevation: 2,500 to 4,800 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Kimbrough and similar soils: 45 percent
Lea and similar soils: 25 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimbrough

Setting

Landform: Plains, playa rims
Down-slope shape: Linear, convex
Across-slope shape: Linear, concave
Parent material: Loamy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 3 inches: gravelly loam
Bw - 3 to 10 inches: loam
Bkkm1 - 10 to 16 inches: cemented material
Bkkm2 - 16 to 80 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 4 to 18 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 95 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Custom Soil Resource Report

Description of Lea**Setting***Landform:* Plains*Down-slope shape:* Convex*Across-slope shape:* Linear*Parent material:* Calcareous, loamy eolian deposits from the blackwater draw formation of pleistocene age over indurated caliche of pliocene age**Typical profile***A - 0 to 10 inches:* loam*Bk - 10 to 18 inches:* loam*Bkk - 18 to 26 inches:* gravelly fine sandy loam*Bkkm - 26 to 80 inches:* cemented material**Properties and qualities***Slope:* 0 to 3 percent*Depth to restrictive feature:* 22 to 30 inches to petrocalcic*Drainage class:* Well drained*Runoff class:* High*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)*Depth to water table:* More than 80 inches*Frequency of flooding:* None*Frequency of ponding:* None*Calcium carbonate, maximum content:* 90 percent*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*Sodium adsorption ratio, maximum:* 3.0*Available water capacity:* Very low (about 2.9 inches)**Interpretive groups***Land capability classification (irrigated):* None specified*Land capability classification (nonirrigated):* 7s*Hydrologic Soil Group:* D*Ecological site:* R077DY047TX - Sandy Loam 12-17" PZ*Hydric soil rating:* No**Minor Components****Douro***Percent of map unit:* 12 percent*Landform:* Plains*Down-slope shape:* Linear*Across-slope shape:* Linear*Ecological site:* R077DY047TX - Sandy Loam 12-17" PZ*Other vegetative classification:* Unnamed (G077DH000TX)*Hydric soil rating:* No**Kenhill***Percent of map unit:* 12 percent*Landform:* Plains*Down-slope shape:* Linear*Across-slope shape:* Linear*Ecological site:* R077DY038TX - Clay Loam 12-17" PZ*Hydric soil rating:* No

Custom Soil Resource Report

Spraberry

Percent of map unit: 6 percent

Landform: Plains, playa rims

Down-slope shape: Linear, convex

Across-slope shape: Linear

Ecological site: R077DY049TX - Very Shallow 12-17" PZ

Other vegetative classification: Unnamed (G077DH000TX)

Hydric soil rating: No

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

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United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

NMSLO Seed Mix**Sandy Loam (SL)****SANDY LOAM (SL) SITES SEED MIXTURE:**

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Galleta grass	Viva, VNS, So.	2.5	F
Little bluestem	Cimmaron, Pastura	2.5	F
Blue grama	Hachita, Lovington	2.0	D
Sideoats grama	Vaughn, El Reno	2.0	F
Sand dropseed	VNS, Southern	1.0	S
Forbs:			
Indian blanketflower	VNS, Southern	1.0	D
Parry penstemon	VNS, Southern	1.0	D
Blue flax	Appar	1.0	D
Desert globemallow	VNS, Southern	1.0	D
Shrubs:			
Fourwing saltbush	VNS, Southern	2.0	D
Common winterfat	VNS, Southern	1.0	F
Apache plume	VNS, Southern	0.75	F
Total PLS/acre		17.75	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box

- VNS, Southern – No Variety Stated, seed should be from a southern latitude collection of this species.
- Double above seed rates for broadcast or hydroseeding.
- If Parry penstemon is not available, substitute firecracker penstemon.
- If desert globemallow is not available, substitute scarlet globemallow or Nelson globemallow.
- If a species is not available, provide a suggested substitute to the New Mexico Land Office for approval. Increasing all other species proportionately may be acceptable.



District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
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District III
 1000 Rio Brazos Rd., Aztec, NM 87410
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District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 207893

CONDITIONS

Operator: Maverick Permian LLC 1111 Bagby Street Suite 1600 Houston, TX 77002	OGRID: 331199
	Action Number: 207893
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
jharimon	Duplicate OCD INCIDENT, closed based on nPRS0414755359. UPLOAD FROM HISTORIC FILES	4/14/2023