TETRA TECH

March 13, 2024

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

Re: Remediation Report and Closure Request
Maverick Permian, LLC
SEMU Permian #31 Injection Line Release
Unit Letter C, Section 19, Township 20 South, Range 38 East
Lea County, New Mexico
Incident ID# nPAC0535052112

Dear Sir or Madam,

Tetra Tech, Inc. (Tetra Tech) was contracted by Maverick Natural Resources (Maverick) to address a release that occurred at an injection line near the South East Monument Unit (SEMU) Permian #31 injection well, API #30-025-07817, located in Unit Letter C, Section 19, Township 20 South, Range 38 East, in Lea County, New Mexico. The release site (Site) coordinates are 32.563811°, -103.190141°. The Site location is shown in **Figures 1** and **2**.

BACKGROUND

There is not an official C-141 form available for this release. According to the C-141 notes on file with the New Mexico Oil Conservation District (NMOCD) provided in **Attachment 1**, a release was discovered on November 29, 2005, from a buried 2-inch steel injection line associated with the SEMU Permian #31 injection well. The release consisted of 82 barrels (bbls) of produced water, of which 60 bbls were recovered by a vacuum truck during the initial response. The C-141 notes describe the affected area as a 12-foot by 483-foot section of caliche lease road and a 39-foot by 27-foot area of pasture. The Site was assigned Incident ID of nPAC0535052112. The initial release, assessment activities, and remediation were performed under contract with ConocoPhillips, the previous site owner and Operator. In June 2022 Maverick acquired this site from ConocoPhillips and took responsibility for the release.

SITE CHARACTERIZATION

Receptors

Tetra Tech performed a site characterization was performed and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified by 19.15.29 New Mexico Administrative Code (NMAC). The Site is located in an area with low karst potential.

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Depth to Groundwater

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are no water wells within an 800-meter (approximately ½-mile) radius of the Site. The search radius had to be extended to 1,600 meters (approximately 1 mile) before one (1) water well was encountered. The average depth to groundwater based on this well is 84 ft below ground surface (bgs).

On March 7, 2024, Tetra Tech and West Texas Water Well mobilized to the SEMU Permian #027 (API 30-025-07814) Well Pad and installed a Depth-To-Water (DTW) boring to 55 feet bgs at 32.560329°, -103.189912°, approximately 0.25-miles south of the Site. The DTW boring did not identify groundwater in the upper 55 feet which verifies that groundwater is below 55 feet at the Site.

Site characterization data are included in **Attachment 2** and boring logs are provided in **Attachment 3**.

REGULATORY FRAMEWORK

Based upon the release footprint location 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 levels (RRALs) for Benzene, Toluene, Ethylbenzene, and Xylene (BTEX), Total Petroleum Hydrocarbons (TPH), and chloride in soil.

Based on the site characterization, established depth to groundwater, and in accordance with Table 1 of 19.15.29.12 NMAC, the remediation RRALs for the Site are as follows:

Closure Criteria for Soils Impacted by a Release

Constituent	Remediation RRAL
Chloride	10,000 mg/kg
TPH (GRO+DRO+ORO)	2,500 mg/kg
TPH (DRO+ORO)	1,000 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

Additionally, in accordance with the New Mexico Oil Conservation District (NMOCD) guidance *Procedures for Implementation of the Spill Rule (19.15.29 NMAC)* (September 6, 2019), the following reclamation requirements for surface soils (0-4 feet bgs) are as follows:

Reclamation Requirements

Constituent	Remediation RRAL
Chloride	600 mg/kg
TPH (GRO+DRO+ORO)	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

SITE ASSESSMENT

The release extent indicated in **Figure 3** is based on information found in the C-141 description and correspondence with COP personnel. In order to achieve horizontal and vertical delineation of the release extent, Tetra Tech personnel mobilized to Site and conducted soil sampling on August 27, 2020. A total of 10 soil borings (BH-1 through BH-10) were installed using an air rotary drilling rig. Three (3) borings (BH-1, BH-2, and BH-3) were installed within the release extent to a depth of 25 feet bgs to achieve vertical delineation of the release. The remaining seven (7) borings (BH-4 through BH-10) were installed along the perimeter of the release extent to a depth of 10 feet bgs to achieve horizontal delineation. Due to steel surface lines in the vicinity of the release, the air rotary drilling rig could not access the area east of the release extent. Therefore, two (2) hand auger borings (BH-7 and BH-8) were installed along the eastern perimeter to a depth of five (5) feet bgs to achieve horizontal delineation east of the release extent. **Figure 3** depicts the release extent and the August 2020 soil boring locations.

A total of 46 samples were collected from the 10 borings and submitted to Pace Analytical National Center for Testing & Innovation (Pace) in Nashville, Tennessee to be analyzed for chloride via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. Boring logs are included in **Attachment 3** presenting soil descriptions, sample depths, and field screening data from the August 2020 assessment activities.

SUMMARY OF SAMPLING RESULTS

Results from the August 2020 soil sampling event are summarized in **Table 1**. No laboratory analytical results reported concentrations greater than the chloride Reclamation Requirement of 600 mg/kg for shallow soils less than 4 feet bgs or Table I Closure Criteria for groundwater from 51 feet to 100 feet bgs of 10,000 mg/kg.

Analytical results associated with the 0 to 1 foot and 1 to 2 foot intervals at BH-1 reported TPH at concentrations greater than the Reclamation Requirements (100 mg/kg). The remainder of the analytical results associated with the samples collected reported concentrations as less than respective Reclamation Requirements or RRALs for TPH. The analytical results associated with all samples analyzed were below the BTEX Reclamation Requirements of 50 mg/kg and benzene Reclamation Requirements of 10 mg/kg therefore, both horizontal and vertical delineation was achieved during the August 2020 soil assessment activities.

INITIAL CLOSURE REQUEST

Tetra Tech, on behalf of ConocoPhillips, submitted a Release Characterization and Closure Request to NMOCD On January 6, 2021. On March 17, 2023, the NMOCD rejected the closure request with the following comments:

> *"The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater.*

> *BH-1 identified impact that exceeds closure criteria. This area must be fully delineated and meet 19.15.29 NMAC.*
>
> *A deferral can only be granted on an active well pad and not on a road, right-of-way, or in the pasture. A clarification document has been placed on the OCD website to clarify the matter."*

At the time of this communication from NMOCD, Maverick was the site owner and operator. Maverick contracted Tetra Tech to respond to the closure request denial by mobilizing to remediate and reclaim the site to address the NMOCD comments above.

REMEDIATION AND CONFIRMATION SAMPLING

Tetra Tech, along with remediation subcontractor McNabb Enterprises, mobilized to the site on October 27, 2023 to begin hydro-excavation of flowlines and completed excavation and backfill on November 7, 2023. **Figure 4** shows the remediation area where soil and impacted pad material were removed from an approximately 500 square foot area surrounding assessment boring BH-1, where TPH concentrations greater than Reclamation Requirements were reported down to 3 feet bgs. A portion of the site was cleared using hydro-excavation to determine underground line locations. McNabb proceeded to excavate and transport 72 cubic yards of impacted soil/pad material (caliche) to the R360 Halfway landfill in New Mexico.

A total of four (4) sidewall and three (3) floor confirmation samples were obtained after excavation to verify reclamation/remediation standards had been obtained with a sampling density of approximately one sample per 125 square feet. The samples were submitted to Cardinal Laboratories in Hobbs, New Mexico for analysis of chloride by method SM4500Cl-B, TPH by EPA Method 8015M, and BTEX by EPA Method 8021B.

The laboratory analytical results screened against Reclamation Requirements are summarized in **Table 2**. Results for all samples were reported as non-detect concentrations or at concentrations less than Reclamation Requirements. Subsequent to receipt of final confirmation sampling results, McNabb backfilled the excavation with clean topsoil and caliche obtained from the Bob McCassland pit to return the remediation surface to match the surrounding caliche well pad.

Laboratory analytical data packages including chain of custody documentation are included in **Attachment 4**. Photographic Documentation showing the excavated area and final grading after backfilling is provided in **Attachment 5**.

CONCLUSIONS

The SEMU Permian #031 well pad has been remediated to achieve remediation/reclamation standards as specified in NMAC 19.15.29. Therefore, Maverick Permian, LLC respectfully requests closure of this release. The final C-141 Closure form has been signed and digitally submitted electronically during the submission of this report to the NMOCD Permitting Portal. If you have any questions concerning the assessment or remediation activities performed at this Site.

Sincerely,

Stephen Jester
Project Manager
Tetra Tech, Inc.

Charles H. Terhune IV, P.G.
Program Manager
Tetra Tech, Inc.

cc:

Mr. Bryce Wagoner, Maverick Natural Resources

LIST OF ATTACHMENTS

Figures

Tables

Attachments

TETRA TECH

FIGURES

Tetra Tech, Inc.
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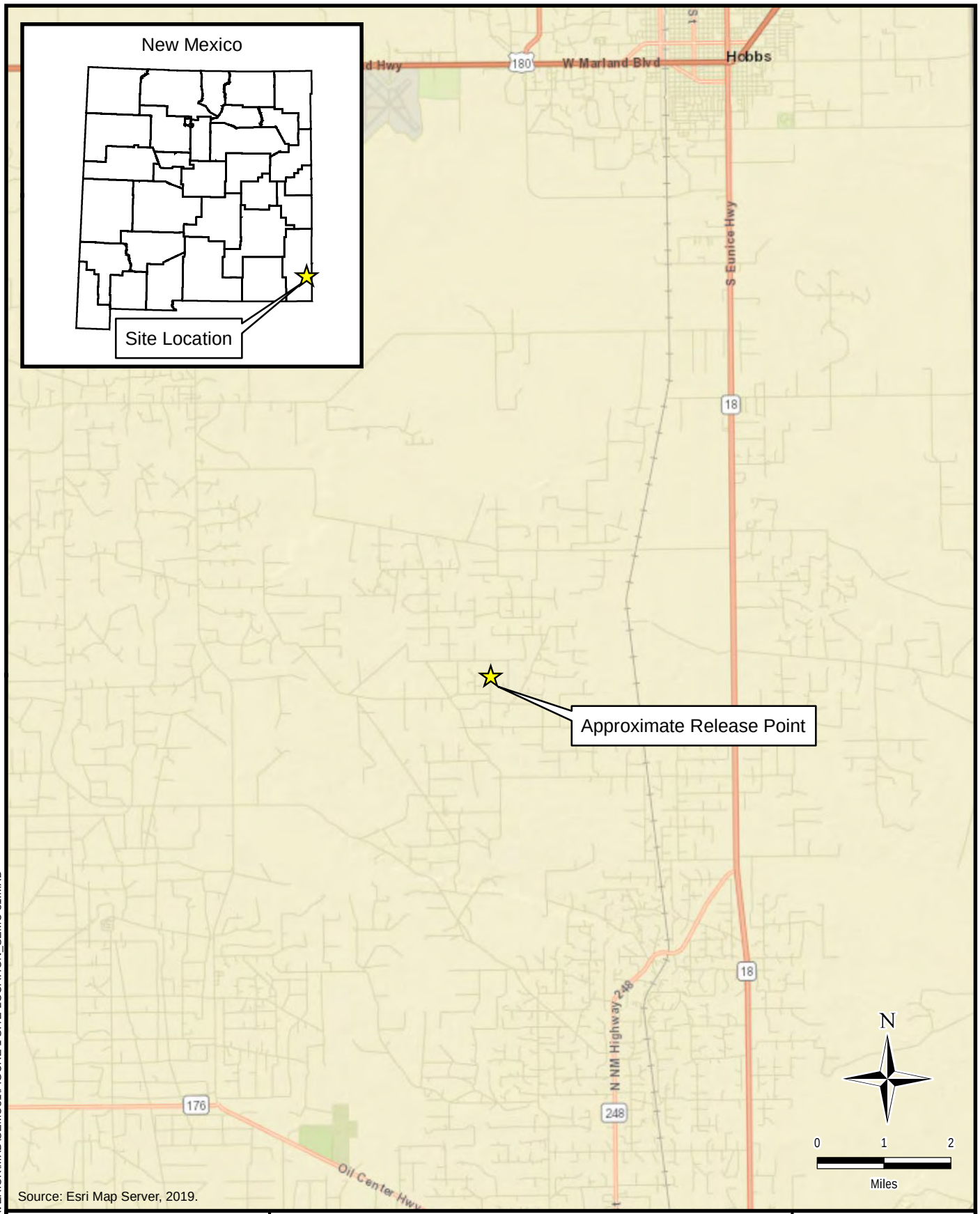

DOCUMENT PATH: D:\MAVERICK\MXD\SEMU31\FIGURE 1 SITE LOCATION_SEMU 31.MXD

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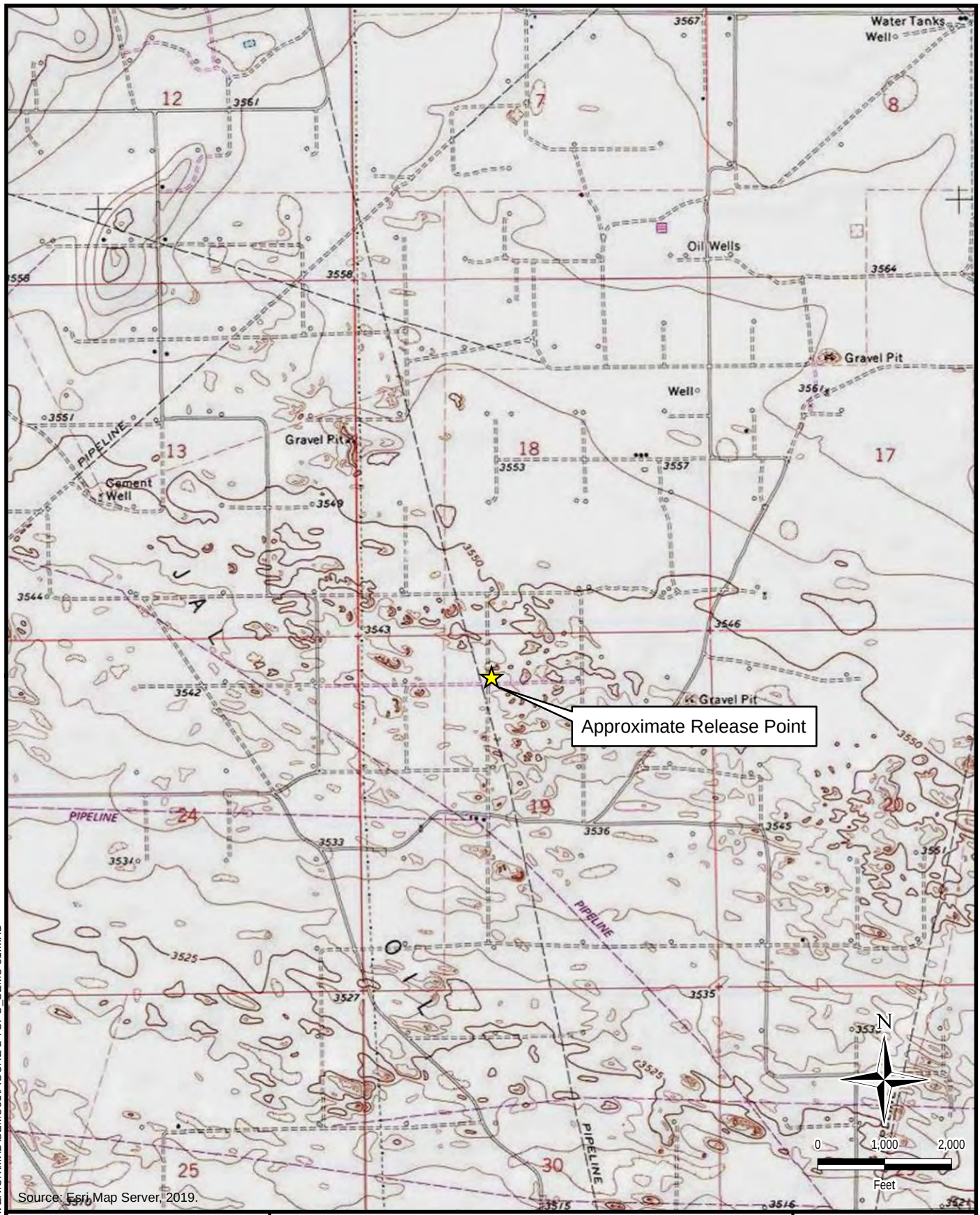
MAVERICK NATURAL RESOURCES

NPAC0535052112
(32.564083°, -103.190025°)
LEA COUNTY, NEW MEXICO

SEMU PERMIAN #031 INJECTION LINE RELEASE
SITE LOCATION MAP

PROJECT NO.:	212C-MD-03271
DATE:	NOVEMBER 09, 2023
DESIGNED BY:	AAM

Figure No.
1



DOCUMENT PATH: D:\MAVERICK\MXD\SEMU31\FIGURE 2 TOPO_SEMU 31.MXD

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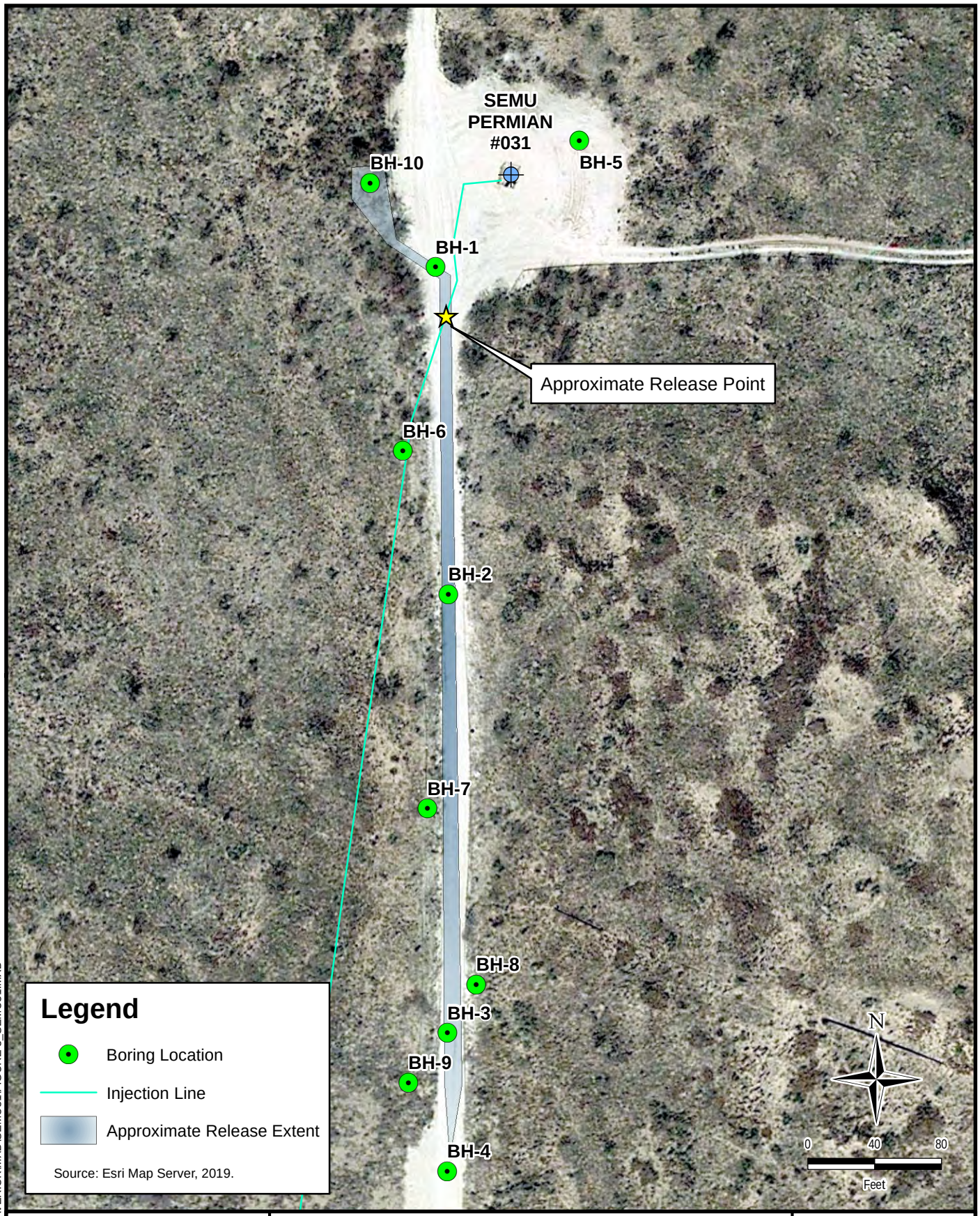
SEMU PERMIAN #031 INJECTION LINE RELEASE
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-03271
DATE:	NOVEMBER 09, 2023
DESIGNED BY:	AAM

Figure No.
2



DOCUMENT PATH: D:\MAVERICK\MXD\SEMU31\FIGURE 3_SEMU31.MXD

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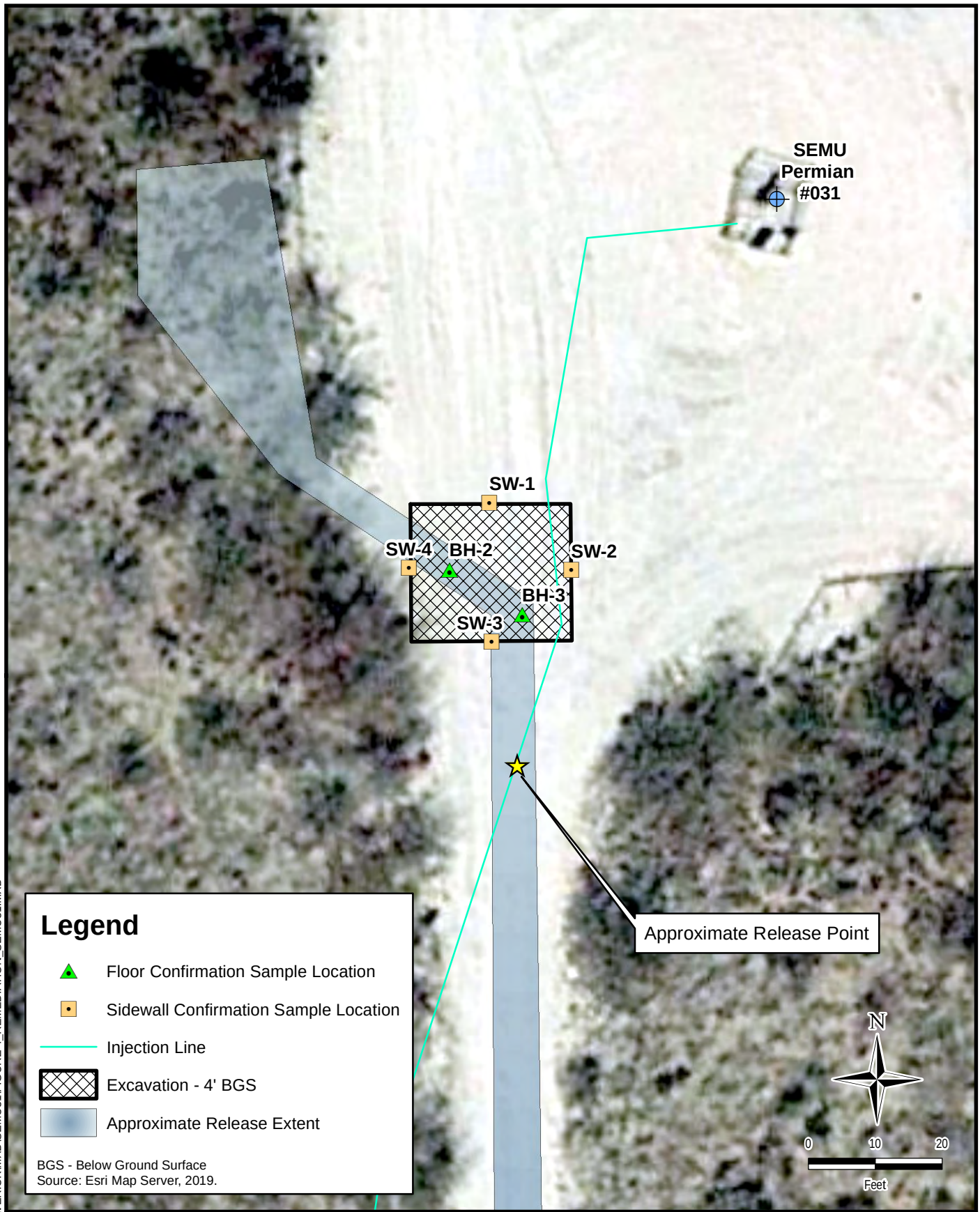
SEMU PERMIAN #031 INJECTION LINE RELEASE
SITE ASSESSMENT MAP

PROJECT NO.:	212C-MD-03271
DATE:	NOVEMBER 09, 2023
DESIGNED BY:	AAM

Figure No.
3



Legend

- Floor Confirmation Sample Location
- Sidewall Confirmation Sample Location
- Injection Line
- Excavation - 4' BGS
- Approximate Release Extent

BGS - Below Ground Surface
Source: Esri Map Server, 2019.

DOCUMENT PATH: D:\MAVERICK\MXD\SEMU31\FIGURE 4_REMEDIATION_SEMU31.MXD

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SEMU PERMIAN #031 INJECTION LINE RELEASE
REMEDIATION AND CONFIRMATION SAMPLING

PROJECT NO.:	212C-MD-03271
DATE:	NOVEMBER 10, 2023
DESIGNED BY:	AAM

Figure No.
4

TABLES

TETRA TECH

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT SAMPLING - INCIDENTS NPAC0535052112 & NPRS0534230461
MAVERICK PERMIAN, LLC
SEMU PERMIAN #31 INJECTION LINE RELEASES
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth Interval	Chloride[1]		BTEX[2]										TPH[3]							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO[4] C_3 - C_{10}		DRO C_{10} - C_{28}		ORO C_{28} - C_{40}		Total TPH GRO+DRO+ORO	
		feet bgs	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	Q	mg/kg	
Reclamation Requirements (19.15.29 NMAC)			**600**		**10**								**50**								**100**	
BH-1	8/27/2020	0-1	21.5		< 0.00112		< 0.00559		< 0.00280		< 0.00727		-		< 0.106		1390		3040		**4430**	
		2-3	9.4	J	< 0.00105		< 0.00523		< 0.00261		0.00119	J	0.00119	J	< 0.102		37.9		100.0		**138**	
		4-5	< 104.0		< 0.00109		< 0.00544		< 0.00272		< 0.00707		-		< 0.104		8.05		14.5		22.6	
		6-7	57.8		< 0.00110		< 0.00551		< 0.00275		< 0.00716		-		< 0.105		11.5		39.5		51.0	
		9-10	41.1		< 0.00110		< 0.00552		< 0.00276		< 0.00718		-		< 0.105		1.89	J	1.98	J	3.87	
BH-2	8/27/2020	0-1	9.55	J	< 0.00105		< 0.00527		< 0.00263		< 0.00685		-		< 0.103		57.9		171		229	
		2-3	< 20.2		< 0.00102		< 0.00512		< 0.00256		< 0.00666		-		< 0.101		< 4.05		1.81	J	1.81	
		4-5	29.8		< 0.00107		< 0.00535		< 0.00268		< 0.00696		-		< 0.104		6.12		18.2		24.3	
		6-7	609		< 0.00112		< 0.00558		< 0.00279		< 0.00725		-		< 0.106		< 4.23		2.97	J	2.97	
		9-10	472		< 0.00110		< 0.00550		< 0.00275		< 0.00715		-		< 0.105		< 4.20		< 4.20		-	
		14-15	433		< 0.00108		< 0.00541		< 0.00271		< 0.00703		-		< 0.104		1.80	J	3.9	B J	5.7	
		19-20	**1550**		< 0.00121		< 0.00606		< 0.00303		< 0.00788		-		< 0.111		< 4.42		3.11	B J	3.11	
		24-25	**929**		< 0.00106		< 0.00530		< 0.00265		< 0.00689		-		0.0259	J	< 4.12		1.09	B J	1.12	
BH-3	8/27/2020	0-1	73.9		< 0.00105		< 0.00524		< 0.00262		< 0.00681		-		0.0293	J	5.74		27.8		33.57	
		2-3	33.1		< 0.00104		< 0.00520		< 0.00260		< 0.00677		-		0.0295	J	17.2		61.6		78.83	
		4-5	31.1		< 0.00104		< 0.00519		< 0.00259		< 0.00674		-		0.0225	J	< 4.08		4.05	B J	4.07	
		6-7	79.5		< 0.00107		< 0.00534		< 0.00267		< 0.00695		-		< 0.103		< 4.14		3.91	B J	3.91	
		9-10	80.8		< 0.00106		< 0.00531		< 0.00265		< 0.00690		-		0.0285	J	< 1.66		1.06	B J	1.09	
BH-4	8/27/2020	0-1	83.1		< 0.00104		< 0.00519		< 0.00260		< 0.00675		-		0.0979	J	2.77	J	7.11	B	9.98	
		2-3	176		< 0.00111		< 0.00555		< 0.00277		< 0.00721		-		< 0.105		9.15		35.3		44.45	
		4-5	285		< 0.00106		< 0.00530		< 0.00265		< 0.00689		-		< 0.103		1.81	J	6.99	B	8.8	
		6-7	91.4		< 0.00103		< 0.00516		< 0.00258		< 0.00671		-		< 0.103		< 4.06		1.21	B J	1.21	
		9-10	148		< 0.00110		< 0.00551		< 0.00276		< 0.00716		-		< 0.105		< 4.20		1.39	B J	1.39	
BH-5	8/27/2020	0-1	< 20.4		< 0.00104		< 0.00519		< 0.00260		< 0.00675		-		< 0.102		1.89	J	6.37	B	8.26	
		2-3	< 20.3		< 0.00103		< 0.00517		< 0.00258		< 0.00672		-		< 0.102		< 4.07		4.02	B J	4.02	
		4-5	< 21.9		< 0.00119		< 0.00597		< 0.00298		< 0.00775		-		< 0.110		< 4.39		2.89	B J	2.89	
		6-7	84.7		< 0.00112		< 0.00562		< 0.00281		< 0.00731		-		< 0.106		< 4.25		2.15	B J	2.15	
		9-10	38.4		< 0.00106		< 0.00528		< 0.00264		< 0.00687		-		< 0.103		< 4.11		1.50	B J	1.50	
BH-6	8/27/2020	0-1	10.2	J	< 0.00101		< 0.00504		< 0.00252		< 0.00655		-		< 0.100		5.84		24.1		29.9	
		2-3	< 20.8		< 0.00108		< 0.00540		< 0.00270		< 0.00702		-		< 0.104		1.81	J	7.65	B	9.46	
BH-7	8/27/2020	0-1	< 20.0		< 0.00100		< 0.00502		< 0.00251		< 0.00653		-		< 0.100		6.99		34.5		41.49	
		2-3	< 20.1		0.000503	J	< 0.00503		< 0.00252		< 0.00654		0.000503	J	< 0.100		< 4.01		1.13	J	1.13	
		4-5	< 20.0		< 0.00100		< 0.00502		< 0.00251		< 0.00653		-		0.0331	J	3.08	J	< 4.01		3.11	
BH-8	8/27/2020	0-1	< 20.0		< 0.00100		< 0.00502		< 0.00251		< 0.00653		-		< 0.100		3.21	J	5.16		8.37	
		2-3	< 20.0		< 0.00100		< 0.00502		< 0.00251		< 0.00653		-		< 0.100		2.16	J	2.59	J	4.75	

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SOIL ASSESSMENT SAMPLING - INCIDENTS NPAC0535052112 & NPRS0534230461
MAVERICK PERMIAN, LLC
SEMU PERMIAN #31 INJECTION LINE RELEASES
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth Interval	Chloride[1]		BTEX[2]										TPH[3]							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO[4] C_3 - C_{10}		DRO C_{10} - C_{28}		ORO C_{28} - C_{40}		Total TPH GRO+DRO+ORO	
		feet bgs	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	Q	mg/kg	
Reclamation Requirements (19.15.29 NMAC)			**600**		**10**								**50**								**100**	
		4-5	< 20.0		< 0.00100		< 0.00502		< 0.00251		< 0.00653		-		< 0.100		2.52	J	3.24	J	5.76	
BH-9	8/27/2020	0-1	15.4	J	< 0.00102		< 0.00509		< 0.00254		< 0.00661		-		< 0.102		3.75	J	13.6		17.35	
		2-3	< 20.2		< 0.00102		< 0.00508		< 0.00254		< 0.00661		-		< 0.101		1.77	J	0.869	J	2.64	
		4-5	< 20.9		< 0.00109		< 0.00547		< 0.00274		< 0.00712		-		< 0.105		< 4.19		2.27	J	2.27	
		6-7	< 20.9		0.000919	J	< 0.00546		< 0.00273		< 0.00710		-		< 0.105		< 4.18		1.3	J	1.3	
		9-10	< 20.8		< 0.00108		< 0.00540		< 0.00270		< 0.00703		-		< 0.104		< 4.16		< 4.16	B J	-	
BH-10	8/27/2020	0-1	< 21.0		< 0.00110		< 0.00552		< 0.00276		< 0.00718		-		< 0.105		< 4.21		1.65	B J	1.65	
		2-3	< 20.4		< 0.00104		< 0.00520		< 0.00260		< 0.00675		-		< 0.102		21.0		105		126	
		4-5	< 20.2		< 0.00102		< 0.00508		< 0.00254		< 0.00660		-		< 0.101		< 4.03		2.52	B J	2.52	
		6-7	< 21.0		< 0.00110		< 0.00549		< 0.00275		< 0.00714		-		< 0.105		< 4.20		6.09	B	6.09	
		9-10	< 21.2		< 0.00112		< 0.00562		< 0.00281		< 0.00731		-		< 0.106		< 4.25		2.64	B J	2.64	

NOTES:

bgs: Below ground surface
mg/kg: Milligrams per kilogram
TPH: Total Petroleum Hydrocarbons
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
1: Method 300.0
2: Method 8260B
3: Method 8015

Bold and highlighted values indicate exceedance of Reclamation Requirements (19.15.29 NMAC).

B: Analyte was detected in the associated blank.

J: Thereported concentration is estimated and identification of the analyte is acceptable.

TETRA TECH

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
SOIL CONFIRMATION SAMPLING - INCIDENTS NPAC0535052112 & NPRS0534230461
MAVERICK PERMIAN, LLC
SEMU PERMIAN #31 INJECTION LINE RELEASEs
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Chloride[1]		BTEX[2]										TPH[3]							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH	
															C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		(GRO+DRO+EXT DRO)	
		feet bgs	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	Q	mg/kg	
Reclamation Requirements (19.15.29 NMAC)			**600**		**10**								**50**								**100**	
SW-1	11/1/2023	0.0 - 4.0	144		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30	
SW-2	11/1/2023	0.0 - 4.0	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30	
SW-3	11/1/2023	0.0 - 4.0	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30	
SW-4	11/1/2023	0.0 - 4.0	224		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30	
BH-1 (4.0')	11/1/2023	4.0 - 4.5	224		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30	
BH-2 (4.0')	11/1/2023	4.0 - 4.5	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30	
BH-3 (4.0')	11/1/2023	4.0 - 4.5	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30	

NOTES:

bgs: Below ground surface
mg/kg: Milligrams per kilogram
TPH: Total Petroleum Hydrocarbons
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
1: Method SM4500Cl-B
2: Method 8021B
3: Method 8015M

Bold and highlighted values indicate exceedance of Reclamation Requirements (19.15.29 NMAC).

ATTACHMENT 1: C-141 INFORMATION

OCD Permitting

NPAC0535052112 SEMU PERMIAN #031 @ 30-025-07817

General Incident Information

Site Name: SEMU PERMIAN #031
Well: [30-025-07817] SEMU PERMIAN #031
Facility:
Operator: [331199] Maverick Permian LLC
Status: Remediation Closure Report Received, Pending OCD Review
Type: Produced Water Release
Severity: Major
Surface Owner: Federal
District: Hobbs
County: Lea (25)

Incident Location: C-19-20S-38E 660 FNL 1980 FWL
Lat/Long: 32.5640831,-103.1900253 NAD83
Directions:

Notes

Source of Referral: Industry Rep
Action / Escalation:

Resulted In Fire: ☐
Resulted In Injury: ☐
Endangered Public Health: ☐
Will or Has Reached Watercourse: ☐
Fresh Water Contamination: ☐
Property Or Environmental Damage: ☐

Contact Details

Contact Name:
Contact Title:

Event Dates

Date of Discovery: 11/29/2005
Initial C-141 Report Due: 12/14/2005
Remediation Closure Report Due: 06/23/2023

Incident Dates

Type	Action	Received	Denied	Approved
Remediation Closure Report		01/06/2021		
Remediation Closure Report Extension		08/15/2018		08/15/2018
Sampling Notice	[292132]	12/07/2023		12/07/2023
Initial C-141 Report		11/29/2005		11/29/2005
Notification		11/29/2005		11/29/2005

Compositional Analysis of Vented and/or Flared Natural Gas

No Compositional Analysis Found

Incident Materials

Cause	Source	Material	Volume Unk.	Volume Released	Volume Recovered	Volume Lost	Units
Corrosion	Pipeline (Any)	Produced Water	☐	82	60	22	BBL

The concentration of dissolved chloride in the produced water >10,000 mg/l: ☐ Yes ☑ No

Quick Links
- General Incident Information
- Materials
- Events
- Orders
- Action Status

Associated Images
- Incident Files (1)
- Well Files (47)

New Searches
- New Facility Search
- New Incident Search
- New Operator Search
- New Pit Search
- New Spill Search
- New Tank Search
- New Well Search

03/17/2023	The (03/17/2023, C-141) application [14101] was rejected by OCD. The operator was emailed with details of this event.
03/17/2023	Closure denied. Depth to groundwater data inadequate. BH-1 exceeds closure criteria. Additional delineation required. A deferral can only be granted on an active well pad and not on a road, right-of-way, or in the pasture. A clarification document has been placed on the OCD website to clarify the matter. Submit a report by 6/23/2023.
03/17/2023	An application [14101] was submitted to OCD for review. It was submitted, indicating that it was an: [C-141] Application for administrative approval of a release notification and corrective action The operator was emailed confirmation of this event.
01/06/2021	The (03/17/2023, C-141) application [14101] was assigned to this incident.
12/16/2005	C-141: A buried 2" steel injection line leaked possibly due to corrosion, cause cannot be determined until such time as the line can be dug out and inspected/repaired. The line is temporarily shut in waiting for the New Mexico One Call to clear and new pipe arrives for repairs. The affected area included a 12'x483' section of caliche road and a 39'x27' area of pasture. A vacuum truck was used to pick up the free liquids (60 bbls of produced water was recovered). The site will be delineated to determine what further clean up will be needed.

Incident Severity

Major release as defined by 19.15.29.7(A) NMAC? ☑ Yes ☐ No	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.

Incident Corrective Actions

No initial response data was found for this incident.

No site characterization data was found for this incident.

No remediation plan data was found for this incident.

No active remediation deferral request was found for this incident.

No remediation closure report data was found for this incident.

No reclamation report data was found for this incident.

No re-vegetation report data was found for this incident.

Orders

No Orders Found

ATTACHMENT 2: 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-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 04412 S	L	LE	4	4	2	13	20S	37E	669189	3605491*	1326	155	84	71

Average Depth to Water: **84 feet**

Minimum Depth: **84 feet**

Maximum Depth: **84 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 669909.331 **Northing (Y):** 3604376.767 **Radius:** 1600

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

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 Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 04412 S		L	LE	4	4	2	13	20S	37E	669189	3605491*	1329	155	84	71

Average Depth to Water: **84 feet**

Minimum Depth: **84 feet**

Maximum Depth: **84 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

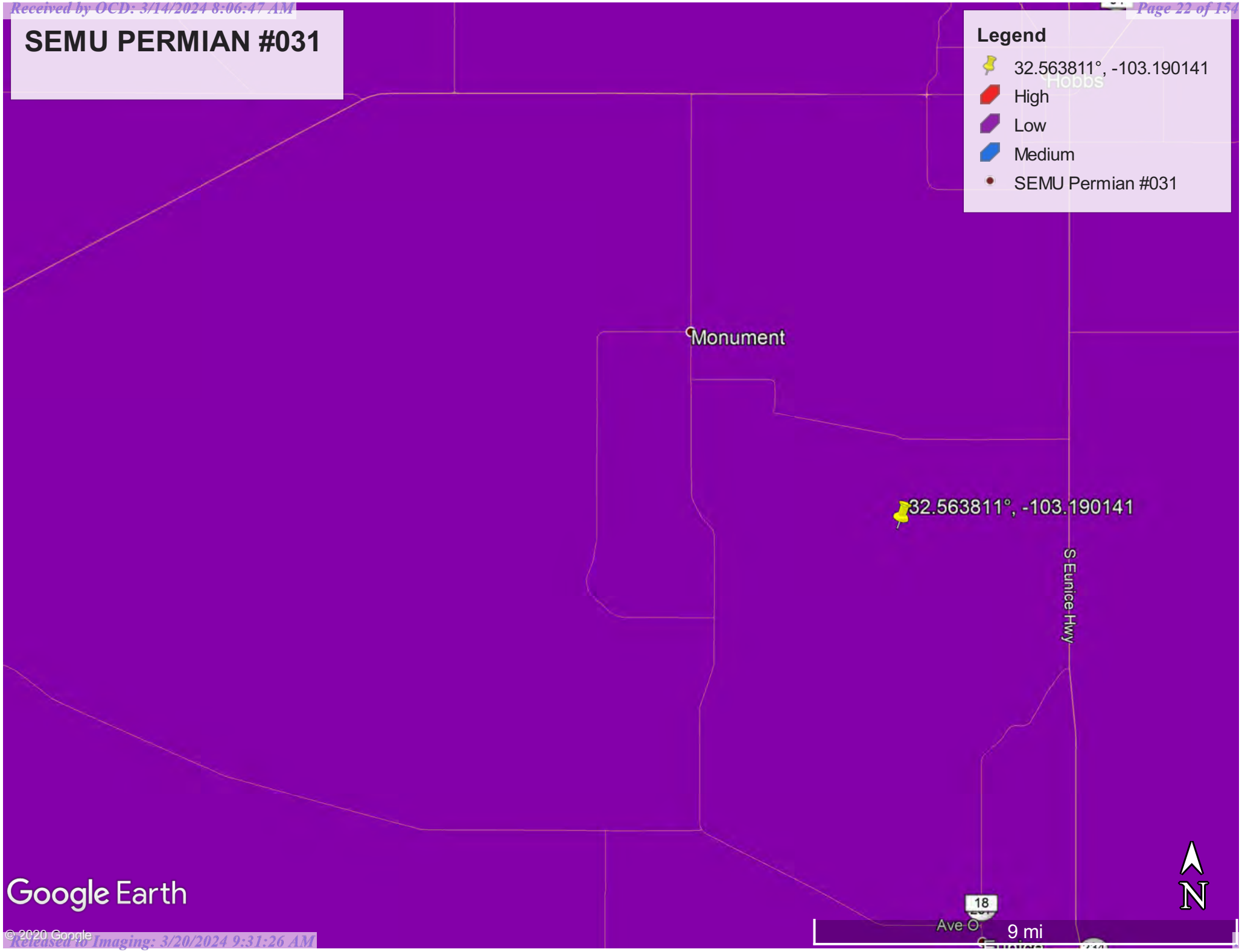
Easting (X): 669805.582 **Northing (Y):** 3604312.847 **Radius:** 1600

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

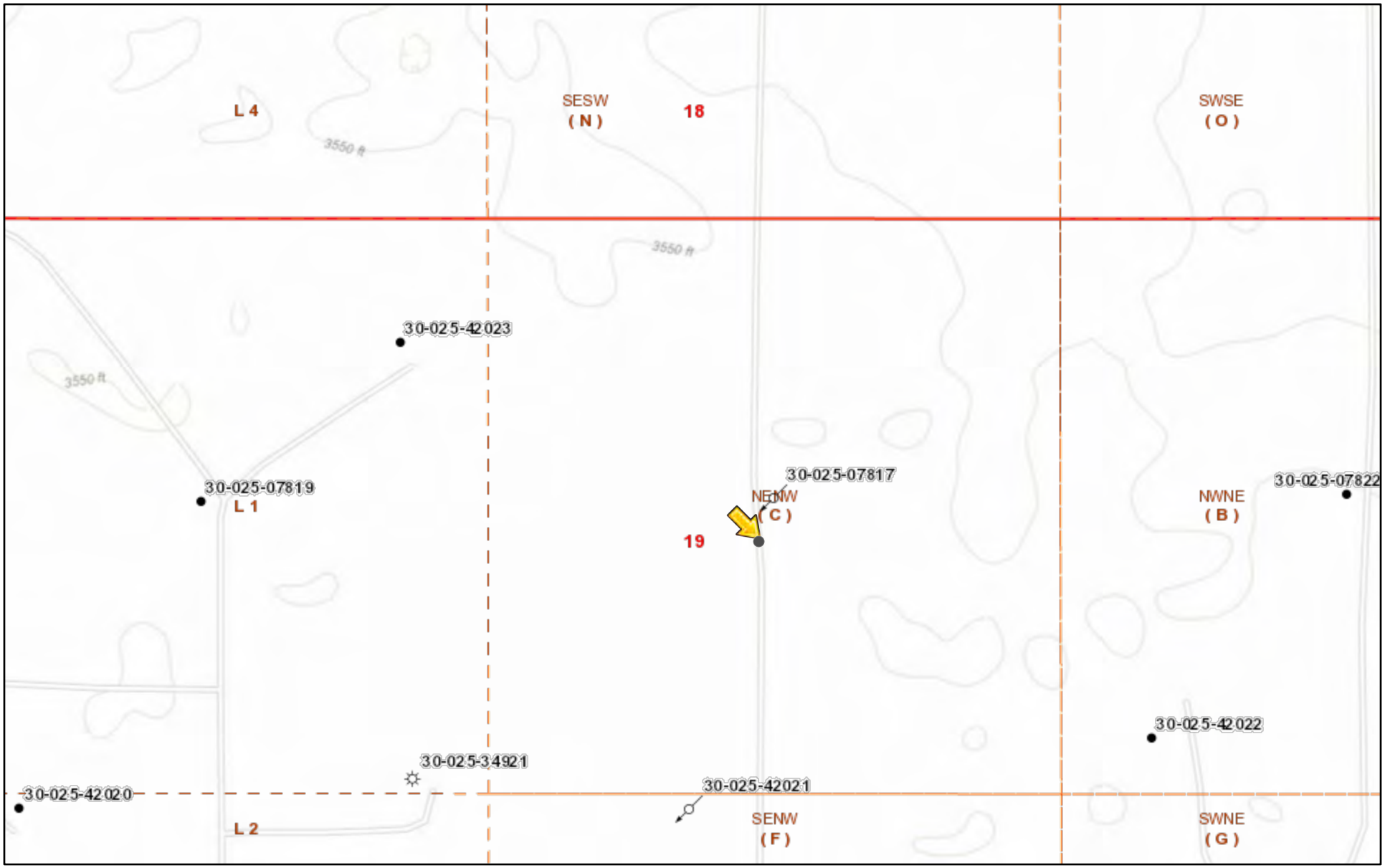
9/14/20 4:46 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

SEMU PERMIAN #031



SEMU Permian #031



12/22/2020, 11:30:22 PM

1:4,514

0 0.03 0.07 0.13 mi

0 0.05 0.1 0.2 km

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

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

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division

ATTACHMENT 3: BORING LOGS

212C-MD-02103 | TETRA TECH | **LOG OF BORING BH-1** | Page 1 of 1

Project Name: SEMU Permian #031 Injection Line Release

Borehole Location: GPS: 32.563899°, -103.190154° | Surface Elevation: 3546 ft

Borehole Number: BH-1 | Borehole Diameter (in.): 5 | Date Started: 8/27/2020 | Date Finished: 8/27/2020

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			0.0	118								**-ML-** SANDY SILT; Brown, loose, dry, with faint hydrocarbon odor, with no staining.	1.5	BH-1 (0'-1')
			0.0	46								**-SM-** SILTY SAND; Light tan, loose, dry, fine-grained, with no odor, with no staining.	4	BH-1 (2'-3')
5			0.0	200								**-SM-** SILTY SAND; Light tan, loose, dry, fine-grained, moderately cemented, with no odor, with no staining. -- with some caliche layers @ 4'-5'.		BH-1 (4'-5')
			0.0	100								-- poorly cemented @ 6'-7'.	8	BH-1 (6'-7')
10			0.0	100								**-SM-** SILTY SAND; Light tan, dense, dry, fine-grained, well cemented, with no odor, with no staining. -- grading to mudstone @ 9'-10'.	10	BH-1 (9'-10')

Bottom of borehole at 10.0 feet.

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

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

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

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-02103 | TETRA TECH

LOG OF BORING BH-2

Page 1 of 1

Project Name: SEMU Permian #031 Injection Line Release

Borehole Location: GPS: 32.553364°, -103.190185° | Surface Elevation: 3536 ft

Borehole Number: BH-2 | Borehole Diameter (in.): 5 | Date Started: 8/27/2020 | Date Finished: 8/27/2020

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
				-SM- SILTY SAND; Light tan, loose, dry, fine-grained, with no odor, with no staining.		BH-2 (0'-1')
						BH-2 (2'-3')
5						BH-2 (4'-5')
					5.5	
				-SM- SILTY SAND; Light tan, loose, dry, fine-grained, moderately cemented, with no odor, with no staining. -- with some siltstone @ 6'-7'		BH-2 (6'-7')
10		0.0	830			BH-2 (9'-10')
					12	
				-SM- SILTY SAND; Tan, dense, dry, fine-grained, well cemented, with no odor, with no staining.		
15		0.0	720			BH-2 (14'-15')
20		0.0	1450			BH-2 (19'-20')
25		0.0	1060		25	BH-2 (24'-25')

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

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

Bottom of borehole at 25.0 feet.

Notes:

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

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-02103	TETRA TECH	**LOG OF BORING BH-3**	Page 1 of 1

Project Name: SEMU Permian #031 Injection Line Release

Borehole Location: GPS: 32.562689°, -103.190163° | Surface Elevation: 3545 ft

Borehole Number: BH-3 | Borehole Diameter (in.): 5 | Date Started: 8/27/2020 | Date Finished: 8/27/2020

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			0.0	120								**-ML-** SANDY SILT; Tan, loose, dry, with caliche, with no odor, with no staining.	1.5	BH-3 (0'-1')
			0.0	230								**-ML-** SANDY SILT; Tan, loose, dry, fine-grained, with some caliche, with no odor, with no staining.	3.5	BH-3 (2'-3')
5			0.0	93								**-SM-** SILTY SAND; Tan, fine-grained, loose, slightly moist, with no odor, with no staining.	5.5	BH-3 (4'-5')
			0.0	214								**-SM-** SILTY SAND: Tan, fine-grained, well cemented, with occasional friable siltstone, with no odor, with no staining.		BH-3 (6'-7')
10			0.0	163									10	BH-3 (9'-10')

Bottom of borehole at 10.0 feet.

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

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

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

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-02103	TETRA TECH	**LOG OF BORING BH-4**	Page 1 of 1

Project Name: SEMU Permian #031 Injection Line Release

Borehole Location: GPS: 32.562415°, -103.190150° | Surface Elevation: 3545 ft

Borehole Number: BH-4 | Borehole Diameter (in.): 5 | Date Started: 8/27/2020 | Date Finished: 8/27/2020

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			0.0	140								**-SM-** SILTY SAND; Light tan, loose, dry, fine-grained, with no odor, with no staining. -- with some caliche @ 0'-1'.		BH-4 (0'-1')
			0.0	170										BH-4 (2'-3')
													4	
5			0.0	370								**-SM-** SILTY SAND; Light tan, loose, dry, fine-grained, moderately cemented, with no odor, with no staining. -- with some mudstone @ 4'-5'.		BH-4 (4'-5')
			0.0	147										BH-4 (6'-7')
													9	
10			0.0	247								**-SM-** SILTY SAND; Tan, dense, dry, fine-grained, well cemented, with no odor, with no staining.	10	BH-4 (9'-10')

Bottom of borehole at 10.0 feet.

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

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

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

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-02103 | TETRA TECH | **LOG OF BORING BH-5** | Page 1 of 1

Project Name: SEMU Permian #031 Injection Line Release

Borehole Location: GPS: 32.564104°, -103.189891° | Surface Elevation: 3546 ft

Borehole Number: BH-5 | Borehole Diameter (in.): 5 | Date Started: 8/27/2020 | Date Finished: 8/27/2020

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			0.0	38								**-ML-** SANDY SILT; Brown, loose, dry, with no odor, with no staining.	1.5	BH-5 (0'-1')
			0.0	30								**-SM-** SILTY SAND; Light tan, loose, dry, fine-grained, with no odor, with no staining. -- with some caliche layers @ 2'-3'.		BH-5 (2'-3')
5			0.0	78										BH-5 (4'-5')
			0.0	305										BH-5 (6'-7')
												-- becoming moderately cemented @ 6'-10'.		
10			0.0	114									10	BH-5 (9'-10')

Bottom of borehole at 10.0 feet.

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

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

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

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-02103	TETRA TECH	**LOG OF BORING BH-6**	Page 1 of 1

Project Name: SEMU Permian #031 Injection Line Release

Borehole Location: GPS: 32.563592°, -103.190157° | Surface Elevation: 3547 ft

Borehole Number: BH-6 | Borehole Diameter (in.): 5 | Date Started: 8/27/2020 | Date Finished: 8/27/2020

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			0.0	21								**-SM-** SILTY SAND; Tan, loose, dry, fine-grained, with no odor, with no staining.		BH-1 (0'-1')
			0.0	26									3	BH-1 (2'-3')

Bottom of borehole at 3.0 feet.

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

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

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

Logger: John Thurston | Drilling Equipment: Hand Auger | Driller: Scarborough Drilling

212C-MD-02103	TETRA TECH	**LOG OF BORING BH-7**	Page 1 of 1

Project Name: SEMU Permian #031 Injection Line Release

Borehole Location: GPS: 32.563011°, -103.190167° | Surface Elevation: 3545 ft

Borehole Number: BH-7 | Borehole Diameter (in.): 5 | Date Started: 8/27/2020 | Date Finished: 8/27/2020

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			0.0	15								**-SM-** SILTY SAND; Light red, loose, dry, fine-grained, with no odor, with no staining.		BH-7 (0'-1')
			0.0	20										BH-7 (2'-3')
5			0.0	10								**--** with some caliche layers and becoming moderately cemented @ 4'-5'.	5	BH-7 (4'-5')
												Bottom of borehole at 5.0 feet.		BH-7 (6'-7')

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

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

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

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-02103	TETRA TECH	**LOG OF BORING BH-8**	Page 1 of 1

Project Name: SEMU Permian #031 Injection Line Release

Borehole Location: GPS: 32.562725°, -103.190150° | Surface Elevation: 3545 ft

Borehole Number: BH-8 | Borehole Diameter (in.): 5 | Date Started: 8/27/2020 | Date Finished: 8/27/2020

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			0.0	19								**-SM-** SILTY SAND; Red, loose, dry, fine-grained, with no odor, with no staining.		BH-8 (0'-1')
			0.0	21										BH-8 (2'-3')
5			0.0	20									5	BH-8 (4'-5')

Bottom of borehole at 5.0 feet.

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

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

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

Logger: John Thurston | Drilling Equipment: Hand Auger | Driller: Scarborough Drilling

212C-MD-02103	TETRA TECH	**LOG OF BORING BH-9**	Page 1 of 1

Project Name: SEMU Permian #031 Injection Line Release

Borehole Location: GPS: 32.562561°, -103.190159° | Surface Elevation: 3545 ft

Borehole Number: BH-9 | Borehole Diameter (in.): 5 | Date Started: 8/27/2020 | Date Finished: 8/27/2020

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			0.0	68								**-SM-** SILTY SAND; Light red, fine-grained, loose, dry, with no odor, with no staining.		BH-9 (0'-1')
			0.0	21								-- with some caliche layers @ 2'-3'.	3.5	BH-9 (2'-3')
5			0.0									**-SM-** SILTY SAND; Tan, fine-grained, loose, dry, with no odor, with no staining. -- with mudstone and some caliche layers @ 4'-5'. -- moderately cemented @ 4'-7'.		BH-9 (4'-5')
			0.0											BH-9 (6'-7')
10			0.0	89.2								-- well cemented @ 9'-10'.	10	BH-9 (9'-10')

Bottom of borehole at 10.0 feet.

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

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

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

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-02103 | TETRA TECH | **LOG OF BORING BH-10** | Page 1 of 1

Project Name: SEMU Permian #031 Injection Line Release

Borehole Location: GPS: 32.564037°, -103.190317° | Surface Elevation: 3545 ft

Borehole Number: BH-10 | Borehole Diameter (in.): 5 | Date Started: 8/27/2020 | Date Finished: 8/27/2020

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			0.0	44								**-ML-** SANDY SILT; Brown, loose, dry, with no odor, with no staining.	1.5	BH-9 (0'-1')
			0.0	24								**-SM-** SILTY SAND; Light tan, fine-grained, loose, dry, with no odor, with no staining. -- with occasional caliche layers @ 2'-3'.		BH-9 (2'-3')
5			0.0	96										BH-9 (4'-5')
			0.0									**-SM-** SILTY SAND; Light tan, loose, dry, fine-grained, moderately cemented, with no odor, with no staining.	5.5	BH-9 (6'-7')
10			0.0	88									10	BH-9 (9'-10')

Bottom of borehole at 10.0 feet.

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

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

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

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

TETRA TECH

BORING LOG: DTW-01 (L-15651 POD1)

PROJECT NUMBER: 212C-MD-03271
PROJECT NAME: SEMU Permian Remediations
CLIENT: Maverick Permian, LLC
ADDRESS: 1410 NW County Road
Hobbs, NM 88240

DRILLING COMPANY: West Texas Water Well
DRILL RIG: Air Rotary Rig
DRILLING METHOD: Air Rotary
BORING TYPE: Depth-to-Water
TOTAL DEPTH: 55 feet
DIAMETER: 8 inches

LATITUDE: 32.560316°
LONGITUDE: -103.190072°
SURFACE ELEVATION: 3,547 feet AMSL
LOGGED BY: Adrian Garcia
CHECKED BY: Charles Terhune

COMMENTS: AMSL: Above Mean Sea Level

Depth (Feet)	Drilling Method	Boring Completion	Graphic Log	Material Description
0	AR			CALICHE, white, dry, poorly sorted, angular, homogeneous.
5				SAND, light brown, dry, fine to medium grained, poorly sorted, loose, sub-angular to sub-rounded, homogeneous.
10				
15				CALICHE, white/pink, moist, medium dense.
20				SAND, light brown, moist, loose, fine to medium grained, sub-angular to sub-rounded, poorly sorted.
25				CALICHE/SAND, tan, loose, moist.
30				
35				
40				SAND, brown, moist, loose, fine to medium grained, sub-angular to sub-rounded, poorly sorted.
45				SAND/CALICHE, tan and white, moist, medium dense, poorly sorted.
50				
55				End of Hole at 55 feet below ground surface. No groundwater encountered, Hole plugged with hydrated 3/8" bentonite chips.

Disclaimer This bore log is intended for environmental not geotechnical purposes.

ATTACHMENT 4: LABORATORY ANALYTICAL DATA

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 11, 2020

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1256203
Samples Received:	08/29/2020
Project Number:	212C-MD-02103
Description:	SEMU Permian #31

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

Entire Report Reviewed By:

Chris McCord
Project Manager

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

TABLE OF CONTENTS

BH-2 (24-25') L1256203-01 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538140	1	09/05/20 21:55	09/05/20 22:55	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 00:07	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 20:36	09/02/20 11:19	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 20:36	09/02/20 12:58	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 13:42	TJD	Mt. Juliet, TN

BH-3 (0-1') L1256203-02 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538140	1	09/05/20 21:55	09/05/20 22:55	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 00:43	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 20:36	09/02/20 11:40	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 20:36	09/02/20 13:17	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/10/20 05:32	JN	Mt. Juliet, TN

BH-3 (2-3') L1256203-03 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538140	1	09/05/20 21:55	09/05/20 22:55	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 01:01	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1.01	09/01/20 20:36	09/02/20 12:00	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 20:36	09/02/20 13:36	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/10/20 06:10	JN	Mt. Juliet, TN

BH-3 (4-5') L1256203-04 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538140	1	09/05/20 21:55	09/05/20 22:55	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 01:20	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 20:36	09/02/20 12:21	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 20:36	09/02/20 13:55	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 17:06	TJD	Mt. Juliet, TN

BH-3 (6-7') L1256203-05 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538140	1	09/05/20 21:55	09/05/20 22:55	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 01:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 20:36	09/02/20 12:42	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 20:36	09/02/20 14:14	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 17:19	TJD	Mt. Juliet, TN

BH-3 (9-10') L1256203-06 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538140	1	09/05/20 21:55	09/05/20 22:55	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 01:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 20:36	09/02/20 13:03	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 20:36	09/02/20 14:33	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 15:24	TJD	Mt. Juliet, TN

BH-4 (0-1') L1256203-07 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538140	1	09/05/20 21:55	09/05/20 22:55	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 03:29	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536763	1.01	09/01/20 20:36	09/02/20 18:21	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 20:36	09/02/20 14:52	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 15:37	TJD	Mt. Juliet, TN

BH-4 (2-3') L1256203-08 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538140	1	09/05/20 21:55	09/05/20 22:55	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 03:47	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536763	1	09/01/20 20:36	09/02/20 18:42	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 20:36	09/02/20 15:11	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/10/20 05:45	JN	Mt. Juliet, TN

BH-4 (4-5') L1256203-09 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538140	1	09/05/20 21:55	09/05/20 22:55	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 04:05	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536763	1	09/01/20 20:36	09/02/20 19:03	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 20:36	09/02/20 09:27	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 16:54	TJD	Mt. Juliet, TN

BH-4 (6-7') L1256203-10 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538140	1	09/05/20 21:55	09/05/20 22:55	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 04:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536763	1.01	09/01/20 20:36	09/02/20 19:23	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 20:36	09/02/20 09:46	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 15:50	TJD	Mt. Juliet, TN

BH-4 (9-10') L1256203-11 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538141	1	09/06/20 23:43	09/06/20 23:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 04:42	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536763	1	09/01/20 20:36	09/02/20 19:44	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 20:36	09/02/20 10:05	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 16:02	TJD	Mt. Juliet, TN

BH-7 (0-1') L1256203-12 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538141	1	09/06/20 23:43	09/06/20 23:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 05:01	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536763	1	09/01/20 20:36	09/02/20 20:05	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 20:36	09/02/20 10:24	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/10/20 05:58	JN	Mt. Juliet, TN

BH-7 (2-3') L1256203-13 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538141	1	09/06/20 23:43	09/06/20 23:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 05:19	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536763	1	09/01/20 20:36	09/02/20 20:26	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 20:36	09/02/20 10:43	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 18:12	TJD	Mt. Juliet, TN

BH-7 (4-5') L1256203-14 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538141	1	09/06/20 23:43	09/06/20 23:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 05:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536763	1	09/01/20 20:36	09/02/20 20:46	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 20:36	09/02/20 11:02	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 18:25	TJD	Mt. Juliet, TN

BH-8 (0-1') L1256203-15 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538141	1	09/06/20 23:43	09/06/20 23:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 05:56	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 20:36	09/02/20 12:16	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 20:36	09/02/20 11:20	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 20:32	TJD	Mt. Juliet, TN

BH-8 (2-3') L1256203-16 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538141	1	09/06/20 23:43	09/06/20 23:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 06:51	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 20:36	09/02/20 13:23	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 20:36	09/02/20 11:39	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 18:38	TJD	Mt. Juliet, TN

BH-8 (4-5') L1256203-17 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538141	1	09/06/20 23:43	09/06/20 23:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 07:10	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 20:36	09/02/20 13:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 20:36	09/02/20 11:58	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 20:45	TJD	Mt. Juliet, TN

BH-9 (0-1') L1256203-18 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538141	1	09/06/20 23:43	09/06/20 23:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 07:47	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1.01	09/01/20 20:36	09/02/20 14:07	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 20:36	09/02/20 12:17	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 21:11	TJD	Mt. Juliet, TN

BH-9 (2-3') L1256203-19 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538141	1	09/06/20 23:43	09/06/20 23:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 08:05	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 20:36	09/02/20 14:30	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 20:36	09/02/20 12:36	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 18:50	TJD	Mt. Juliet, TN

BH-9 (4-5') L1256203-20 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538141	1	09/06/20 23:43	09/06/20 23:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535206	1	08/31/20 21:30	09/01/20 08:23	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 20:36	09/02/20 14:52	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 20:36	09/02/20 12:55	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 19:03	TJD	Mt. Juliet, TN

BH-9 (6-7') L1256203-21 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538143	1	09/06/20 21:43	09/06/20 22:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 03:04	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 21:11	09/02/20 15:14	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 21:11	09/02/20 13:14	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 19:16	TJD	Mt. Juliet, TN

BH-9 (9-10') L1256203-22 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538143	1	09/06/20 21:43	09/06/20 22:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 03:28	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 21:11	09/02/20 15:37	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 21:11	09/02/20 13:32	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 19:29	TJD	Mt. Juliet, TN

BH-1 (0-1') L1256203-23 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538143	1	09/06/20 21:43	09/06/20 22:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 03:40	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 21:11	09/02/20 15:59	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 21:11	09/02/20 13:51	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	10	09/08/20 10:24	09/09/20 04:34	JN	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	50	09/08/20 10:24	09/09/20 11:48	JN	Mt. Juliet, TN

BH-1 (2-3') L1256203-24 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538143	1	09/06/20 21:43	09/06/20 22:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 03:52	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 21:11	09/02/20 16:22	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 21:11	09/02/20 14:10	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1540114	1	09/10/20 21:06	09/11/20 03:02	TJD	Mt. Juliet, TN

BH-1 (4-5') L1256203-25 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538143	1	09/06/20 21:43	09/06/20 22:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	5	08/31/20 19:05	09/01/20 04:03	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 21:11	09/02/20 16:44	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 21:11	09/02/20 14:29	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 20:58	TJD	Mt. Juliet, TN

BH-1 (6-7') L1256203-26 Solid

Collected by: John Thurston
Collected date/time: 08/27/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538143	1	09/06/20 21:43	09/06/20 22:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 04:15	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 21:11	09/02/20 17:06	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 21:11	09/02/20 14:47	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/09/20 04:08	JN	Mt. Juliet, TN

BH-1 (9-10') L1256203-27 Solid

Collected by: John Thurston
Collected date/time: 08/27/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538143	1	09/06/20 21:43	09/06/20 22:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 04:27	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 21:11	09/02/20 17:28	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 21:11	09/02/20 15:06	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 20:20	TJD	Mt. Juliet, TN

BH-2 (0-1') L1256203-28 Solid

Collected by: John Thurston
Collected date/time: 08/27/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538143	1	09/06/20 21:43	09/06/20 22:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 05:28	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 21:11	09/02/20 18:17	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536695	1	09/01/20 21:11	09/02/20 15:25	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	10	09/08/20 10:24	09/08/20 22:40	TJD	Mt. Juliet, TN

BH-2 (2-3') L1256203-29 Solid

Collected by: John Thurston
Collected date/time: 08/27/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538143	1	09/06/20 21:43	09/06/20 22:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 05:41	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 21:11	09/02/20 18:39	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 11:39	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 19:54	TJD	Mt. Juliet, TN

BH-2 (4-5') L1256203-30 Solid

Collected by: John Thurston
Collected date/time: 08/27/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538143	1	09/06/20 21:43	09/06/20 22:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 05:53	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 21:11	09/02/20 19:01	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 11:58	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/09/20 04:21	JN	Mt. Juliet, TN

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

BH-2 (6-7') L1256203-31 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538144	1	09/06/20 21:11	09/06/20 21:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 06:05	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 21:11	09/02/20 19:23	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 12:17	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 20:07	TJD	Mt. Juliet, TN

BH-2 (9-10') L1256203-32 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538144	1	09/06/20 21:11	09/06/20 21:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 06:16	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536768	1	09/01/20 21:11	09/02/20 19:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 12:36	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539274	1	09/08/20 10:24	09/08/20 19:41	TJD	Mt. Juliet, TN

BH-2 (14-15') L1256203-33 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538144	1	09/06/20 21:11	09/06/20 21:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 06:28	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/02/20 19:29	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 12:55	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 04:59	JN	Mt. Juliet, TN

BH-2 (19-20') L1256203-34 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538144	1	09/06/20 21:11	09/06/20 21:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	5	08/31/20 19:05	09/01/20 06:41	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/02/20 19:52	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 13:15	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 05:12	JN	Mt. Juliet, TN

BH-5 (0-1') L1256203-35 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538144	1	09/06/20 21:11	09/06/20 21:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 06:53	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/02/20 20:15	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 13:34	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 05:24	JN	Mt. Juliet, TN

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

BH-5 (2-3') L1256203-36 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538144	1	09/06/20 21:11	09/06/20 21:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 07:29	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/02/20 20:38	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 13:53	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 05:37	JN	Mt. Juliet, TN

BH-5 (4-5') L1256203-37 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538144	1	09/06/20 21:11	09/06/20 21:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 07:41	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/02/20 21:01	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 14:13	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 05:50	JN	Mt. Juliet, TN

BH-5 (6-7') L1256203-38 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538144	1	09/06/20 21:11	09/06/20 21:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 07:52	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/02/20 21:24	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 14:32	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 06:02	JN	Mt. Juliet, TN

BH-5 (9-10') L1256203-39 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538144	1	09/06/20 21:11	09/06/20 21:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 08:04	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/02/20 22:52	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 14:51	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 06:15	JN	Mt. Juliet, TN

BH-6 (0-1') L1256203-40 Solid

Collected by: John Thurston | Collected date/time: 08/27/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538144	1	09/06/20 21:11	09/06/20 21:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535327	1	08/31/20 19:05	09/01/20 08:26	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/02/20 23:15	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 15:10	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 10:57	JN	Mt. Juliet, TN

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

BH-6 (2-3') L1256203-41 Solid

Collected by: John Thurston
Collected date/time: 08/27/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538145	1	09/06/20 20:24	09/06/20 21:07	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535329	1	08/31/20 14:03	09/01/20 00:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/02/20 23:38	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 15:29	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 06:27	JN	Mt. Juliet, TN

BH-10 (0-1') L1256203-42 Solid

Collected by: John Thurston
Collected date/time: 08/27/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538145	1	09/06/20 20:24	09/06/20 21:07	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535329	1	08/31/20 14:03	09/01/20 01:01	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/03/20 00:01	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 15:48	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 06:40	JN	Mt. Juliet, TN

BH-10 (2-3') L1256203-43 Solid

Collected by: John Thurston
Collected date/time: 08/27/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538145	1	09/06/20 20:24	09/06/20 21:07	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535329	1	08/31/20 14:03	09/01/20 01:19	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/03/20 00:24	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 16:07	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 08:48	JN	Mt. Juliet, TN

BH-10 (4-5') L1256203-44 Solid

Collected by: John Thurston
Collected date/time: 08/27/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538145	1	09/06/20 20:24	09/06/20 21:07	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535329	1	08/31/20 14:03	09/01/20 01:37	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/03/20 00:47	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 16:26	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 06:53	JN	Mt. Juliet, TN

BH-10 (6-7') L1256203-45 Solid

Collected by: John Thurston
Collected date/time: 08/27/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538145	1	09/06/20 20:24	09/06/20 21:07	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535329	1	08/31/20 14:03	09/01/20 03:10	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/03/20 01:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536720	1	09/01/20 21:11	09/02/20 16:45	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 07:31	JN	Mt. Juliet, TN

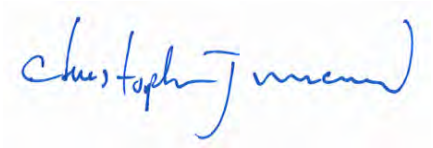
1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

BH-10 (9-10') L1256203-46 Solid

Collected by: John Thurston
Collected date/time: 08/27/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538145	1	09/06/20 20:24	09/06/20 21:07	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535329	1	08/31/20 14:03	09/01/20 03:28	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536987	1	09/01/20 21:11	09/03/20 01:33	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1537203	1	09/01/20 21:11	09/03/20 06:33	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539276	1	09/08/20 22:55	09/09/20 07:44	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.1		1	09/05/2020 22:55	WG1538140

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	929		9.48	20.6	1	09/01/2020 00:07	WG1535206

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	0.0259	J	0.0224	0.103	1	09/02/2020 11:19	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*87.5*			*77.0-120*		*09/02/2020 11:19*	WG1536524

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		0.000495	0.00106	1	09/02/2020 12:58	WG1536658
Toluene	U		0.00138	0.00530	1	09/02/2020 12:58	WG1536658
Ethylbenzene	U		0.000781	0.00265	1	09/02/2020 12:58	WG1536658
Total Xylenes	U		0.000933	0.00689	1	09/02/2020 12:58	WG1536658
(S) Toluene-d8	*101*			*75.0-131*		*09/02/2020 12:58*	WG1536658
(S) 4-Bromofluorobenzene	*96.8*			*67.0-138*		*09/02/2020 12:58*	WG1536658
(S) 1,2-Dichloroethane-d4	*94.4*			*70.0-130*		*09/02/2020 12:58*	WG1536658

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.66	4.12	1	09/09/2020 13:42	WG1539273
C28-C40 Oil Range	1.09	B J	0.282	4.12	1	09/09/2020 13:42	WG1539273
(S) o-Terphenyl	*88.6*			*18.0-148*		*09/09/2020 13:42*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.7		1	09/05/2020 22:55	WG1538140

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	73.9		9.42	20.5	1	09/01/2020 00:43	WG1535206

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	0.0293	J	0.0222	0.102	1	09/02/2020 11:40	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*86.7*			*77.0-120*		*09/02/2020 11:40*	WG1536524

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		0.000489	0.00105	1	09/02/2020 13:17	WG1536658
Toluene	U		0.00136	0.00524	1	09/02/2020 13:17	WG1536658
Ethylbenzene	U		0.000772	0.00262	1	09/02/2020 13:17	WG1536658
Total Xylenes	U		0.000922	0.00681	1	09/02/2020 13:17	WG1536658
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 13:17*	WG1536658
(S) 4-Bromofluorobenzene	*93.5*			*67.0-138*		*09/02/2020 13:17*	WG1536658
(S) 1,2-Dichloroethane-d4	*92.9*			*70.0-130*		*09/02/2020 13:17*	WG1536658

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	5.74		1.65	4.10	1	09/10/2020 05:32	WG1539273
C28-C40 Oil Range	27.8		0.281	4.10	1	09/10/2020 05:32	WG1539273
(S) o-Terphenyl	*69.5*			*18.0-148*		*09/10/2020 05:32*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.0		1	09/05/2020 22:55	WG1538140

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	33.1		9.39	20.4	1	09/01/2020 01:01	WG1535206

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	0.0295	J	0.0223	0.103	1.01	09/02/2020 12:00	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*87.9*			*77.0-120*		*09/02/2020 12:00*	WG1536524

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	09/02/2020 13:36	WG1536658
Toluene	U		0.00135	0.00520	1	09/02/2020 13:36	WG1536658
Ethylbenzene	U		0.000767	0.00260	1	09/02/2020 13:36	WG1536658
Total Xylenes	U		0.000916	0.00677	1	09/02/2020 13:36	WG1536658
(S) Toluene-d8	*108*			*75.0-131*		*09/02/2020 13:36*	WG1536658
(S) 4-Bromofluorobenzene	*93.9*			*67.0-138*		*09/02/2020 13:36*	WG1536658
(S) 1,2-Dichloroethane-d4	*90.8*			*70.0-130*		*09/02/2020 13:36*	WG1536658

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	17.2		1.64	4.08	1	09/10/2020 06:10	WG1539273
C28-C40 Oil Range	61.6		0.280	4.08	1	09/10/2020 06:10	WG1539273
(S) o-Terphenyl	*63.6*			*18.0-148*		*09/10/2020 06:10*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.2		1	09/05/2020 22:55	WG1538140

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	31.1		9.37	20.4	1	09/01/2020 01:20	WG1535206

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	0.0225	J	0.0221	0.102	1	09/02/2020 12:21	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*87.4*			*77.0-120*		*09/02/2020 12:21*	WG1536524

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		0.000485	0.00104	1	09/02/2020 13:55	WG1536658
Toluene	U		0.00135	0.00519	1	09/02/2020 13:55	WG1536658
Ethylbenzene	U		0.000765	0.00259	1	09/02/2020 13:55	WG1536658
Total Xylenes	U		0.000913	0.00674	1	09/02/2020 13:55	WG1536658
(S) Toluene-d8	*107*			*75.0-131*		*09/02/2020 13:55*	WG1536658
(S) 4-Bromofluorobenzene	*94.6*			*67.0-138*		*09/02/2020 13:55*	WG1536658
(S) 1,2-Dichloroethane-d4	*93.7*			*70.0-130*		*09/02/2020 13:55*	WG1536658

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		1.64	4.08	1	09/09/2020 17:06	WG1539273
C28-C40 Oil Range	4.05	B J	0.279	4.08	1	09/09/2020 17:06	WG1539273
(S) o-Terphenyl	*90.0*			*18.0-148*		*09/09/2020 17:06*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.7		1	09/05/2020 22:55	WG1538140

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	79.5		9.52	20.7	1	09/01/2020 01:38	WG1535206

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	09/02/2020 12:42	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*88.1*			*77.0-120*		*09/02/2020 12:42*	WG1536524

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		0.000499	0.00107	1	09/02/2020 14:14	WG1536658
Toluene	U		0.00139	0.00534	1	09/02/2020 14:14	WG1536658
Ethylbenzene	U		0.000788	0.00267	1	09/02/2020 14:14	WG1536658
Total Xylenes	U		0.000941	0.00695	1	09/02/2020 14:14	WG1536658
(S) Toluene-d8	*106*			*75.0-131*		*09/02/2020 14:14*	WG1536658
(S) 4-Bromofluorobenzene	*95.9*			*67.0-138*		*09/02/2020 14:14*	WG1536658
(S) 1,2-Dichloroethane-d4	*90.3*			*70.0-130*		*09/02/2020 14:14*	WG1536658

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.67	4.14	1	09/09/2020 17:19	WG1539273
C28-C40 Oil Range	3.91	B J	0.283	4.14	1	09/09/2020 17:19	WG1539273
(S) o-Terphenyl	*86.7*			*18.0-148*		*09/09/2020 17:19*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.0		1	09/05/2020 22:55	WG1538140

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	80.8		9.48	20.6	1	09/01/2020 01:57	WG1535206

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	0.0285	J	0.0224	0.103	1	09/02/2020 13:03	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*88.3*			*77.0-120*		*09/02/2020 13:03*	WG1536524

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		0.000496	0.00106	1	09/02/2020 14:33	WG1536658
Toluene	U		0.00138	0.00531	1	09/02/2020 14:33	WG1536658
Ethylbenzene	U		0.000783	0.00265	1	09/02/2020 14:33	WG1536658
Total Xylenes	U		0.000935	0.00690	1	09/02/2020 14:33	WG1536658
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 14:33*	WG1536658
(S) 4-Bromofluorobenzene	*95.3*			*67.0-138*		*09/02/2020 14:33*	WG1536658
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*		*09/02/2020 14:33*	WG1536658

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.66	4.12	1	09/09/2020 15:24	WG1539273
C28-C40 Oil Range	1.06	B J	0.282	4.12	1	09/09/2020 15:24	WG1539273
(S) o-Terphenyl	*81.6*			*18.0-148*		*09/09/2020 15:24*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.1		1	09/05/2020 22:55	WG1538140

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	83.1		9.38	20.4	1	09/01/2020 03:29	WG1535206

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	0.0979	J	0.0223	0.103	1.01	09/02/2020 18:21	WG1536763
(S) a,a,a-Trifluorotoluene(FID)	*111*			*77.0-120*		*09/02/2020 18:21*	WG1536763

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		0.000485	0.00104	1	09/02/2020 14:52	WG1536658
Toluene	U		0.00135	0.00519	1	09/02/2020 14:52	WG1536658
Ethylbenzene	U		0.000766	0.00260	1	09/02/2020 14:52	WG1536658
Total Xylenes	U		0.000914	0.00675	1	09/02/2020 14:52	WG1536658
(S) Toluene-d8	*108*			*75.0-131*		*09/02/2020 14:52*	WG1536658
(S) 4-Bromofluorobenzene	*91.1*			*67.0-138*		*09/02/2020 14:52*	WG1536658
(S) 1,2-Dichloroethane-d4	*94.0*			*70.0-130*		*09/02/2020 14:52*	WG1536658

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	2.77	J	1.64	4.08	1	09/09/2020 15:37	WG1539273
C28-C40 Oil Range	7.11	B	0.279	4.08	1	09/09/2020 15:37	WG1539273
(S) o-Terphenyl	*89.3*			*18.0-148*		*09/09/2020 15:37*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.8		1	09/05/2020 22:55	WG1538140

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	176		9.70	21.1	1	09/01/2020 03:47	WG1535206

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0229	0.105	1	09/02/2020 18:42	WG1536763
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*		*09/02/2020 18:42*	WG1536763

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		0.000518	0.00111	1	09/02/2020 15:11	WG1536658
Toluene	U		0.00144	0.00555	1	09/02/2020 15:11	WG1536658
Ethylbenzene	U		0.000818	0.00277	1	09/02/2020 15:11	WG1536658
Total Xylenes	U		0.000977	0.00721	1	09/02/2020 15:11	WG1536658
(S) Toluene-d8	*105*			*75.0-131*		*09/02/2020 15:11*	WG1536658
(S) 4-Bromofluorobenzene	*90.9*			*67.0-138*		*09/02/2020 15:11*	WG1536658
(S) 1,2-Dichloroethane-d4	*93.9*			*70.0-130*		*09/02/2020 15:11*	WG1536658

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	9.15		1.70	4.22	1	09/10/2020 05:45	WG1539273
C28-C40 Oil Range	35.3		0.289	4.22	1	09/10/2020 05:45	WG1539273
(S) o-Terphenyl	*62.7*			*18.0-148*		*09/10/2020 05:45*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.1		1	09/05/2020 22:55	WG1538140

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	285		9.47	20.6	1	09/01/2020 04:05	WG1535206

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	09/02/2020 19:03	WG1536763
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*09/02/2020 19:03*	WG1536763

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		0.000495	0.00106	1	09/02/2020 09:27	WG1536695
Toluene	U		0.00138	0.00530	1	09/02/2020 09:27	WG1536695
Ethylbenzene	U		0.000781	0.00265	1	09/02/2020 09:27	WG1536695
Total Xylenes	U		0.000933	0.00689	1	09/02/2020 09:27	WG1536695
(S) Toluene-d8	*98.7*			*75.0-131*		*09/02/2020 09:27*	WG1536695
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*09/02/2020 09:27*	WG1536695
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*09/02/2020 09:27*	WG1536695

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	1.81	J	1.66	4.12	1	09/09/2020 16:54	WG1539273
C28-C40 Oil Range	6.99	B	0.282	4.12	1	09/09/2020 16:54	WG1539273
(S) o-Terphenyl	*87.8*			*18.0-148*		*09/09/2020 16:54*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.4		1	09/05/2020 22:55	WG1538140

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	91.4		9.35	20.3	1	09/01/2020 04:24	WG1535206

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1.01	09/02/2020 19:23	WG1536763
(S) a,a,a-Trifluorotoluene(FID)	*105*			*77.0-120*		*09/02/2020 19:23*	WG1536763

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	09/02/2020 09:46	WG1536695
Toluene	U		0.00134	0.00516	1	09/02/2020 09:46	WG1536695
Ethylbenzene	U		0.000761	0.00258	1	09/02/2020 09:46	WG1536695
Total Xylenes	U		0.000909	0.00671	1	09/02/2020 09:46	WG1536695
(S) Toluene-d8	*101*			*75.0-131*		*09/02/2020 09:46*	WG1536695
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*09/02/2020 09:46*	WG1536695
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*09/02/2020 09:46*	WG1536695

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		1.64	4.06	1	09/09/2020 15:50	WG1539273
C28-C40 Oil Range	1.21	B J	0.278	4.06	1	09/09/2020 15:50	WG1539273
(S) o-Terphenyl	*90.2*			*18.0-148*		*09/09/2020 15:50*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.1		1	09/06/2020 23:54	WG1538141

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	148		9.67	21.0	1	09/01/2020 04:42	WG1535206

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		0.0228	0.105	1	09/02/2020 19:44	WG1536763
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*09/02/2020 19:44*	WG1536763

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		0.000515	0.00110	1	09/02/2020 10:05	WG1536695
Toluene	U		0.00143	0.00551	1	09/02/2020 10:05	WG1536695
Ethylbenzene	U		0.000812	0.00276	1	09/02/2020 10:05	WG1536695
Total Xylenes	U		0.000970	0.00716	1	09/02/2020 10:05	WG1536695
(S) Toluene-d8	*101*			*75.0-131*		*09/02/2020 10:05*	WG1536695
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*09/02/2020 10:05*	WG1536695
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*09/02/2020 10:05*	WG1536695

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.69	4.20	1	09/09/2020 16:02	WG1539273
C28-C40 Oil Range	1.39	B J	0.288	4.20	1	09/09/2020 16:02	WG1539273
(S) o-Terphenyl	*79.7*			*18.0-148*		*09/09/2020 16:02*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.8		1	09/06/2020 23:54	WG1538141

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		9.22	20.0	1	09/01/2020 05:01	WG1535206

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		0.0218	0.100	1	09/02/2020 20:05	WG1536763
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*09/02/2020 20:05*	WG1536763

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		0.000469	0.00100	1	09/02/2020 10:24	WG1536695
Toluene	U		0.00131	0.00502	1	09/02/2020 10:24	WG1536695
Ethylbenzene	U		0.000741	0.00251	1	09/02/2020 10:24	WG1536695
Total Xylenes	U		0.000884	0.00653	1	09/02/2020 10:24	WG1536695
(S) Toluene-d8	*98.3*			*75.0-131*		*09/02/2020 10:24*	WG1536695
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*09/02/2020 10:24*	WG1536695
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*09/02/2020 10:24*	WG1536695

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	6.99		1.61	4.01	1	09/10/2020 05:58	WG1539273
C28-C40 Oil Range	34.5		0.275	4.01	1	09/10/2020 05:58	WG1539273
(S) o-Terphenyl	*68.6*			*18.0-148*		*09/10/2020 05:58*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.7		1	09/06/2020 23:54	WG1538141

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		9.23	20.1	1	09/01/2020 05:19	WG1535206

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		0.0218	0.100	1	09/02/2020 20:26	WG1536763
(S) a,a,a-Trifluorotoluene(FID)	*105*			*77.0-120*		*09/02/2020 20:26*	WG1536763

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	0.000503	J	0.000470	0.00101	1	09/02/2020 10:43	WG1536695
Toluene	U		0.00131	0.00503	1	09/02/2020 10:43	WG1536695
Ethylbenzene	U		0.000742	0.00252	1	09/02/2020 10:43	WG1536695
Total Xylenes	U		0.000886	0.00654	1	09/02/2020 10:43	WG1536695
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 10:43*	WG1536695
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*09/02/2020 10:43*	WG1536695
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*09/02/2020 10:43*	WG1536695

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.62	4.01	1	09/08/2020 18:12	WG1539274
C28-C40 Oil Range	1.13	J	0.275	4.01	1	09/08/2020 18:12	WG1539274
(S) o-Terphenyl	*85.9*			*18.0-148*		*09/08/2020 18:12*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.8		1	09/06/2020 23:54	WG1538141

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		9.22	20.0	1	09/01/2020 05:38	WG1535206

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	0.0331	J	0.0217	0.100	1	09/02/2020 20:46	WG1536763
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*09/02/2020 20:46*	WG1536763

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		0.000469	0.00100	1	09/02/2020 11:02	WG1536695
Toluene	U		0.00131	0.00502	1	09/02/2020 11:02	WG1536695
Ethylbenzene	U		0.000740	0.00251	1	09/02/2020 11:02	WG1536695
Total Xylenes	U		0.000884	0.00653	1	09/02/2020 11:02	WG1536695
(S) Toluene-d8	*101*			*75.0-131*		*09/02/2020 11:02*	WG1536695
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*09/02/2020 11:02*	WG1536695
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*09/02/2020 11:02*	WG1536695

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3.08	J	1.61	4.01	1	09/08/2020 18:25	WG1539274
C28-C40 Oil Range	U		0.275	4.01	1	09/08/2020 18:25	WG1539274
(S) o-Terphenyl	*82.2*			*18.0-148*		*09/08/2020 18:25*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.8		1	09/06/2020 23:54	WG1538141

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		9.22	20.0	1	09/01/2020 05:56	WG1535206

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		0.0217	0.100	1	09/02/2020 12:16	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*95.8*			*77.0-120*		*09/02/2020 12:16*	WG1536768

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		0.000469	0.00100	1	09/02/2020 11:20	WG1536695
Toluene	U		0.00131	0.00502	1	09/02/2020 11:20	WG1536695
Ethylbenzene	U		0.000740	0.00251	1	09/02/2020 11:20	WG1536695
Total Xylenes	U		0.000884	0.00653	1	09/02/2020 11:20	WG1536695
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 11:20*	WG1536695
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*09/02/2020 11:20*	WG1536695
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*09/02/2020 11:20*	WG1536695

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3.21	J	1.61	4.01	1	09/08/2020 20:32	WG1539274
C28-C40 Oil Range	5.16		0.275	4.01	1	09/08/2020 20:32	WG1539274
(S) o-Terphenyl	*90.4*			*18.0-148*		*09/08/2020 20:32*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.8		1	09/06/2020 23:54	WG1538141

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		9.22	20.0	1	09/01/2020 06:51	WG1535206

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		0.0218	0.100	1	09/02/2020 13:23	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*96.0*			*77.0-120*		*09/02/2020 13:23*	WG1536768

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		0.000469	0.00100	1	09/02/2020 11:39	WG1536695
Toluene	U		0.00131	0.00502	1	09/02/2020 11:39	WG1536695
Ethylbenzene	U		0.000741	0.00251	1	09/02/2020 11:39	WG1536695
Total Xylenes	U		0.000884	0.00653	1	09/02/2020 11:39	WG1536695
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 11:39*	WG1536695
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*09/02/2020 11:39*	WG1536695
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*09/02/2020 11:39*	WG1536695

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	2.16	J	1.61	4.01	1	09/08/2020 18:38	WG1539274
C28-C40 Oil Range	2.59	J	0.275	4.01	1	09/08/2020 18:38	WG1539274
(S) o-Terphenyl	*87.5*			*18.0-148*		*09/08/2020 18:38*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.8		1	09/06/2020 23:54	WG1538141

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		9.22	20.0	1	09/01/2020 07:10	WG1535206

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		0.0217	0.100	1	09/02/2020 13:45	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*95.6*			*77.0-120*		*09/02/2020 13:45*	WG1536768

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		0.000469	0.00100	1	09/02/2020 11:58	WG1536695
Toluene	U		0.00131	0.00502	1	09/02/2020 11:58	WG1536695
Ethylbenzene	U		0.000740	0.00251	1	09/02/2020 11:58	WG1536695
Total Xylenes	U		0.000884	0.00653	1	09/02/2020 11:58	WG1536695
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 11:58*	WG1536695
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*09/02/2020 11:58*	WG1536695
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*09/02/2020 11:58*	WG1536695

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	2.52	J	1.61	4.01	1	09/08/2020 20:45	WG1539274
C28-C40 Oil Range	3.24	J	0.275	4.01	1	09/08/2020 20:45	WG1539274
(S) o-Terphenyl	*90.9*			*18.0-148*		*09/08/2020 20:45*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.1		1	09/06/2020 23:54	WG1538141

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	15.4	J	9.28	20.2	1	09/01/2020 07:47	WG1535206

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		0.0221	0.102	1.01	09/02/2020 14:07	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*95.9*			*77.0-120*		*09/02/2020 14:07*	WG1536768

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		0.000475	0.00102	1	09/02/2020 12:17	WG1536695
Toluene	U		0.00132	0.00509	1	09/02/2020 12:17	WG1536695
Ethylbenzene	U		0.000750	0.00254	1	09/02/2020 12:17	WG1536695
Total Xylenes	U		0.000895	0.00661	1	09/02/2020 12:17	WG1536695
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 12:17*	WG1536695
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*09/02/2020 12:17*	WG1536695
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*09/02/2020 12:17*	WG1536695

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3.75	J	1.62	4.04	1	09/08/2020 21:11	WG1539274
C28-C40 Oil Range	13.6		0.276	4.04	1	09/08/2020 21:11	WG1539274
(S) o-Terphenyl	*92.1*			*18.0-148*		*09/08/2020 21:11*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.2		1	09/06/2020 23:54	WG1538141

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		9.28	20.2	1	09/01/2020 08:05	WG1535206

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0219	0.101	1	09/02/2020 14:30	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*96.5*			*77.0-120*		*09/02/2020 14:30*	WG1536768

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		0.000475	0.00102	1	09/02/2020 12:36	WG1536695
Toluene	U		0.00132	0.00508	1	09/02/2020 12:36	WG1536695
Ethylbenzene	U		0.000749	0.00254	1	09/02/2020 12:36	WG1536695
Total Xylenes	U		0.000895	0.00661	1	09/02/2020 12:36	WG1536695
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 12:36*	WG1536695
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*09/02/2020 12:36*	WG1536695
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*09/02/2020 12:36*	WG1536695

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	1.77	J	1.62	4.03	1	09/08/2020 18:50	WG1539274
C28-C40 Oil Range	0.869	J	0.276	4.03	1	09/08/2020 18:50	WG1539274
(S) o-Terphenyl	*89.9*			*18.0-148*		*09/08/2020 18:50*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.5		1	09/06/2020 23:54	WG1538141

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		9.63	20.9	1	09/01/2020 08:23	WG1535206

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	09/02/2020 14:52	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*97.1*			*77.0-120*		*09/02/2020 14:52*	WG1536768

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		0.000511	0.00109	1	09/02/2020 12:55	WG1536695
Toluene	U		0.00142	0.00547	1	09/02/2020 12:55	WG1536695
Ethylbenzene	U		0.000807	0.00274	1	09/02/2020 12:55	WG1536695
Total Xylenes	U		0.000963	0.00712	1	09/02/2020 12:55	WG1536695
(S) Toluene-d8	*100*			*75.0-131*		*09/02/2020 12:55*	WG1536695
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*09/02/2020 12:55*	WG1536695
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*09/02/2020 12:55*	WG1536695

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.69	4.19	1	09/08/2020 19:03	WG1539274
C28-C40 Oil Range	2.27	J	0.287	4.19	1	09/08/2020 19:03	WG1539274
(S) o-Terphenyl	*85.7*			*18.0-148*		*09/08/2020 19:03*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.6		1	09/06/2020 22:54	WG1538143

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		9.62	20.9	1	09/01/2020 03:04	WG1535327

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	09/02/2020 15:14	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*96.8*			*77.0-120*		*09/02/2020 15:14*	WG1536768

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	0.000919	J	0.000510	0.00109	1	09/02/2020 13:14	WG1536695
Toluene	U		0.00142	0.00546	1	09/02/2020 13:14	WG1536695
Ethylbenzene	U		0.000805	0.00273	1	09/02/2020 13:14	WG1536695
Total Xylenes	U		0.000961	0.00710	1	09/02/2020 13:14	WG1536695
(S) Toluene-d8	*101*			*75.0-131*		*09/02/2020 13:14*	WG1536695
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*09/02/2020 13:14*	WG1536695
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*09/02/2020 13:14*	WG1536695

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.68	4.18	1	09/08/2020 19:16	WG1539274
C28-C40 Oil Range	1.30	J	0.287	4.18	1	09/08/2020 19:16	WG1539274
(S) o-Terphenyl	*87.5*			*18.0-148*		*09/08/2020 19:16*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.1		1	09/06/2020 22:54	WG1538143

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		9.57	20.8	1	09/01/2020 03:28	WG1535327

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	09/02/2020 15:37	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*96.4*			*77.0-120*		*09/02/2020 15:37*	WG1536768

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		0.000505	0.00108	1	09/02/2020 13:32	WG1536695
Toluene	U		0.00141	0.00540	1	09/02/2020 13:32	WG1536695
Ethylbenzene	U		0.000797	0.00270	1	09/02/2020 13:32	WG1536695
Total Xylenes	U		0.000951	0.00703	1	09/02/2020 13:32	WG1536695
(S) Toluene-d8	*100*			*75.0-131*		*09/02/2020 13:32*	WG1536695
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*09/02/2020 13:32*	WG1536695
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*09/02/2020 13:32*	WG1536695

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.67	4.16	1	09/08/2020 19:29	WG1539274
C28-C40 Oil Range	U		0.285	4.16	1	09/08/2020 19:29	WG1539274
(S) o-Terphenyl	*82.1*			*18.0-148*		*09/08/2020 19:29*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.4		1	09/06/2020 22:54	WG1538143

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	21.5		9.74	21.2	1	09/01/2020 03:40	WG1535327

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	09/02/2020 15:59	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*94.2*			*77.0-120*		*09/02/2020 15:59*	WG1536768

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		0.000522	0.00112	1	09/02/2020 13:51	WG1536695
Toluene	U		0.00145	0.00559	1	09/02/2020 13:51	WG1536695
Ethylbenzene	U		0.000824	0.00280	1	09/02/2020 13:51	WG1536695
Total Xylenes	U		0.000984	0.00727	1	09/02/2020 13:51	WG1536695
(S) Toluene-d8	*100*			*75.0-131*		*09/02/2020 13:51*	WG1536695
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*09/02/2020 13:51*	WG1536695
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*09/02/2020 13:51*	WG1536695

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	1390		17.1	42.4	10	09/09/2020 04:34	WG1539274
C28-C40 Oil Range	3040		14.5	212	50	09/09/2020 11:48	WG1539274
(S) o-Terphenyl	*79.6*			*18.0-148*		*09/09/2020 04:34*	WG1539274
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*09/09/2020 11:48*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.8		1	09/06/2020 22:54	WG1538143

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	9.44	J	9.41	20.5	1	09/01/2020 03:52	WG1535327

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	09/02/2020 16:22	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*77.0-120*		*09/02/2020 16:22*	WG1536768

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		0.000488	0.00105	1	09/02/2020 14:10	WG1536695
Toluene	U		0.00136	0.00523	1	09/02/2020 14:10	WG1536695
Ethylbenzene	U		0.000771	0.00261	1	09/02/2020 14:10	WG1536695
Total Xylenes	0.00119	J	0.000920	0.00680	1	09/02/2020 14:10	WG1536695
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 14:10*	WG1536695
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*09/02/2020 14:10*	WG1536695
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*09/02/2020 14:10*	WG1536695

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	37.9		1.65	4.09	1	09/11/2020 03:02	WG1540114
C28-C40 Oil Range	100		0.280	4.09	1	09/11/2020 03:02	WG1540114
(S) o-Terphenyl	*58.6*			*18.0-148*		*09/11/2020 03:02*	WG1540114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.8		1	09/06/2020 22:54	WG1538143

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		48.0	104	5	09/01/2020 04:03	WG1535327

Sample Narrative:

L1256203-25 WG1535327: Dilution due to sample matrix

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0227	0.104	1	09/02/2020 16:44	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*96.3*			*77.0-120*		*09/02/2020 16:44*	WG1536768

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		0.000508	0.00109	1	09/02/2020 14:29	WG1536695
Toluene	U		0.00141	0.00544	1	09/02/2020 14:29	WG1536695
Ethylbenzene	U		0.000802	0.00272	1	09/02/2020 14:29	WG1536695
Total Xylenes	U		0.000957	0.00707	1	09/02/2020 14:29	WG1536695
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 14:29*	WG1536695
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*09/02/2020 14:29*	WG1536695
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*09/02/2020 14:29*	WG1536695

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	8.05		1.68	4.18	1	09/08/2020 20:58	WG1539274
C28-C40 Oil Range	14.5		0.286	4.18	1	09/08/2020 20:58	WG1539274
(S) o-Terphenyl	*90.3*			*18.0-148*		*09/08/2020 20:58*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.2		1	09/06/2020 22:54	WG1538143

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	57.8		9.67	21.0	1	09/01/2020 04:15	WG1535327

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		0.0228	0.105	1	09/02/2020 17:06	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*96.5*			*77.0-120*		*09/02/2020 17:06*	WG1536768

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		0.000515	0.00110	1	09/02/2020 14:47	WG1536695
Toluene	U		0.00143	0.00551	1	09/02/2020 14:47	WG1536695
Ethylbenzene	U		0.000812	0.00275	1	09/02/2020 14:47	WG1536695
Total Xylenes	U		0.000970	0.00716	1	09/02/2020 14:47	WG1536695
(S) Toluene-d8	*101*			*75.0-131*		*09/02/2020 14:47*	WG1536695
(S) 4-Bromofluorobenzene	*114*			*67.0-138*		*09/02/2020 14:47*	WG1536695
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*09/02/2020 14:47*	WG1536695

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	11.5		1.69	4.20	1	09/09/2020 04:08	WG1539274
C28-C40 Oil Range	39.5		0.288	4.20	1	09/09/2020 04:08	WG1539274
(S) o-Terphenyl	*57.1*			*18.0-148*		*09/09/2020 04:08*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.0		1	09/06/2020 22:54	WG1538143

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	41.1		9.68	21.0	1	09/01/2020 04:27	WG1535327

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		0.0228	0.105	1	09/02/2020 17:28	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*96.5*			*77.0-120*		*09/02/2020 17:28*	WG1536768

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		0.000516	0.00110	1	09/02/2020 15:06	WG1536695
Toluene	U		0.00144	0.00552	1	09/02/2020 15:06	WG1536695
Ethylbenzene	U		0.000814	0.00276	1	09/02/2020 15:06	WG1536695
Total Xylenes	U		0.000972	0.00718	1	09/02/2020 15:06	WG1536695
(S) Toluene-d8	*101*			*75.0-131*		*09/02/2020 15:06*	WG1536695
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*09/02/2020 15:06*	WG1536695
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*09/02/2020 15:06*	WG1536695

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	1.89	J	1.69	4.21	1	09/08/2020 20:20	WG1539274
C28-C40 Oil Range	1.98	J	0.288	4.21	1	09/08/2020 20:20	WG1539274
(S) o-Terphenyl	*85.8*			*18.0-148*		*09/08/2020 20:20*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	09/06/2020 22:54	WG1538143

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	9.55	J	9.44	20.5	1	09/01/2020 05:28	WG1535327

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	09/02/2020 18:17	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*96.6*			*77.0-120*		*09/02/2020 18:17*	WG1536768

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		0.000492	0.00105	1	09/02/2020 15:25	WG1536695
Toluene	U		0.00137	0.00527	1	09/02/2020 15:25	WG1536695
Ethylbenzene	U		0.000776	0.00263	1	09/02/2020 15:25	WG1536695
Total Xylenes	U		0.000927	0.00685	1	09/02/2020 15:25	WG1536695
(S) Toluene-d8	*101*			*75.0-131*		*09/02/2020 15:25*	WG1536695
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*09/02/2020 15:25*	WG1536695
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*09/02/2020 15:25*	WG1536695

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	57.9		16.5	41.1	10	09/08/2020 22:40	WG1539274
C28-C40 Oil Range	171		2.81	41.1	10	09/08/2020 22:40	WG1539274
(S) o-Terphenyl	*70.1*			*18.0-148*		*09/08/2020 22:40*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.8		1	09/06/2020 22:54	WG1538143

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		9.31	20.2	1	09/01/2020 05:41	WG1535327

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		0.0220	0.101	1	09/02/2020 18:39	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*95.9*			*77.0-120*		*09/02/2020 18:39*	WG1536768

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		0.000479	0.00102	1	09/02/2020 11:39	WG1536720
Toluene	U		0.00133	0.00512	1	09/02/2020 11:39	WG1536720
Ethylbenzene	U		0.000755	0.00256	1	09/02/2020 11:39	WG1536720
Total Xylenes	U		0.000902	0.00666	1	09/02/2020 11:39	WG1536720
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 11:39*	WG1536720
(S) 4-Bromofluorobenzene	*93.1*			*67.0-138*		*09/02/2020 11:39*	WG1536720
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/02/2020 11:39*	WG1536720

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.63	4.05	1	09/08/2020 19:54	WG1539274
C28-C40 Oil Range	1.81	J	0.277	4.05	1	09/08/2020 19:54	WG1539274
(S) o-Terphenyl	*78.9*			*18.0-148*		*09/08/2020 19:54*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	09/06/2020 22:54	WG1538143

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	29.8		9.52	20.7	1	09/01/2020 05:53	WG1535327

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0225	0.104	1	09/02/2020 19:01	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*97.1*			*77.0-120*		*09/02/2020 19:01*	WG1536768

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		0.000500	0.00107	1	09/02/2020 11:58	WG1536720
Toluene	U		0.00139	0.00535	1	09/02/2020 11:58	WG1536720
Ethylbenzene	U		0.000789	0.00268	1	09/02/2020 11:58	WG1536720
Total Xylenes	U		0.000942	0.00696	1	09/02/2020 11:58	WG1536720
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 11:58*	WG1536720
(S) 4-Bromofluorobenzene	*91.6*			*67.0-138*		*09/02/2020 11:58*	WG1536720
(S) 1,2-Dichloroethane-d4	*97.3*			*70.0-130*		*09/02/2020 11:58*	WG1536720

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	6.12		1.67	4.14	1	09/09/2020 04:21	WG1539274
C28-C40 Oil Range	18.2		0.284	4.14	1	09/09/2020 04:21	WG1539274
(S) o-Terphenyl	*68.1*			*18.0-148*		*09/09/2020 04:21*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.6		1	09/06/2020 21:35	WG1538144

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	609		9.73	21.1	1	09/01/2020 06:05	WG1535327

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0229	0.106	1	09/02/2020 19:23	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*77.0-120*		*09/02/2020 19:23*	WG1536768

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		0.000521	0.00112	1	09/02/2020 12:17	WG1536720
Toluene	U		0.00145	0.00558	1	09/02/2020 12:17	WG1536720
Ethylbenzene	U		0.000822	0.00279	1	09/02/2020 12:17	WG1536720
Total Xylenes	U		0.000981	0.00725	1	09/02/2020 12:17	WG1536720
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 12:17*	WG1536720
(S) 4-Bromofluorobenzene	*93.8*			*67.0-138*		*09/02/2020 12:17*	WG1536720
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*09/02/2020 12:17*	WG1536720

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.70	4.23	1	09/08/2020 20:07	WG1539274
C28-C40 Oil Range	2.97	J	0.290	4.23	1	09/08/2020 20:07	WG1539274
(S) o-Terphenyl	*78.7*			*18.0-148*		*09/08/2020 20:07*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.3		1	09/06/2020 21:35	WG1538144

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	472		9.66	21.0	1	09/01/2020 06:16	WG1535327

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		0.0228	0.105	1	09/02/2020 19:45	WG1536768
(S) a,a,a-Trifluorotoluene(FID)	*96.0*			*77.0-120*		*09/02/2020 19:45*	WG1536768

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		0.000513	0.00110	1	09/02/2020 12:36	WG1536720
Toluene	U		0.00143	0.00550	1	09/02/2020 12:36	WG1536720
Ethylbenzene	U		0.000810	0.00275	1	09/02/2020 12:36	WG1536720
Total Xylenes	U		0.000967	0.00715	1	09/02/2020 12:36	WG1536720
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 12:36*	WG1536720
(S) 4-Bromofluorobenzene	*96.1*			*67.0-138*		*09/02/2020 12:36*	WG1536720
(S) 1,2-Dichloroethane-d4	*96.5*			*70.0-130*		*09/02/2020 12:36*	WG1536720

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.69	4.20	1	09/08/2020 19:41	WG1539274
C28-C40 Oil Range	U		0.288	4.20	1	09/08/2020 19:41	WG1539274
(S) o-Terphenyl	*69.9*			*18.0-148*		*09/08/2020 19:41*	WG1539274

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.1		1	09/06/2020 21:35	WG1538144

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	433		9.58	20.8	1	09/01/2020 06:28	WG1535327

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	09/02/2020 19:29	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*95.2*			*77.0-120*		*09/02/2020 19:29*	WG1536987

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		0.000505	0.00108	1	09/02/2020 12:55	WG1536720
Toluene	U		0.00141	0.00541	1	09/02/2020 12:55	WG1536720
Ethylbenzene	U		0.000797	0.00271	1	09/02/2020 12:55	WG1536720
Total Xylenes	U		0.000952	0.00703	1	09/02/2020 12:55	WG1536720
(S) Toluene-d8	*105*			*75.0-131*		*09/02/2020 12:55*	WG1536720
(S) 4-Bromofluorobenzene	*97.6*			*67.0-138*		*09/02/2020 12:55*	WG1536720
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*09/02/2020 12:55*	WG1536720

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	1.80	J	1.68	4.16	1	09/09/2020 04:59	WG1539276
C28-C40 Oil Range	3.90	B J	0.285	4.16	1	09/09/2020 04:59	WG1539276
(S) o-Terphenyl	*61.9*			*18.0-148*		*09/09/2020 04:59*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.4		1	09/06/2020 21:35	WG1538144

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	1550		50.9	111	5	09/01/2020 06:41	WG1535327

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0240	0.111	1	09/02/2020 19:52	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*95.2*			*77.0-120*		*09/02/2020 19:52*	WG1536987

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		0.000566	0.00121	1	09/02/2020 13:15	WG1536720
Toluene	U		0.00158	0.00606	1	09/02/2020 13:15	WG1536720
Ethylbenzene	U		0.000893	0.00303	1	09/02/2020 13:15	WG1536720
Total Xylenes	U		0.00107	0.00788	1	09/02/2020 13:15	WG1536720
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 13:15*	WG1536720
(S) 4-Bromofluorobenzene	*92.0*			*67.0-138*		*09/02/2020 13:15*	WG1536720
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*09/02/2020 13:15*	WG1536720

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.78	4.42	1	09/09/2020 05:12	WG1539276
C28-C40 Oil Range	3.11	B J	0.303	4.42	1	09/09/2020 05:12	WG1539276
(S) o-Terphenyl	*70.6*			*18.0-148*		*09/09/2020 05:12*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.1		1	09/06/2020 21:35	WG1538144

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		9.38	20.4	1	09/01/2020 06:53	WG1535327

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		0.0221	0.102	1	09/02/2020 20:15	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*94.4*			*77.0-120*		*09/02/2020 20:15*	WG1536987

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		0.000485	0.00104	1	09/02/2020 13:34	WG1536720
Toluene	U		0.00135	0.00519	1	09/02/2020 13:34	WG1536720
Ethylbenzene	U		0.000765	0.00260	1	09/02/2020 13:34	WG1536720
Total Xylenes	U		0.000914	0.00675	1	09/02/2020 13:34	WG1536720
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 13:34*	WG1536720
(S) 4-Bromofluorobenzene	*93.9*			*67.0-138*		*09/02/2020 13:34*	WG1536720
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*09/02/2020 13:34*	WG1536720

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	1.89	J	1.64	4.08	1	09/09/2020 05:24	WG1539276
C28-C40 Oil Range	6.37	B	0.279	4.08	1	09/09/2020 05:24	WG1539276
(S) o-Terphenyl	*71.1*			*18.0-148*		*09/09/2020 05:24*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.4		1	09/06/2020 21:35	WG1538144

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		9.35	20.3	1	09/01/2020 07:29	WG1535327

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		0.0221	0.102	1	09/02/2020 20:38	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*94.9*			*77.0-120*		*09/02/2020 20:38*	WG1536987

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		0.000483	0.00103	1	09/02/2020 13:53	WG1536720
Toluene	U		0.00134	0.00517	1	09/02/2020 13:53	WG1536720
Ethylbenzene	U		0.000762	0.00258	1	09/02/2020 13:53	WG1536720
Total Xylenes	U		0.000910	0.00672	1	09/02/2020 13:53	WG1536720
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 13:53*	WG1536720
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*		*09/02/2020 13:53*	WG1536720
(S) 1,2-Dichloroethane-d4	*95.4*			*70.0-130*		*09/02/2020 13:53*	WG1536720

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		1.64	4.07	1	09/09/2020 05:37	WG1539276
C28-C40 Oil Range	4.02	B J	0.279	4.07	1	09/09/2020 05:37	WG1539276
(S) o-Terphenyl	*76.2*			*18.0-148*		*09/09/2020 05:37*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.2		1	09/06/2020 21:35	WG1538144

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		10.1	21.9	1	09/01/2020 07:41	WG1535327

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		0.0238	0.110	1	09/02/2020 21:01	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*94.0*			*77.0-120*		*09/02/2020 21:01*	WG1536987

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		0.000557	0.00119	1	09/02/2020 14:13	WG1536720
Toluene	U		0.00155	0.00597	1	09/02/2020 14:13	WG1536720
Ethylbenzene	U		0.000879	0.00298	1	09/02/2020 14:13	WG1536720
Total Xylenes	U		0.00105	0.00775	1	09/02/2020 14:13	WG1536720
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 14:13*	WG1536720
(S) 4-Bromofluorobenzene	*95.1*			*67.0-138*		*09/02/2020 14:13*	WG1536720
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*09/02/2020 14:13*	WG1536720

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		1.77	4.39	1	09/09/2020 05:50	WG1539276
C28-C40 Oil Range	2.89	B J	0.300	4.39	1	09/09/2020 05:50	WG1539276
(S) o-Terphenyl	*74.1*			*18.0-148*		*09/09/2020 05:50*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.1		1	09/06/2020 21:35	WG1538144

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	84.7		9.77	21.2	1	09/01/2020 07:52	WG1535327

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0231	0.106	1	09/02/2020 21:24	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*94.3*			*77.0-120*		*09/02/2020 21:24*	WG1536987

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		0.000525	0.00112	1	09/02/2020 14:32	WG1536720
Toluene	U		0.00146	0.00562	1	09/02/2020 14:32	WG1536720
Ethylbenzene	U		0.000829	0.00281	1	09/02/2020 14:32	WG1536720
Total Xylenes	U		0.000990	0.00731	1	09/02/2020 14:32	WG1536720
(S) Toluene-d8	*106*			*75.0-131*		*09/02/2020 14:32*	WG1536720
(S) 4-Bromofluorobenzene	*94.8*			*67.0-138*		*09/02/2020 14:32*	WG1536720
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/02/2020 14:32*	WG1536720

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		1.71	4.25	1	09/09/2020 06:02	WG1539276
C28-C40 Oil Range	2.15	B J	0.291	4.25	1	09/09/2020 06:02	WG1539276
(S) o-Terphenyl	*80.2*			*18.0-148*		*09/09/2020 06:02*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.3		1	09/06/2020 21:35	WG1538144

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	38.4		9.46	20.6	1	09/01/2020 08:04	WG1535327

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	09/02/2020 22:52	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*94.4*			*77.0-120*		*09/02/2020 22:52*	WG1536987

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		0.000493	0.00106	1	09/02/2020 14:51	WG1536720
Toluene	U		0.00137	0.00528	1	09/02/2020 14:51	WG1536720
Ethylbenzene	U		0.000779	0.00264	1	09/02/2020 14:51	WG1536720
Total Xylenes	U		0.000930	0.00687	1	09/02/2020 14:51	WG1536720
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 14:51*	WG1536720
(S) 4-Bromofluorobenzene	*95.1*			*67.0-138*		*09/02/2020 14:51*	WG1536720
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*09/02/2020 14:51*	WG1536720

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.66	4.11	1	09/09/2020 06:15	WG1539276
C28-C40 Oil Range	1.50	B J	0.282	4.11	1	09/09/2020 06:15	WG1539276
(S) o-Terphenyl	*73.6*			*18.0-148*		*09/09/2020 06:15*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.6		1	09/06/2020 21:35	WG1538144

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	10.2	J	9.24	20.1	1	09/01/2020 08:26	WG1535327

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		0.0218	0.100	1	09/02/2020 23:15	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*93.8*			*77.0-120*		*09/02/2020 23:15*	WG1536987

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		0.000471	0.00101	1	09/02/2020 15:10	WG1536720
Toluene	U		0.00131	0.00504	1	09/02/2020 15:10	WG1536720
Ethylbenzene	U		0.000743	0.00252	1	09/02/2020 15:10	WG1536720
Total Xylenes	U		0.000887	0.00655	1	09/02/2020 15:10	WG1536720
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 15:10*	WG1536720
(S) 4-Bromofluorobenzene	*93.2*			*67.0-138*		*09/02/2020 15:10*	WG1536720
(S) 1,2-Dichloroethane-d4	*99.5*			*70.0-130*		*09/02/2020 15:10*	WG1536720

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	5.84		1.62	4.02	1	09/09/2020 10:57	WG1539276
C28-C40 Oil Range	24.1		0.275	4.02	1	09/09/2020 10:57	WG1539276
(S) o-Terphenyl	*65.2*			*18.0-148*		*09/09/2020 10:57*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.2		1	09/06/2020 21:07	WG1538145

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		9.57	20.8	1	09/01/2020 00:24	WG1535329

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	09/02/2020 23:38	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*94.5*			*77.0-120*		*09/02/2020 23:38*	WG1536987

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		0.000504	0.00108	1	09/02/2020 15:29	WG1536720
Toluene	U		0.00140	0.00540	1	09/02/2020 15:29	WG1536720
Ethylbenzene	U		0.000796	0.00270	1	09/02/2020 15:29	WG1536720
Total Xylenes	U		0.000950	0.00702	1	09/02/2020 15:29	WG1536720
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 15:29*	WG1536720
(S) 4-Bromofluorobenzene	*92.8*			*67.0-138*		*09/02/2020 15:29*	WG1536720
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*09/02/2020 15:29*	WG1536720

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	1.81	J	1.67	4.16	1	09/09/2020 06:27	WG1539276
C28-C40 Oil Range	7.65	B	0.285	4.16	1	09/09/2020 06:27	WG1539276
(S) o-Terphenyl	*63.3*			*18.0-148*		*09/09/2020 06:27*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.1		1	09/06/2020 21:07	WG1538145

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		9.68	21.0	1	09/01/2020 01:01	WG1535329

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		0.0228	0.105	1	09/03/2020 00:01	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*94.8*			*77.0-120*		*09/03/2020 00:01*	WG1536987

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		0.000516	0.00110	1	09/02/2020 15:48	WG1536720
Toluene	U		0.00144	0.00552	1	09/02/2020 15:48	WG1536720
Ethylbenzene	U		0.000814	0.00276	1	09/02/2020 15:48	WG1536720
Total Xylenes	U		0.000972	0.00718	1	09/02/2020 15:48	WG1536720
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 15:48*	WG1536720
(S) 4-Bromofluorobenzene	*95.3*			*67.0-138*		*09/02/2020 15:48*	WG1536720
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*09/02/2020 15:48*	WG1536720

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.69	4.21	1	09/09/2020 06:40	WG1539276
C28-C40 Oil Range	1.65	B J	0.288	4.21	1	09/09/2020 06:40	WG1539276
(S) o-Terphenyl	*66.8*			*18.0-148*		*09/09/2020 06:40*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.1		1	09/06/2020 21:07	WG1538145

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		9.38	20.4	1	09/01/2020 01:19	WG1535329

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		0.0221	0.102	1	09/03/2020 00:24	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*94.3*			*77.0-120*		*09/03/2020 00:24*	WG1536987

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		0.000485	0.00104	1	09/02/2020 16:07	WG1536720
Toluene	U		0.00135	0.00520	1	09/02/2020 16:07	WG1536720
Ethylbenzene	U		0.000766	0.00260	1	09/02/2020 16:07	WG1536720
Total Xylenes	U		0.000914	0.00675	1	09/02/2020 16:07	WG1536720
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 16:07*	WG1536720
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*		*09/02/2020 16:07*	WG1536720
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*09/02/2020 16:07*	WG1536720

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	21.0		1.64	4.08	1	09/09/2020 08:48	WG1539276
C28-C40 Oil Range	105		0.279	4.08	1	09/09/2020 08:48	WG1539276
(S) o-Terphenyl	*55.8*			*18.0-148*		*09/09/2020 08:48*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.2		1	09/06/2020 21:07	WG1538145

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		9.27	20.2	1	09/01/2020 01:37	WG1535329

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0219	0.101	1	09/03/2020 00:47	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*94.5*			*77.0-120*		*09/03/2020 00:47*	WG1536987

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		0.000474	0.00102	1	09/02/2020 16:26	WG1536720
Toluene	U		0.00132	0.00508	1	09/02/2020 16:26	WG1536720
Ethylbenzene	U		0.000748	0.00254	1	09/02/2020 16:26	WG1536720
Total Xylenes	U		0.000894	0.00660	1	09/02/2020 16:26	WG1536720
(S) Toluene-d8	*105*			*75.0-131*		*09/02/2020 16:26*	WG1536720
(S) 4-Bromofluorobenzene	*91.5*			*67.0-138*		*09/02/2020 16:26*	WG1536720
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/02/2020 16:26*	WG1536720

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.62	4.03	1	09/09/2020 06:53	WG1539276
C28-C40 Oil Range	2.52	B J	0.276	4.03	1	09/09/2020 06:53	WG1539276
(S) o-Terphenyl	*76.0*			*18.0-148*		*09/09/2020 06:53*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.3		1	09/06/2020 21:07	WG1538145

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		9.65	21.0	1	09/01/2020 03:10	WG1535329

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		0.0228	0.105	1	09/03/2020 01:10	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*95.3*			*77.0-120*		*09/03/2020 01:10*	WG1536987

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		0.000513	0.00110	1	09/02/2020 16:45	WG1536720
Toluene	U		0.00143	0.00549	1	09/02/2020 16:45	WG1536720
Ethylbenzene	U		0.000809	0.00275	1	09/02/2020 16:45	WG1536720
Total Xylenes	U		0.000966	0.00714	1	09/02/2020 16:45	WG1536720
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 16:45*	WG1536720
(S) 4-Bromofluorobenzene	*93.2*			*67.0-138*		*09/02/2020 16:45*	WG1536720
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/02/2020 16:45*	WG1536720

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.69	4.20	1	09/09/2020 07:31	WG1539276
C28-C40 Oil Range	6.09	B	0.287	4.20	1	09/09/2020 07:31	WG1539276
(S) o-Terphenyl	*76.7*			*18.0-148*		*09/09/2020 07:31*	WG1539276

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.2		1	09/06/2020 21:07	WG1538145

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		9.77	21.2	1	09/01/2020 03:28	WG1535329

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	09/03/2020 01:33	WG1536987
(S) a,a,a-Trifluorotoluene(FID)	*94.6*			*77.0-120*		*09/03/2020 01:33*	WG1536987

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		0.000525	0.00112	1	09/03/2020 06:33	WG1537203
Toluene	U		0.00146	0.00562	1	09/03/2020 06:33	WG1537203
Ethylbenzene	U		0.000829	0.00281	1	09/03/2020 06:33	WG1537203
Total Xylenes	U		0.000989	0.00731	1	09/03/2020 06:33	WG1537203
(S) Toluene-d8	*100*			*75.0-131*		*09/03/2020 06:33*	WG1537203
(S) 4-Bromofluorobenzene	*94.6*			*67.0-138*		*09/03/2020 06:33*	WG1537203
(S) 1,2-Dichloroethane-d4	*90.8*			*70.0-130*		*09/03/2020 06:33*	WG1537203

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		1.71	4.25	1	09/09/2020 07:44	WG1539276
C28-C40 Oil Range	2.64	B J	0.291	4.25	1	09/09/2020 07:44	WG1539276
(S) o-Terphenyl	*67.5*			*18.0-148*		*09/09/2020 07:44*	WG1539276

Method Blank (MB)

(MB) R3568424-1 09/05/20 22:55

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

L1256203-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1256203-09 09/05/20 22:55 • (DUP) R3568424-3 09/05/20 22:55

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	97.1	96.4	1	0.678		10

Laboratory Control Sample (LCS)

(LCS) R3568424-2 09/05/20 22:55

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

Method Blank (MB)

(MB) R3568176-1 09/06/20 23:54

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

L1256203-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1256203-20 09/06/20 23:54 • (DUP) R3568176-3 09/06/20 23:54

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	95.5	95.3	1	0.175		10

Laboratory Control Sample (LCS)

(LCS) R3568176-2 09/06/20 23:54

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

Method Blank (MB)

(MB) R3568447-1 09/06/20 22:54

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1256203-23 Original Sample (OS) • Duplicate (DUP)

(OS) L1256203-23 09/06/20 22:54 • (DUP) R3568447-3 09/06/20 22:54

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.4	94.3	1	0.158		10

Laboratory Control Sample (LCS)

(LCS) R3568447-2 09/06/20 22:54

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

Method Blank (MB)

(MB) R3568446-1 09/06/20 21:35

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1256203-33 Original Sample (OS) • Duplicate (DUP)

(OS) L1256203-33 09/06/20 21:35 • (DUP) R3568446-3 09/06/20 21:35

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	96.1	95.9	1	0.218		10

Laboratory Control Sample (LCS)

(LCS) R3568446-2 09/06/20 21:35

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

Method Blank (MB)

(MB) R3568445-1 09/06/20 21:07

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1256203-43 Original Sample (OS) • Duplicate (DUP)

(OS) L1256203-43 09/06/20 21:07 • (DUP) R3568445-3 09/06/20 21:07

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	98.1	97.9	1	0.186		10

Laboratory Control Sample (LCS)

(LCS) R3568445-2 09/06/20 21:07

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

Method Blank (MB)

(MB) R3566033-1 08/31/20 23:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		9.20	20.0

L1256203-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1256203-01 09/01/20 00:07 • (DUP) R3566033-3 09/01/20 00:24

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	929	918	1	1.14		20

L1256203-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1256203-17 09/01/20 07:10 • (DUP) R3566033-6 09/01/20 07:28

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3566033-2 08/31/20 23:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	210	105	90.0-110	

L1256203-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256203-06 09/01/20 01:57 • (MS) R3566033-4 09/01/20 02:15 • (MSD) R3566033-5 09/01/20 03:10

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	515	80.8	585	592	97.8	99.2	1	80.0-120			1.26	20

Method Blank (MB)

(MB) R3566173-1 09/01/20 02:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		9.20	20.0

L1256203-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1256203-21 09/01/20 03:04 • (DUP) R3566173-3 09/01/20 03:16

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	U	U	1	0.000		20

L1256203-39 Original Sample (OS) • Duplicate (DUP)

(OS) L1256203-39 09/01/20 08:04 • (DUP) R3566173-6 09/01/20 08:16

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	38.4	36.7	1	4.66		20

Laboratory Control Sample (LCS)

(LCS) R3566173-2 09/01/20 02:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	200	100	90.0-110	

L1256203-27 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256203-27 09/01/20 04:27 • (MS) R3566173-4 09/01/20 05:04 • (MSD) R3566173-5 09/01/20 05:16

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	526	41.1	559	546	98.5	96.0	1	80.0-120			2.29	20

Method Blank (MB)

(MB) R3565928-1 08/31/20 20:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		9.20	20.0

L1256203-41 Original Sample (OS) • Duplicate (DUP)

(OS) L1256203-41 09/01/20 00:24 • (DUP) R3565928-3 09/01/20 00:42

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	U	U	1	0.000		20

L1256291-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1256291-06 09/01/20 06:26 • (DUP) R3565928-6 09/01/20 06:42

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	46.6	48.7	1	4.33		20

Laboratory Control Sample (LCS)

(LCS) R3565928-2 08/31/20 21:11

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

L1256203-44 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256203-44 09/01/20 01:37 • (MS) R3565928-4 09/01/20 02:33 • (MSD) R3565928-5 09/01/20 02:51

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	504	U	517	506	103	100	1	80.0-120			2.24	20

Method Blank (MB)

(MB) R3567079-2 09/02/20 05:36

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)	*91.0*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3567079-1 09/02/20 04:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.58	101	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*106*	*77.0-120*	

L1256203-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256203-01 09/02/20 11:19 • (MS) R3567079-3 09/02/20 13:23 • (MSD) R3567079-4 09/02/20 13:44

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	5.55	0.0259	5.09	5.08	91.2	89.2	1	10.0-151			0.203	28
(S) a,a,a-Trifluorotoluene(FID)					*98.8*	*97.8*		*77.0-120*				

Method Blank (MB)

(MB) R3566670-2 09/02/20 14:14

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)	*106*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3566670-3 09/02/20 15:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.17	94.0	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*99.3*	*77.0-120*	

Method Blank (MB)

(MB) R3566744-2 09/02/20 11:18

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)	*98.1*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3566744-1 09/02/20 10:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.91	107	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*102*	*77.0-120*	

L1256203-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256203-16 09/02/20 13:23 • (MS) R3566744-3 09/02/20 20:08 • (MSD) R3566744-4 09/02/20 20:30

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.40	U	2.60	2.61	48.1	49.2	1	10.0-151			0.385	28
(S) a,a,a-Trifluorotoluene(FID)					*94.4*	*95.6*		*77.0-120*				

Method Blank (MB)

(MB) R3567727-2 09/02/20 18:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0408	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*97.3*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3567727-1 09/02/20 17:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.32	96.7	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*105*	*77.0-120*	

L1256212-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256212-17 09/03/20 03:50 • (MS) R3567727-3 09/03/20 04:13 • (MSD) R3567727-4 09/03/20 04:36

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	6.55	U	1.95	2.34	29.8	36.2	1	10.0-151			18.3	28
(S) a,a,a-Trifluorotoluene(FID)					*97.3*	*98.2*		*77.0-120*				

Method Blank (MB)

(MB) R3566859-2 09/02/20 08:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL 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	*105*			*75.0-131*
(S) 4-Bromofluorobenzene	*95.4*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*86.0*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3566859-1 09/02/20 07:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.124	99.2	70.0-123	
Ethylbenzene	0.125	0.124	99.2	74.0-126	
Toluene	0.125	0.122	97.6	75.0-121	
Xylenes, Total	0.375	0.379	101	72.0-127	
(S) Toluene-d8			*97.8*	*75.0-131*	
(S) 4-Bromofluorobenzene			*102*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*97.9*	*70.0-130*	

L1256173-33 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256173-33 09/02/20 09:10 • (MS) R3566859-3 09/02/20 15:30 • (MSD) R3566859-4 09/02/20 15:49

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.124	U	0.101	0.0752	81.5	60.6	1	10.0-149			29.3	37
Ethylbenzene	0.124	0.000742	0.106	0.0774	84.9	61.8	1	10.0-160			31.2	38
Toluene	0.124	U	0.110	0.0803	88.7	64.8	1	10.0-156			31.2	38
Xylenes, Total	0.372	0.00646	0.306	0.240	80.5	62.8	1	10.0-160			24.2	38
(S) Toluene-d8					*104*	*104*		*75.0-131*				
(S) 4-Bromofluorobenzene					*94.4*	*95.7*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*97.9*	*97.0*		*70.0-130*				

Method Blank (MB)

(MB) R3568203-3 09/02/20 06:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL 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	*99.8*			*75.0-131*
(S) 4-Bromofluorobenzene	*110*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*

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

(LCS) R3568203-1 09/02/20 05:39 • (LCSD) R3568203-2 09/02/20 05:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.123	0.120	98.4	96.0	70.0-123			2.47	20
Ethylbenzene	0.125	0.114	0.117	91.2	93.6	74.0-126			2.60	20
Toluene	0.125	0.111	0.112	88.8	89.6	75.0-121			0.897	20
Xylenes, Total	0.375	0.383	0.376	102	100	72.0-127			1.84	20
(S) Toluene-d8				*98.3*	*98.5*	*75.0-131*				
(S) 4-Bromofluorobenzene				*106*	*107*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*111*	*113*	*70.0-130*				

L1256203-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256203-09 09/02/20 09:27 • (MS) R3568203-4 09/02/20 15:44 • (MSD) R3568203-5 09/02/20 16:03

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.132	U	0.112	0.0974	84.8	73.5	1	10.0-149			14.2	37
Ethylbenzene	0.132	U	0.111	0.106	84.0	79.7	1	10.0-160			5.28	38
Toluene	0.132	U	0.107	0.102	80.8	77.0	1	10.0-156			4.76	38
Xylenes, Total	0.397	U	0.356	0.341	89.6	85.9	1	10.0-160			4.26	38
(S) Toluene-d8					*99.4*	*103*		*75.0-131*				
(S) 4-Bromofluorobenzene					*107*	*111*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*108*	*106*		*70.0-130*				

Method Blank (MB)

(MB) R3566717-2 09/02/20 09:05

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL 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	*93.8*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*96.2*			*70.0-130*

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

(LCS) R3566717-1 09/02/20 07:49 • (LCSD) R3566717-3 09/02/20 09:34

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.119	0.110	95.2	88.0	70.0-123			7.86	20
Ethylbenzene	0.125	0.125	0.117	100	93.6	74.0-126			6.61	20
Toluene	0.125	0.116	0.108	92.8	86.4	75.0-121			7.14	20
Xylenes, Total	0.375	0.361	0.346	96.3	92.3	72.0-127			4.24	20
(S) Toluene-d8				*99.0*	*99.2*	*75.0-131*				
(S) 4-Bromofluorobenzene				*94.6*	*98.9*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*105*	*112*	*70.0-130*				

L1255221-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1255221-01 09/02/20 11:00 • (MS) R3566717-4 09/02/20 17:04 • (MSD) R3566717-5 09/02/20 17:23

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.151	U	0.139	0.136	91.6	90.1	1.05	10.0-149			1.68	37
Ethylbenzene	0.151	U	0.147	0.142	96.9	93.9	1.05	10.0-160			3.20	38
Toluene	0.151	U	0.140	0.143	92.4	94.7	1.05	10.0-156			2.45	38
Xylenes, Total	0.455	U	0.438	0.443	96.2	97.5	1.05	10.0-160			1.31	38
(S) Toluene-d8					*101*	*101*		*75.0-131*				
(S) 4-Bromofluorobenzene					*96.3*	*91.6*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*110*	*103*		*70.0-130*				

Method Blank (MB)

(MB) R3566976-3 09/03/20 06:14

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL 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	*97.8*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*97.6*			*70.0-130*

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

(LCS) R3566976-1 09/03/20 04:59 • (LCSD) R3566976-2 09/03/20 05:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.137	0.145	110	116	70.0-123			5.67	20
Ethylbenzene	0.125	0.124	0.123	99.2	98.4	74.0-126			0.810	20
Toluene	0.125	0.124	0.125	99.2	100	75.0-121			0.803	20
Xylenes, Total	0.375	0.391	0.382	104	102	72.0-127			2.33	20
(S) Toluene-d8				*97.8*	*93.2*	*75.0-131*				
(S) 4-Bromofluorobenzene				*106*	*98.7*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*102*	*105*	*70.0-130*				

L1257278-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1257278-15 09/03/20 11:17 • (MS) R3566976-4 09/03/20 11:36 • (MSD) R3566976-5 09/03/20 11:55

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.104	0.394	0.462	232	286	1	10.0-149	J5	J5	15.9	37
Ethylbenzene	0.125	0.0359	0.172	0.202	109	133	1	10.0-160			16.0	38
Toluene	0.125	0.192	0.589	0.643	318	361	1	10.0-156	J5	J5	8.77	38
Xylenes, Total	0.375	0.147	0.604	0.689	122	145	1	10.0-160			13.1	38
(S) Toluene-d8					*103*	*103*		*75.0-131*				
(S) 4-Bromofluorobenzene					*98.8*	*99.4*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*74.1*	*78.5*		*70.0-130*				

Method Blank (MB)

(MB) R3568754-1 09/09/20 13:17

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	1.94	J	0.274	4.00
(S) o-Terphenyl	*85.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3568754-2 09/09/20 13:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	42.6	85.2	50.0-150	
(S) o-Terphenyl			*69.2*	*18.0-148*	

L1256203-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256203-01 09/09/20 13:42 • (MS) R3568754-3 09/09/20 13:55 • (MSD) R3568754-4 09/09/20 14:07

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	51.3	U	45.1	42.9	88.0	83.5	1	50.0-150			5.15	20
(S) o-Terphenyl					*66.0*	*64.2*		*18.0-148*				

Method Blank (MB)

(MB) R3568296-1 09/08/20 17:34

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	*72.4*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3568296-2 09/08/20 17:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	38.5	77.0	50.0-150	
(S) o-Terphenyl			*64.7*	*18.0-148*	

L1256203-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256203-18 09/08/20 21:11 • (MS) R3568296-3 09/08/20 21:23 • (MSD) R3568296-4 09/08/20 21:36

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	49.6	3.75	46.7	44.0	86.5	81.1	1	50.0-150			6.01	20
(S) o-Terphenyl					*54.7*	*54.1*		*18.0-148*				

Method Blank (MB)

(MB) R3568336-1 09/09/20 03:43

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	1.08	J	0.274	4.00
(S) o-Terphenyl	*80.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3568336-2 09/09/20 03:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	41.1	82.2	50.0-150	
(S) o-Terphenyl			*62.8*	*18.0-148*	

L1256203-44 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256203-44 09/09/20 06:53 • (MS) R3568336-3 09/09/20 07:06 • (MSD) R3568336-4 09/09/20 07:18

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	49.3	U	33.9	33.5	68.7	67.9	1	50.0-150			1.20	20
(S) o-Terphenyl					*50.2*	*49.1*		*18.0-148*				

Method Blank (MB)

(MB) R3569226-1 09/11/20 01:34

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	*89.9*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3569226-2 09/11/20 01:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	42.2	84.4	50.0-150	
(S) o-Terphenyl			*26.0*	*18.0-148*	

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

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

State Accreditations

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

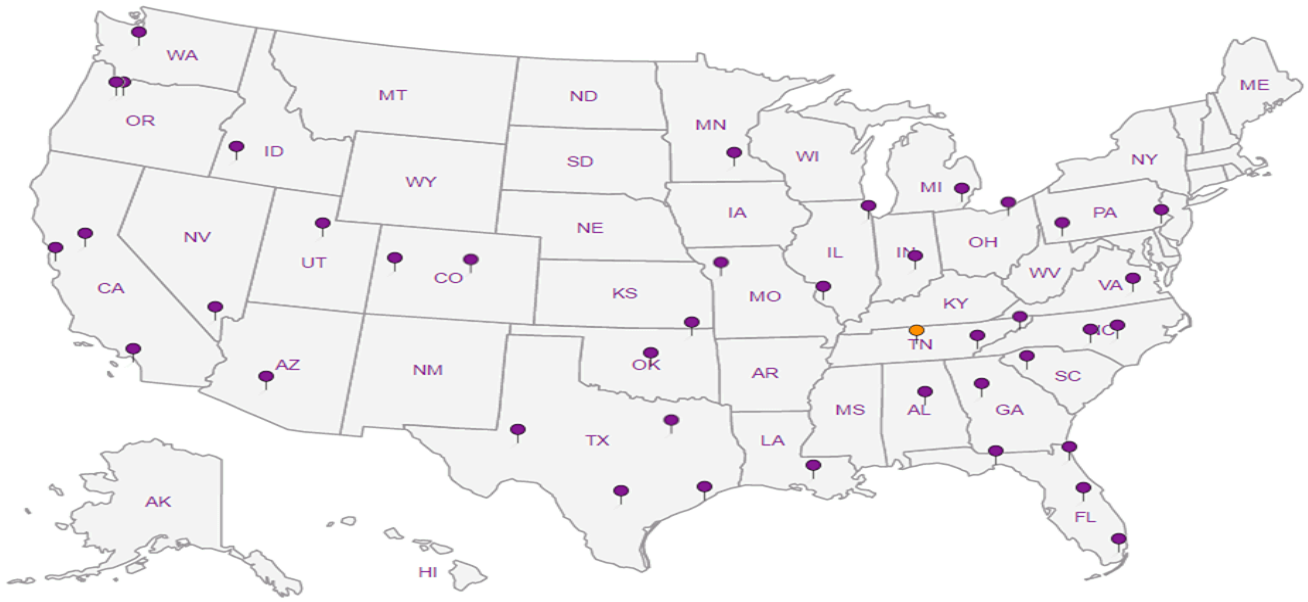
Third Party Federal Accreditations

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

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

Our Locations

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



Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

D079

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	SEMU Permian #31	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02103
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY) 1256203	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2020)	TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX	PRESERVATIVE METHOD: HCL	HNO_3	ICE	NONE		# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
	BH-1 (0-1)	8/27/2020			X				X			1	N	X		X												X						
	BH-1 (2-3)	8/27/2020			X				X			1	N	X		X												X						
	BH-1 (4-5)	8/27/2020			X				X			1	N	X		X												X						
	BH-1 (6-7)	8/27/2020			X				X			1	N	X		X												X						
	BH-1 (9-10)	8/27/2020			X				X			1	N	X		X												X						
	BH-2 (0-1')	8/27/2020			X				X			1	N	X		X												X						
	BH-2 (2-3')	8/27/2020			X				X			1	N	X		X												X						
01	BH-2 (4-5')	8/27/2020			X				X			1	N	X		X												X						
	BH-2 (6-7')	8/27/2020			X				X			1	N	X		X												X						
	BH-2 (9-10')	8/27/2020			X				X			1	N	X		X												X						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	8/28/20	1345	[signature]	8/28/20	13:45
[signature]	8/28/20	17:00	SWA	8/28/20	17:00
			[signature]	8-29-20	1000

LAB USE ONLY

Sample Temperature

1.5±0=1.5 IR A7

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: ____________

ORIGINAL COPY

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	SEMU Permian #31	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02103
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2020)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
125203																																		
	BH-2 (14-15')	8/27/2020			X				X			1	N	X		X												X						
	BH-2 (19-20')	8/27/2020			X				X			1	N	X		X												X						
	BH-2 (24-25')	8/27/2020			X				X			1	N	X		X												X						
02	BH-3 (0-1')	8/27/2020			X				X			1	N	X		X												X						
03	BH-3 (2-3')	8/27/2020			X				X			1	N	X		X												X						
04	BH-3 (4-5')	8/27/2020			X				X			1	N	X		X												X						
05	BH-3 (6-7')	8/27/2020			X				X			1	N	X		X												X						
06	BH-3 (9-10')	8/27/2020			X				X			1	N	X		X												X						
07	BH-4 (0-1')	8/27/2020			X				X			1	N	X		X												X						
08	BH-4 (2-3')	8/27/2020			X				X			1	N	X		X												X						

Relinquished by:	Date: 8/28/20	Time: 1345	Received by: Date: 8/28/20 Time: 13:45
Relinquished by:	Date: 8/28/20	Time: 17:00	Received by: Date: 8/28/20 Time: 17:00
Relinquished by:	Date:	Time:	Received by: Date: 8.29.20 Time: 1000

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	SEMU Permian #31	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02103
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY) 1256203	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
09	BH-4 (4-5')	8/27/2020			X				X			1	N	X		X												X						
10	BH-4 (6-7')	8/27/2020			X				X			1	N	X		X												X						
11	BH-4 (9-10')	8/27/2020			X				X			1	N	X		X												X						
	BH-5 (0-1')	8/27/2020			X				X			1	N	X		X												X						
	BH-5 (2-3')	8/27/2020			X				X			1	N	X		X												X						
	BH-5 (4-5')	8/27/2020			X				X			1	N	X		X												X						
	BH-5 (6-7')	8/27/2020			X				X			1	N	X		X												X						
	BH-5 (9-10')	8/27/2020			X				X			1	N	X		X												X						
	BH-6 (0-1')	8/27/2020			X				X			1	N	X		X												X						
	BH-6 (2-3')	8/27/2020			X				X			1	N	X		X												X						

Relinquished by:	Date: 8/28/20 Time: 1345	Received by:	Date: 8/28/20 Time: 13:45
Relinquished by:	Date: 8/28/20 Time: 17:00	Received by:	Date: 8/28/20 Time: 17:00
Relinquished by:	Date: Time:	Received by:	Date: 8-29-20 Time: 1000

ORIGINAL COPY

1.5±D=1.5

LAB USE ONLY

Sample Temperature

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	SEMU Permian #31	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02103
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY) 125203	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
12	BH-7 (0-1')	8/27/2020			X				X			1	N	X		X												X						
13	BH-7 (2-3')	8/27/2020			X				X			1	N	X		X												X						
14	BH-7 (4-5')	8/27/2020			X				X			1	N	X		X												X						
15	BH-8 (0-1')	8/27/2020			X				X			1	N	X		X												X						
16	BH-8 (2-3')	8/27/2020			X				X			1	N	X		X												X						
17	BH-8 (4-5')	8/27/2020			X				X			1	N	X		X												X						
18	BH-9 (0-1')	8/27/2020			X				X			1	N	X		X												X						
19	BH-9 (2-3')	8/27/2020			X				X			1	N	X		X												X						
20	BH-9 (4-5')	8/27/2020			X				X			1	N	X		X												X						
21	BH-9 (6-7')	8/27/2020			X				X			1	N	X		X												X						

Relinquished by:	Date:	Time:	Received by:	Date: Time:
[signature]	8/28/20	1345	[signature]	8.28.20 13:45
Relinquished by:	Date:	Time:	Received by:	Date: Time:
[signature]	8.28.20	17:00	[signature]	8.28.20 17:00
Relinquished by:	Date:	Time:	Received by:	Date: Time:
			[signature]	8-28-20 1700

LAB USE ONLY

Sample Temperature

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

[redacted] GINAL COPY

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	SEMU Permian #31	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02103
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY) 1256203	SAMPLE IDENTIFICATION	DATE (YEAR: 2020)	TIME	MATRIX: WATER	MATRIX: SOIL	PRESERVATIVE: HCL	PRESERVATIVE: HNO_3	PRESERVATIVE: ICE	PRESERVATIVE: NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
22	BH-9 (9-10')	8/27/2020			X			X		1	N	X		X												X						
	BH-10 (0-1')	8/27/2020			X			X		1	N	X		X												X						
	BH-10 (2-3')	8/27/2020			X			X		1	N	X		X												X						
	BH-10 (4-5')	8/27/2020			X			X		1	N	X		X												X						
	BH-10 (6-7')	8/27/2020			X			X		1	N	X		X												X						
	BH-10 (9-10')	8/27/2020			X			X		1	N	X		X												X						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	8/28/20	1345	[signature]	8/28/20	13:45
[signature]	8/28/20	17:00	[signature]	8/28/20	17:00
			[signature]	8-29-20	1000

ORIGINAL COPY

1.5±0=1.5 [initials]

LAB USE ONLY

Sample Temperature

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: ____________

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client: Coltetra	125203	
Cooler Received/Opened On: 8 / 29 / 20 Temperature:	1.5	
Received By: JOEY BRENT		
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?			

Analysis Request of Chain of Custody Record

Page : 1 of 5

Tetra Tech, Inc.

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

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Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	SEMU Permian #31	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02103
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2020)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B 8TEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
125623																																
-23	BH-1 (0-1)	8/27/2020			X			X		1	N	X		X												X						
-24	BH-1 (2-3)	8/27/2020			X			X		1	N	X		X												X						
-25	BH-1 (4-5)	8/27/2020			X			X		1	N	X		X												X						
-26	BH-1 (6-7)	8/27/2020			X			X		1	N	X		X												X						
-27	BH-1 (9-10)	8/27/2020			X			X		1	N	X		X												X						
-28	BH-2 (0-1')	8/27/2020			X			X		1	N	X		X												X						
-29	BH-2 (2-3')	8/27/2020			X			X		1	N	X		X												X						
-30 OT	BH-2 (4-5')	8/27/2020			X			X		1	N	X		X												X						
-31	BH-2 (6-7')	8/27/2020			X			X		1	N	X		X												X						
-32	BH-2 (9-10')	8/27/2020			X			X		1	N	X		X												X						

Relinquished by:	Date: 8/28/20	Time: 1345	Received by:
Relinquished by:	Date: 8/28/20	Time: 17:00	Received by:
Relinquished by:	Date:	Time:	Received by:
			Date: 8-29-20 Time: 1000

ORIGINAL COPY

1.5±D=1.5 KO Ag

LAB USE ONLY

Sample Temperature

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	Site Manager:	Christian Llull
Project Name:	SEMU Permian #31	Contact Info:	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02103
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
125123																															
-33	BH-2 (14-15')	8/27/2020			X			X		1	N	X		X												X					
-34	BH-2 (19-20')	8/27/2020			X			X		1	N	X		X												X					
01	BH-2 (24-25')	8/27/2020			X			X		1	N	X		X												X					
02	BH-3 (0-1')	8/27/2020			X			X		1	N	X		X												X					
03	BH-3 (2-3')	8/27/2020			X			X		1	N	X		X												X					
04	BH-3 (4-5')	8/27/2020			X			X		1	N	X		X												X					
05	BH-3 (6-7')	8/27/2020			X			X		1	N	X		X												X					
06	BH-3 (9-10')	8/27/2020			X			X		1	N	X		X												X					
07	BH-4 (0-1')	8/27/2020			X			X		1	N	X		X												X					
08	BH-4 (2-3')	8/27/2020			X			X		1	N	X		X												X					

Relinquished by:	Date: 8/28/20	Time: 1345	Received by:	Date: 8/28/20 Time: 13:45
Relinquished by:	Date: 8/28/20	Time: 17:00	Received by:	Date: 8/28/20 Time: 17:00
Relinquished by:	Date:	Time:	Received by:	Date: 8.29.20 Time: 0900

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

alysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

lient Name:	Conoco Phillips	Site Manager:	Christian Llull
Project Name:	SEMU Permian #31	Contact Info:	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02103
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701	Sampler Signature:	John Thurston
Receiving Laboratory:	Pace Analytical		

Comments: COPTETRA Acctnum

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
	1256253																														
09	BH-4 (4-5')	8/27/2020			X			X		1	N	X		X												X					
10	BH-4 (6-7')	8/27/2020			X			X		1	N	X		X												X					
11	BH-4 (9-10')	8/27/2020			X			X		1	N	X		X												X					
-35	BH-5 (0-1')	8/27/2020			X			X		1	N	X		X												X					
-36	BH-5 (2-3')	8/27/2020			X			X		1	N	X		X												X					
-37	BH-5 (4-5')	8/27/2020			X			X		1	N	X		X												X					
-38	BH-5 (6-7')	8/27/2020			X			X		1	N	X		X												X					
-39	BH-5 (9-10')	8/27/2020			X			X		1	N	X		X												X					
-40	BH-6 (0-1')	8/27/2020			X			X		1	N	X		X												X					
-41	BH-6 (2-3')	8/27/2020			X			X		1	N	X		X												X					

Relinquished by: Date: Time:
8/28/20 1345

Received by: Date: Time:
8/28/20 13:45

Relinquished by: Date: Time:
8/28/20 17:45

Received by: Date: Time:
8/28/20 17:45

Relinquished by: Date: Time:

Received by: Date: Time:
8-29-20 1000

ORIGINAL COPY

1.5±D=1.5 KG AT

LAB USE ONLY

Sample Temperature

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

901 West Wall Street, Suite 100
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Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	SEMU Permian #31	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02103
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
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Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
	125203	YEAR: 2020																													
12	BH-7 (0-1')	8/27/2020			X			X		1	N	X		X												X					
13	BH-7 (2-3')	8/27/2020			X			X		1	N	X		X												X					
14	BH-7 (4-5')	8/27/2020			X			X		1	N	X		X												X					
15	BH-8 (0-1')	8/27/2020			X			X		1	N	X		X												X					
16	BH-8 (2-3')	8/27/2020			X			X		1	N	X		X												X					
17	BH-8 (4-5')	8/27/2020			X			X		1	N	X		X												X					
18	BH-9 (0-1')	8/27/2020			X			X		1	N	X		X												X					
19	BH-9 (2-3')	8/27/2020			X			X		1	N	X		X												X					
20	BH-9 (4-5')	8/27/2020			X			X		1	N	X		X												X					
21	BH-9 (6-7')	8/27/2020			X			X		1	N	X		X												X					

	Date	Time		Date	Time
Relinquished by:	8/28/20	1345	Received by:	8.28.20	13:45
Relinquished by:	8.28.20	17:45	Received by:	8.28.20	17:45
Relinquished by:			Received by:	8-28-20	1800

LAB USE ONLY

Sample Temperature

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

[redacted] IGINAL COPY

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	SEMU Permian #31	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02103
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2020)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
1256207																																	
-42	BH-9 (9-10')	8/27/2020			X				X			1	N	X		X												X						
-43	BH-10 (0-1')	8/27/2020			X				X			1	N	X		X												X						
-44	BH-10 (2-3')	8/27/2020			X				X			1	N	X		X												X						
-45	BH-10 (4-5')	8/27/2020			X				X			1	N	X		X												X						
-46	BH-10 (6-7')	8/27/2020			X				X			1	N	X		X												X						
	BH-10 (9-10')	8/27/2020			X				X			1	N	X		X												X						

Relinquished by: Edwin Dela	Date: 8/28/20	Time: 1345	Received by:	Date: 8/28/20	Time: 13:45
Relinquished by:	Date: 8/28/20	Time: 17:00	Received by:	Date: 8/28/20	Time: 17:00
Relinquished by:	Date:	Time:	Received by:	Date: 8-29-20	Time: 1000

ORIGINAL COPY

1.5+0=1.5 KG AT

LAB USE ONLY

Sample Temperature

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

November 02, 2023

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: SEMU PERMIAN 31

Enclosed are the results of analyses for samples received by the laboratory on 11/01/23 16:26.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
CHUCK TERHUNE
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	11/01/2023	Sampling Date:	11/01/2023
Reported:	11/02/2023	Sampling Type:	Soil
Project Name:	SEMU PERMIAN 31	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03271	Sample Received By:	Tamara Oldaker
Project Location:	COG -LEA CO NM		

Sample ID: SW-1 (H236006-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/02/2023	ND	2.09	104	2.00	5.93	
Toluene*	<0.050	0.050	11/02/2023	ND	2.02	101	2.00	4.51	
Ethylbenzene*	<0.050	0.050	11/02/2023	ND	2.12	106	2.00	3.35	
Total Xylenes*	<0.150	0.150	11/02/2023	ND	6.33	106	6.00	2.92	
Total BTEX	<0.300	0.300	11/02/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	11/02/2023	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2023	ND	175	87.5	200	0.722	
DRO >C10-C28*	<10.0	10.0	11/01/2023	ND	147	73.4	200	4.96	
EXT DRO >C28-C36	<10.0	10.0	11/01/2023	ND					

Surrogate: 1-Chlorooctane *79.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *70.6 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
CHUCK TERHUNE
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	11/01/2023	Sampling Date:	11/01/2023
Reported:	11/02/2023	Sampling Type:	Soil
Project Name:	SEMU PERMIAN 31	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03271	Sample Received By:	Tamara Oldaker
Project Location:	COG -LEA CO NM		

Sample ID: SW-2 (H236006-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/02/2023	ND	2.09	104	2.00	5.93	
Toluene*	<0.050	0.050	11/02/2023	ND	2.02	101	2.00	4.51	
Ethylbenzene*	<0.050	0.050	11/02/2023	ND	2.12	106	2.00	3.35	
Total Xylenes*	<0.150	0.150	11/02/2023	ND	6.33	106	6.00	2.92	
Total BTEX	<0.300	0.300	11/02/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/02/2023	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2023	ND	175	87.5	200	0.722	
DRO >C10-C28*	<10.0	10.0	11/01/2023	ND	147	73.4	200	4.96	
EXT DRO >C28-C36	<10.0	10.0	11/01/2023	ND					

Surrogate: 1-Chlorooctane *79.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *70.6 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
CHUCK TERHUNE
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	11/01/2023	Sampling Date:	11/01/2023
Reported:	11/02/2023	Sampling Type:	Soil
Project Name:	SEMU PERMIAN 31	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03271	Sample Received By:	Tamara Oldaker
Project Location:	COG -LEA CO NM		

Sample ID: SW-3 (H236006-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/02/2023	ND	2.09	104	2.00	5.93	
Toluene*	<0.050	0.050	11/02/2023	ND	2.02	101	2.00	4.51	
Ethylbenzene*	<0.050	0.050	11/02/2023	ND	2.12	106	2.00	3.35	
Total Xylenes*	<0.150	0.150	11/02/2023	ND	6.33	106	6.00	2.92	
Total BTEX	<0.300	0.300	11/02/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/02/2023	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2023	ND	175	87.5	200	0.722	
DRO >C10-C28*	<10.0	10.0	11/01/2023	ND	147	73.4	200	4.96	
EXT DRO >C28-C36	<10.0	10.0	11/01/2023	ND					

Surrogate: 1-Chlorooctane *75.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *67.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
CHUCK TERHUNE
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	11/01/2023	Sampling Date:	11/01/2023
Reported:	11/02/2023	Sampling Type:	Soil
Project Name:	SEMU PERMIAN 31	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03271	Sample Received By:	Tamara Oldaker
Project Location:	COG -LEA CO NM		

Sample ID: SW-4 (H236006-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/02/2023	ND	2.09	104	2.00	5.93	
Toluene*	<0.050	0.050	11/02/2023	ND	2.02	101	2.00	4.51	
Ethylbenzene*	<0.050	0.050	11/02/2023	ND	2.12	106	2.00	3.35	
Total Xylenes*	<0.150	0.150	11/02/2023	ND	6.33	106	6.00	2.92	
Total BTEX	<0.300	0.300	11/02/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *109 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**224**	16.0	11/02/2023	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2023	ND	175	87.5	200	0.722	
DRO >C10-C28*	<10.0	10.0	11/01/2023	ND	147	73.4	200	4.96	
EXT DRO >C28-C36	<10.0	10.0	11/01/2023	ND					

Surrogate: 1-Chlorooctane *76.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *67.6 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
CHUCK TERHUNE
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	11/01/2023	Sampling Date:	11/01/2023
Reported:	11/02/2023	Sampling Type:	Soil
Project Name:	SEMU PERMIAN 31	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03271	Sample Received By:	Tamara Oldaker
Project Location:	COG -LEA CO NM		

Sample ID: BH-1 (4.0') (H236006-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/02/2023	ND	2.09	104	2.00	5.93	
Toluene*	<0.050	0.050	11/02/2023	ND	2.02	101	2.00	4.51	
Ethylbenzene*	<0.050	0.050	11/02/2023	ND	2.12	106	2.00	3.35	
Total Xylenes*	<0.150	0.150	11/02/2023	ND	6.33	106	6.00	2.92	
Total BTEX	<0.300	0.300	11/02/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *118 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**224**	16.0	11/02/2023	ND	384	96.0	400	11.8	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/02/2023	ND	175	87.5	200	0.722	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	147	73.4	200	4.96	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane *76.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *67.9 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
CHUCK TERHUNE
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	11/01/2023	Sampling Date:	11/01/2023
Reported:	11/02/2023	Sampling Type:	Soil
Project Name:	SEMU PERMIAN 31	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03271	Sample Received By:	Tamara Oldaker
Project Location:	COG -LEA CO NM		

Sample ID: BH-2 (4.0') (H236006-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/02/2023	ND	2.09	104	2.00	5.93	
Toluene*	<0.050	0.050	11/02/2023	ND	2.02	101	2.00	4.51	
Ethylbenzene*	<0.050	0.050	11/02/2023	ND	2.12	106	2.00	3.35	
Total Xylenes*	<0.150	0.150	11/02/2023	ND	6.33	106	6.00	2.92	
Total BTEX	<0.300	0.300	11/02/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/02/2023	ND	384	96.0	400	11.8	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/02/2023	ND	192	96.0	200	7.53	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	184	91.8	200	6.47	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane *90.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *99.6 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
CHUCK TERHUNE
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	11/01/2023	Sampling Date:	11/01/2023
Reported:	11/02/2023	Sampling Type:	Soil
Project Name:	SEMU PERMIAN 31	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03271	Sample Received By:	Tamara Oldaker
Project Location:	COG -LEA CO NM		

Sample ID: BH-3 (4.0') (H236006-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/02/2023	ND	2.09	104	2.00	5.93	
Toluene*	<0.050	0.050	11/02/2023	ND	2.02	101	2.00	4.51	
Ethylbenzene*	<0.050	0.050	11/02/2023	ND	2.12	106	2.00	3.35	
Total Xylenes*	<0.150	0.150	11/02/2023	ND	6.33	106	6.00	2.92	
Total BTEX	<0.300	0.300	11/02/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *123 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/02/2023	ND	384	96.0	400	11.8	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/02/2023	ND	192	96.0	200	7.53	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	184	91.8	200	6.47	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					

Surrogate: 1-Chlorooctane *86.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *101 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

Client Name:	Maverick Natural Resources	Site Manager:	Chuck Terhune
Project Name:	SEMU Permian 31		281-755-8965 chuck.terhune@tetratech.com
Project Location: (county, state)	Lea County, NM	Project #:	212C-MD-03271
Invoice to:	Attn: Chuck Terhune		
Receiving Laboratory:	Cardinal Labs	Sampler Signature:	Jorge Fernadez
Comments:			

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2023)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD:	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance					Hold
H236004																																				
1	SW-1	11/1/2023			x				x					x		x												x								
2	SW-2	11/1/2023			x				x					x		x												x								
3	SW-3	11/1/2023			x				x					x		x												x								
4	SW-4	11/1/2023			x				x					x		x												x								
5	BH-1 (4.0')	11/1/2023			x				x					x		x												x								
6	BH-2 (4.0')	11/1/2023			x				x					x		x												x								
7	BH-3 (4.0')	11/1/2023			x				x					x		x												x								

Relinquished by: Date: Time: 1625 — 11-1-23
Received by: Date: Time: 1626 — 11-1-23

Relinquished by: Date: Time:
Received by: Date: Time:

Relinquished by: Date: Time:
Received by: Date: Time:

LAB USE ONLY
Sample Temperature 2.1°C
#140

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

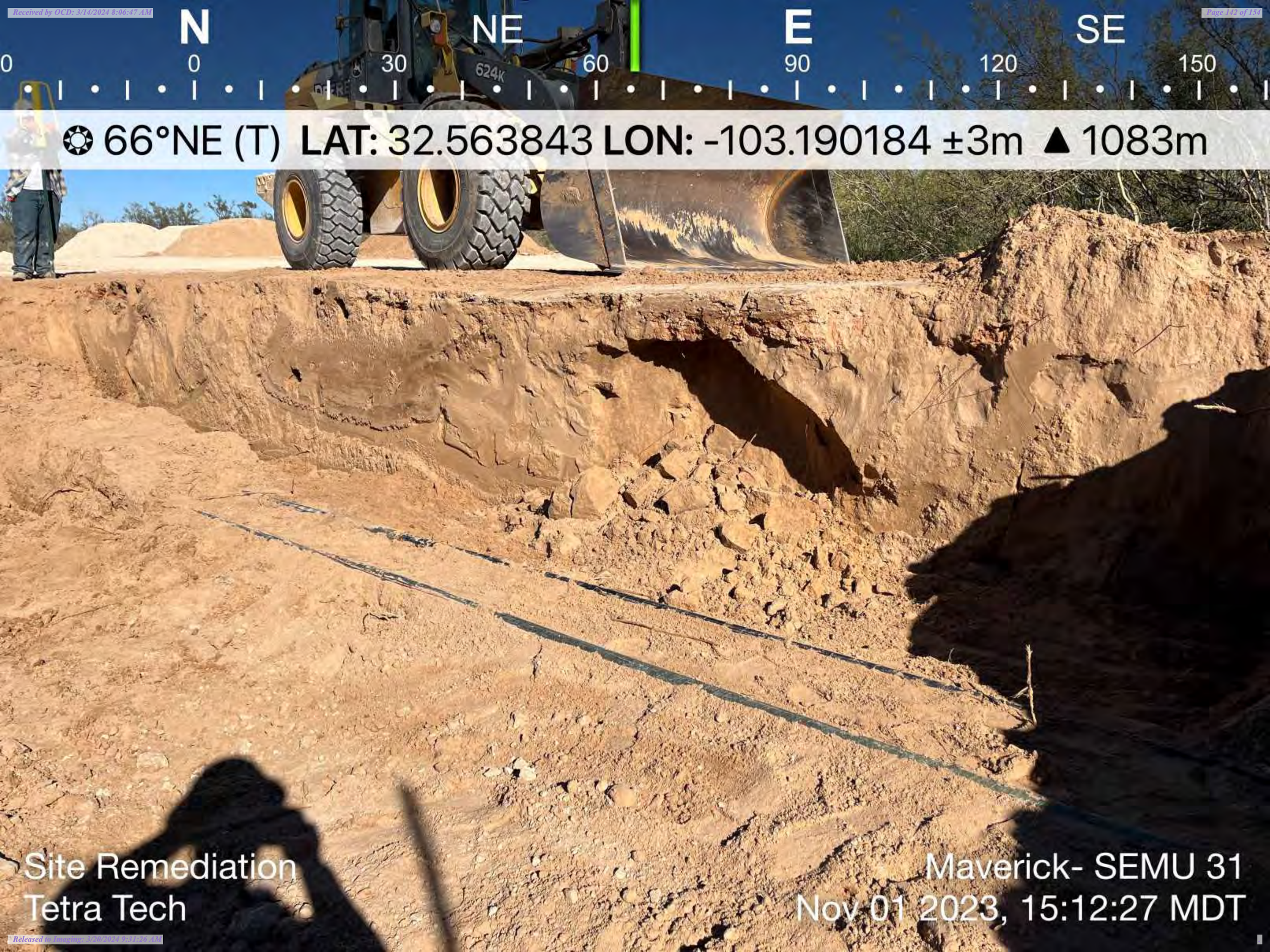
ATTACHMENT 5: PHOTOGRAPHIC DOCUMENTATION

E SE S SW
90 120 150 180 210 240

169°S (T) **LAT:** 32.563873 **LON:** -103.190168 ±4m ▲ 1082m

Site Remediation
Tetra Tech

Maverick- SEMU 31
Nov 01 2023, 15:12:11 MDT



S SW W NW N
180 210 240 270 300 330 0

268°W (T) **LAT:** 32.563872 **LON:** -103.190138 ±4m ▲1082m

Site Remediation
Tetra Tech

Maverick- SEMU 31
Nov 01 2023, 15:13:25 MDT

NW N NE E
300 330 0 30 60 90 120

28°NE (T) **LAT:** 32.563791 **LON:** -103.190188 ±3m ▲ 1084m

Site Remediation
Tetra Tech

Maverick-SEMU 31
Nov 07 2023, 15:15:25 MST

NE E SE S

30 60 90 120 150 180

109°E (T) **LAT:** 32.563956 **LON:** -103.190245 ±4m ▲ 1084m

Site Remediation
Tetra Tech

Maverick-SEMU 31
Nov 07 2023, 15:15:46 MST

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
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
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

QUESTIONS

Action 323129

QUESTIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 323129
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nPAC0535052112**
Incident Name	**NPAC0535052112 SEMU PERMIAN #031 @ 30-025-07817**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-025-07817] SEMU PERMIAN #031**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	SEMU PERMIAN #031
Date Release Discovered	11/29/2005
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Corrosion | Pipeline (Any) | Produced Water | Released: 82 BBL | Recovered: 60 BBL | Lost: 22 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 323129
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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.

I hereby agree and sign off to the above statement	Name: Chuck Terhune Email: chuck.terhune@tetratech.com Date: 03/14/2024

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 323129
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	1550
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	4430
GRO+DRO (EPA SW-846 Method 8015M)	1390
BTEX (EPA SW-846 Method 8021B or 8260B)	0.1
Benzene (EPA SW-846 Method 8021B or 8260B)	0.1
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	10/27/2023
On what date will (or did) the final sampling or liner inspection occur	11/01/2023
On what date will (or was) the remediation complete(d)	11/07/2023
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	500
What is the estimated volume (in cubic yards) that will be remediated	72
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 323129
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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.	
I hereby agree and sign off to the above statement	Name: Chuck Terhune Email: chuck.terhune@tetratech.com Date: 03/14/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 323129
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

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	Action Number: 323129
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**292132**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**11/01/2023**
What was the (estimated) number of samples that were to be gathered	**7**
What was the sampling surface area in square feet	**500**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Was this release entirely contained within a lined containment area	**No**
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	500
What was the total volume (cubic yards) remediated	72
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	500
What was the total volume (in cubic yards) reclaimed	500
Summarize any additional remediation activities not included by answers (above)	Site was constrained to on an active wellpad, excavation, disposal, and backfill to restore pad surface, revegetation will occur at end of life of the well pad during wellpad reclamation and revegetation..

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

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

I hereby agree and sign off to the above statement	Name: Chuck Terhune Email: chuck.terhune@tetratech.com Date: 03/14/2024

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QUESTIONS (continued)

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	Action Number: 323129
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 323129

CONDITIONS

Operator:	OGRID:
Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	331199
	Action Number: 323129
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation approved.	3/20/2024
amaxwell	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	3/20/2024