TETRA TECH

February 12, 2021

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

Re: Deferral Request
ConocoPhillips
Vacuum Abo Battery #4 Trunkline Release
Unit Letter D, Section 35, Township 17 South, Range 35 East
Lea County, New Mexico
1RP-3714
Incident ID nTO1518757703

Dear Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to evaluate and assess a release that occurred from a trunk line located at the Vacuum Abo Battery #4, in Lea County, New Mexico (Site). The initial C-141 inaccurately states the release occurred in the Public Land System Survey (PLSS) Unit Letter F, Section 5, Township 18 South, and Range 35 East at coordinates 32.7779083°, -103.4816513°. This ULSTR location corresponds to the well listed on the C-141 (API No. 30-025-26931).

According to information provided by COP, the release occurred in the vicinity of the Vacuum Abo Battery #4, located approximately 3 miles northeast of the coordinates provided in the C-141, in the PLSS Unit Letter D, Section 35, Township 17 South, Range 35 East. The approximate location of the release point is within the caliche pad located south of the Vacuum Abo Battery #4 at 32.798294°, -103.434623°. The site location is shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report (Appendix A), the release was discovered on July 6, 2015. Approximately 1 barrel (bbl) of oil and 22.23 bbls of produced water were released from a trunk line leak at the Vacuum Abo Battery #4. The release originated on the caliche pad and flowed north into the bar ditch south of County Road (CR) 50 before spilling out onto the road. Immediate response action taken was to shut down wells and the Vacuum Abo Battery #4 facility and close the valve to the trunk line, effectively stopping the release. Approximately 5 barrels of produced water were recovered using a vacuum truck. COP covered the highway with base course material to soak up the released fluids that traveled onto the road, then scraped the visually impacted material and backfilled the scraped area. The New Mexico Oil Conservation District (NMOCD) was notified later the same day, and the release was subsequently assigned the Remediation Permit (RP) number 1RP-3714 and Incident ID nTO1518757703.

SITE CHARACTERIZATION

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

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

According to the New Mexico Office of the State Engineer (NMOSE) well database, there are four (4) wells listed within an 800-meter (approximately ½-mile) radius of the Site on the New Mexico Office of the State Engineer's (NMOSE) website. The average depth to water is 68 feet (ft) below ground surface (bgs). The site characterization data are provided in Appendix B.

REGULATORY FRAMEWORK

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine recommended remedial action levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

Based on the site characterization and in accordance with Table I of 19.15.29.12 NMAC, the remediation RRALs for the Site are as follows:

CONSTITUENT	RRAL
Chloride (0-4 ft bgs)	600 mg/kg
Chloride (>4 ft bgs)	10,000 mg/kg
TPH (GRO + DRO + ORO) (0-4 ft bgs)	100 mg/kg
TPH (GRO + DRO + ORO) (>4 ft bgs)	2,500 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

INITIAL SITE ASSESSMENT AND ADDITIONAL RELEASE INFORMATION

A Corrective Action Plan (CAP) dated May 24, 2016 to address the release was submitted to and approved by the NMOCD (Appendix C) by Basin Environmental Service Technologies (Basin). According to the CAP, on July 6, 2015, personnel from Basin went onsite to assess the release on behalf of COP. On May 3, 2016, Basin collected samples from five points (Verticals 1 through 5) within the release area footprint (Figure 4). The samples were field tested for salinity and organic vapors, and select samples were sent to Cardinal Laboratories in Hobbs, NM for analysis. Laboratory analytical results are included in Appendix B of the CAP (Appendix C).

The results of the field screening and analytical results are summarized in Table 1. Salinity screening results were elevated in surface soils at all locations and decreased with depth. The terminal depth samples from each location, ranging from 6 inches to 5 ft, were selected for laboratory analysis to confirm vertical delineation of the release. Analytical results associated with the terminal depth samples were below Site RRALs for all constituents at all locations, and vertical delineation was achieved.

A second release, assigned the RP number 1RP-4310, occurred on June 11, 2016 shortly following the completion of the CAP. The footprint of the second release (1RP-4310) closely matched the footprint of the initial release (1RP-3714), although the 1RP-4310 release extended further to the west on the lease pad and did not travel as far to the east in the road ditch. According to available information, further assessment work was not conducted following the second release before these proposed remediation activities commenced.

2016 REMEDIATION ACTIVITIES AND CONFIRMATION SAMPLING

Based on the May 2016 soil assessment results and in accordance with the approved CAP, excavation activities progressed in July 2016. COP scraped the release extent on the lease pad to a depth of 6 inches below ground surface (bgs). Additionally, the release area footprint around Vertical 1 was excavated down to 2.5 ft bgs, and the release area footprint around Vertical 2 was excavated to 3.5 ft bgs. In the interest of safety, COP kept the excavation more than 5 ft from buried lines. A map created by Basin that shows the 1RP-3714 and 1RP-4310 release extents (identified as "AD #1 Stain" and "AD #2 Stain," respectively) and the excavated areas is presented in Appendix D.

Four confirmation samples were collected from the floor of the excavated areas and sent to Cardinal Laboratories to be analyzed for TPH and chlorides. The analytical results associated with point 3 (2.5 ft bgs) and at point 4 (6 inches bgs) exceeded the reclamation RRAL for chloride of 600 mg/kg, however, these impacted surface areas occur on a developed pad storage site. Based on the site characterization, the analytical results associated with these confirmation samples meet the standards of Table I of 19.15.29.12 NMAC for chloride and TPH. Although analysis for BTEX was not conducted, based on the TPH values, it is a safe assumption that the BTEX concentrations in these locations would be below the applicable RRALs. The laboratory analytical report is included in Appendix E, and confirmation sampling results are included in Table 2. Sample locations are included in the Basin map in Appendix D. The excavated areas were backfilled after confirmation samples were collected.

ADDITIONAL SITE ASSESSMENT

In October 2020 Tetra Tech was onsite on behalf of ConocoPhillips to conduct additional assessment activities in order to complete horizontal and vertical delineation of the documented releases at the Site. As there are multiple releases associated with this Site, the assessment and characterization activities were grouped together for expediency. A total of twelve (12) borings were installed using a combination of methods. Six borings were completed using an air rotary drilling rig (BH-1, -2, -3, -7, -9, and -10) and six were completed via hand auger (BH-5, -6, -11, -12, -13, and -14). Three borings (BH-1 through BH-3) were installed within the interior of the individual release extents to achieve vertical delineation of the releases. Boring locations BH-1 and BH-3 were each installed to a depth of 20 ft bgs, while BH-2 was installed to 40 ft bgs, based on field soil screening results. BH-2 is the vertical delineation point for the 1RP-3714 release.

The nine remaining borings (B-5, -6, -7, and -9 through -14) were installed to various depths on the perimeter of the release to the north, south, east, and west to confirm horizontal delineation of the release footprint. Boring logs, included as Appendix F, present soil descriptions, sample depths, and field screening data from the October 2020 assessment activities. Figure 4 depicts the release extent, excavated areas and the October 2020 soil boring locations.

A total of forty-eight (48) samples were collected from the twelve borings and submitted to Pace Analytical National Center for Testing & Innovation in Nashville, Tennessee to be analyzed for chlorides via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix E.

SUMMARY OF SAMPLING RESULTS

Results from the October 2020 soil sampling event are summarized in Table 3. Analytical results associated with boring locations BH-1 (0-1 ft bgs), BH-2 (0-3 ft bgs), and BH-3 (0-3 ft bgs) exceeded the reclamation RRAL (0-4 ft bgs) of 600 mg/kg for chlorides. However, each of these boring locations were inside the footprint of impacted surface areas on the existing developed caliche pad. The pad is needed for production operations. Analytical results associated with the 0-1 ft bgs interval at on-pad borings BH-3 and at BH-7 exceeded the reclamation RRAL (0-4 ft bgs) for TPH (100 mg/kg). These areas are also on-pad in an active production site. There were no analytical results which exceeded the Site RRALs for soils deeper than 4 feet bgs for chlorides (10,000 mg/kg) or TPH (2,500 mg/kg). The remainder of analytical results associated with the samples collected were below Site RRALs for all constituents. The analytical results associated with all samples analyzed were below the BTEX Site RRAL of 50 mg/kg.

Analytical sampling results that exceeded Site RRALs are from borings located on the Vacuum Abo Battery #4 lease pad. All samples collected from borings located in off-site pasture areas had analytical results below Site RRALs. Therefore, both horizontal and vertical delineation was achieved during the October 2020 soil assessment activities.

CONCLUSION

ConocoPhillips respectfully requests that NMOCD will consider delaying remediation activities at the Site until the end of life of the battery. At the time of abandonment, retrofit, or inactivity, remediation will be completed in addition to reclamation. After the initial assessment activities conducted at the Site in 2015, the remedial activities in 2016, and the additional assessment in 2020, the contamination remaining in place is determined to be limited to surface soils in on-pad locations in active oil and gas production areas. As such, these soils are not currently subject to reclamation RRALs, and analytical results are below the RRALs for chloride (10,000 mg/kg) and TPH (2,500 mg/kg).

Therefore, the release does not cause an imminent risk to human health, the environment, or groundwater. Although the 2016 CAP was approved, active operations and an abundance of energized subsurface lines at the Vacuum Abo Battery #4 did not allow for complete remediation of the release footprint. Site assessment activities from 2020 achieved horizontal and vertical delineation to the Site-specific RRALs established according to the site characterization. Final remediation and reclamation shall take place in accordance with 19.15.29.12 and 19.15.29.13 NMAC once the site is no longer being used for oil and gas operations. The C-141 form deferral request form is enclosed in Attachment A.

If you have any questions or comments concerning the assessments or the deferral request for this site, please call me at (512) 338-2861 or Greg at (432) 682-4559.

Sincerely,
Tetra Tech, Inc.

Christian M. Llull, P.G.
Project Manager

Greg W. Pope, P.G.
Program Manager

cc:
Mr. Marvin Soriwei, RMR – ConocoPhillips
Mr. Charles Beauvais, GPBU - ConocoPhillips

LIST OF ATTACHMENTS

Figures:

- Figure 1 – Overview Map
- Figure 2 – Topographic Map
- Figure 3 – Approximate Release Extent
- Figure 4 – Additional Site Assessment

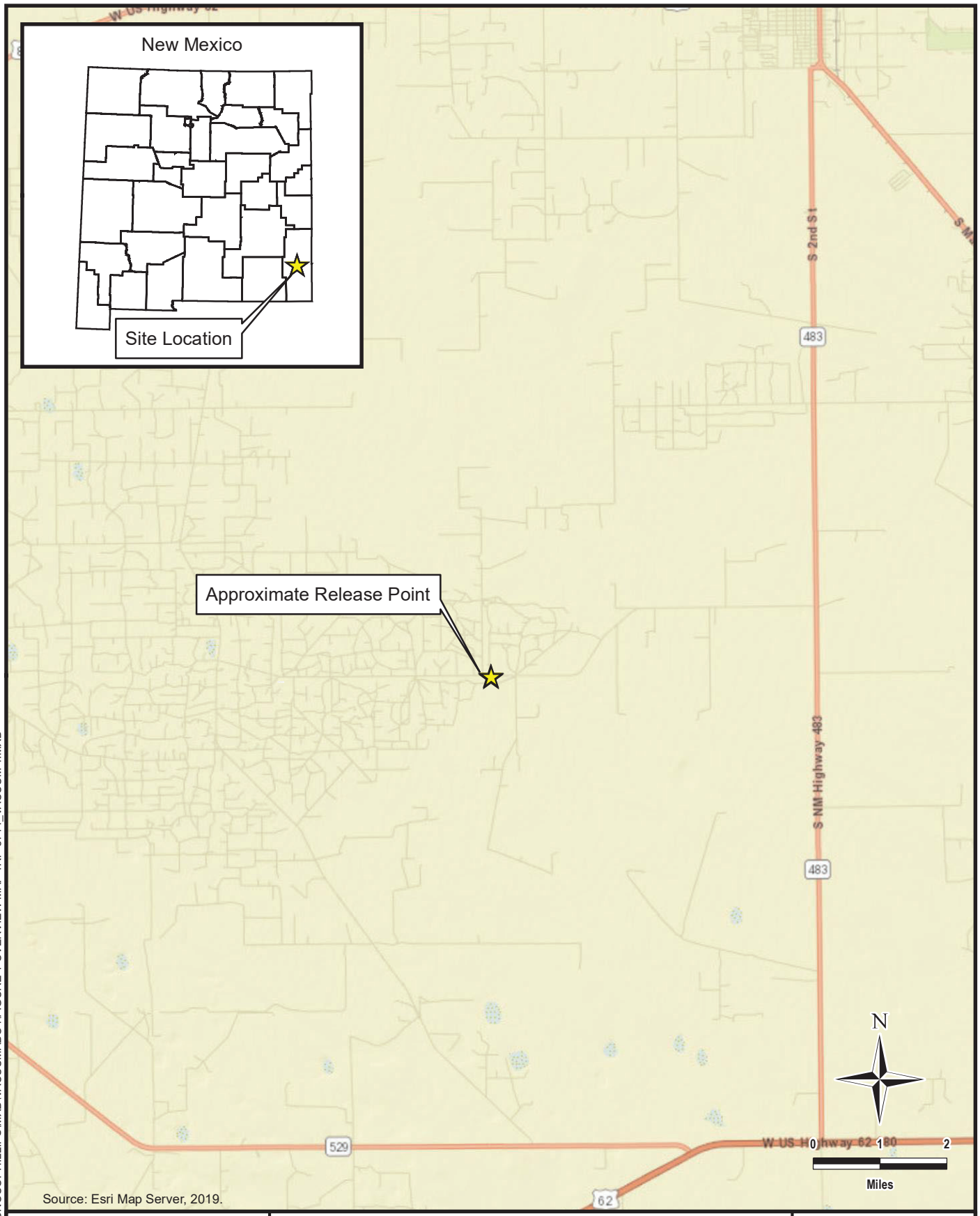
Tables:

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

Appendices:

- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – Corrective Action Plan (May 24, 2016)
- Appendix D – Basin Excavation Map
- Appendix E – Laboratory Analytical Data
- Appendix F – Boring Logs

FIGURES



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\VACUUMABO4\FIGURE 1 OVERVIEW MAP 1RP-3714_VACUUM 4.MXD

TETRA TECH

www.tetratech.com

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

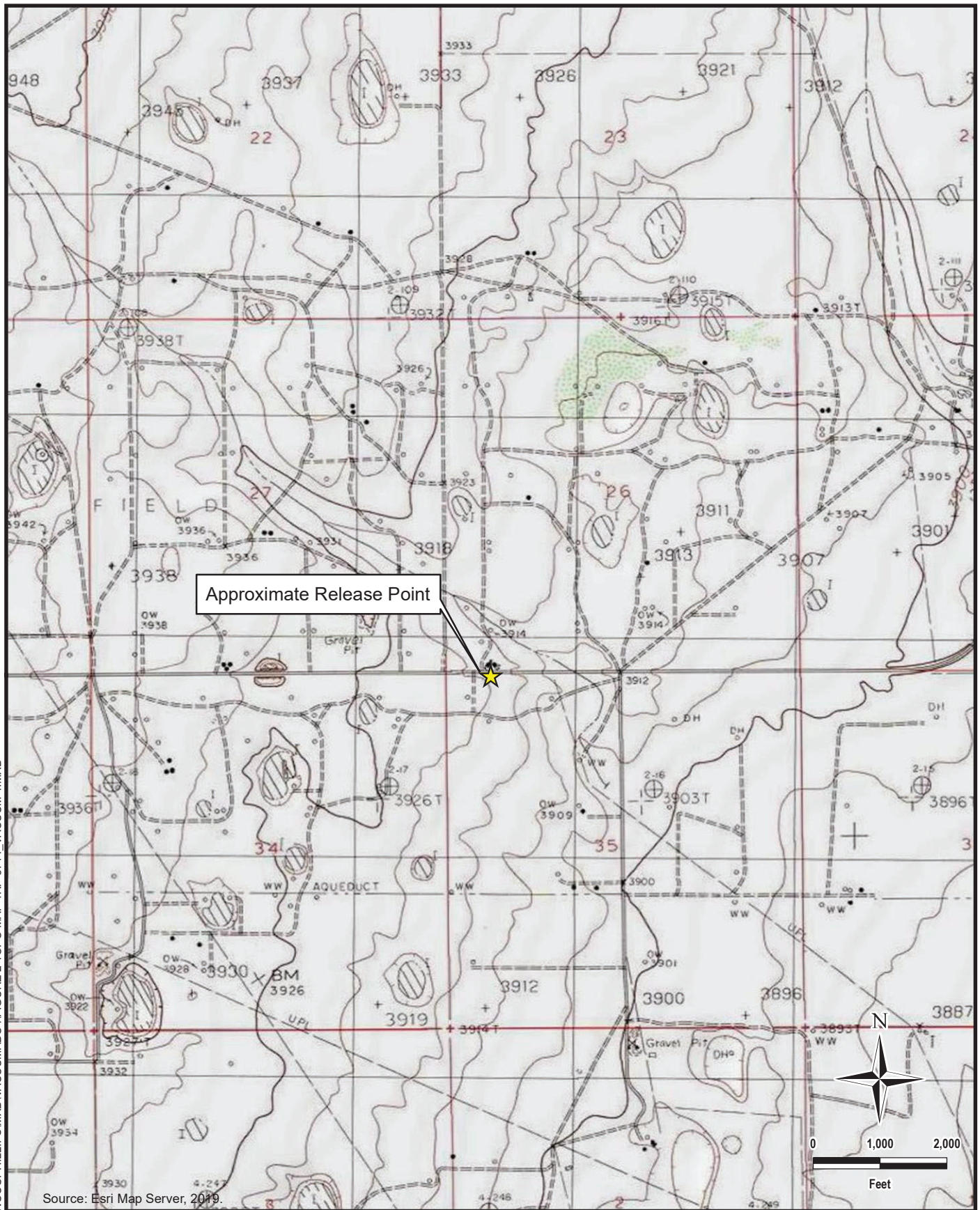
CONOCOPHILLIPS

1RP-3714
(32.798294°, -103.434623°)
LEA COUNTY, NEW MEXICO

VACUUM ABO BATTERY #4 TRUNK LINE RELEASE
OVERVIEW MAP

PROJECT NO.:	212C-MD-02110
DATE:	FEBRUARY 12, 2021
DESIGNED BY:	AAM

Figure No.
1



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

CONOCOPHILLIPS

1RP-3714
(32.798294°, -103.434623°)
LEA COUNTY, NEW MEXICO

VACUUM ABO BATTERY #4 TRUNK LINE RELEASE
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-02110
DATE:	FEBRUARY 12, 2021
DESIGNED BY:	AAM

Figure No.
2

Legend

Approximate Release Extent

Image Source: Esri Map Server, 2017.

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

CONOCOPHILLIPS

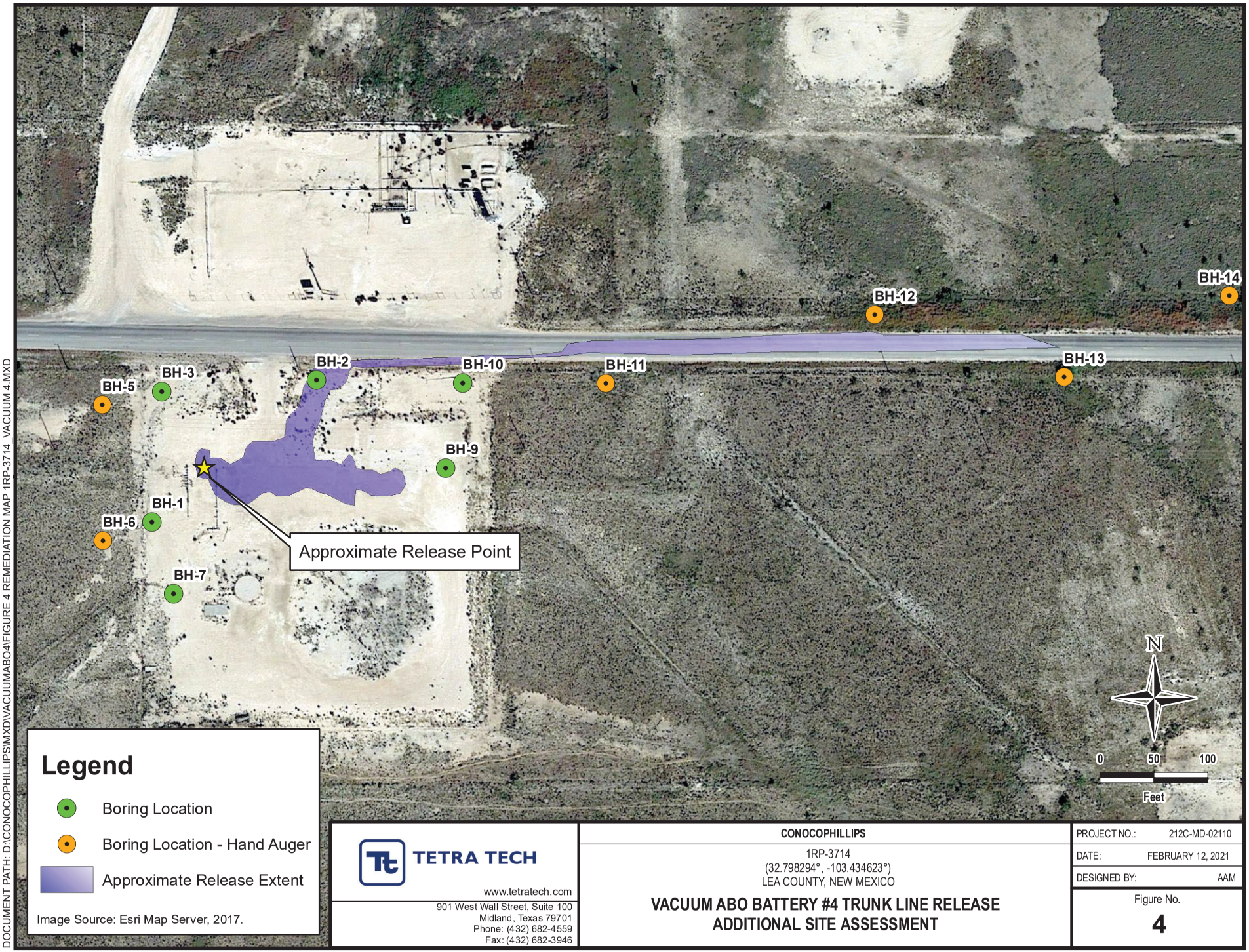
1RP-3714
(32.798294°, -103.434623°)
LEA COUNTY, NEW MEXICO

VACUUM ABO BATTERY #4 TRUNK LINE RELEASE
APPROXIMATE RELEASE EXTENT

PROJECT NO.:	212C-MD-02110
DATE:	FEBRUARY 12, 2021
DESIGNED BY:	AAM

Figure No.
3

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\VACUUMABO4\FIGURE 3 RELEASE MAP 1RP-3714_VACUUM 4.MXD



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TETRA TECH

www.tetratech.com

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

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1RP-3714
(32.798294°, -103.434623°)
LEA COUNTY, NEW MEXICO

VACUUM ABO BATTERY #4 TRUNK LINE RELEASE
ADDITIONAL SITE ASSESSMENT

PROJECT NO.:	212C-MD-02110
DATE:	FEBRUARY 12, 2021
DESIGNED BY:	AAM

Figure No.
4

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
INITIAL SOIL ASSESSMENT
CONOCOPHILLIPS
VACUUM ABO BATTERY #4 TRUNK LINE RELEASE
1RP-3714
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride[1]		TPH[2]				
			PID*	Chlorides*			GRO		DRO		TPH
							C_6 - C_{10}		>C_{10} - C_{28}		C_6 - C_{28}
		ft. bgs	ppm	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
Vertical 1	5/17/2016	0.5	0.1	2877	NS		NS		NS		NS
		1	1.1	2514	NS		NS		NS		NS
		1.5	0.1	2129	NS		NS		NS		NS
		2	0.1	1540	NS		NS		NS		NS
		2.5	1	1238	NS		NS		NS		NS
		3	0.6	732	NS		NS		NS		NS
		3.5	0.7	734	NS		NS		NS		NS
		4	5.4	NR	80.0		< 10.0		131		131
Vertical 2	5/17/2016	0.5	0	2161	NS		NS		NS		NS
		1	1.1	1727	NS		NS		NS		NS
		1.5	1.7	1486	NS		NS		NS		NS
		2	0.6	1702	NS		NS		NS		NS
		2.5	1	1669	NS		NS		NS		NS
		3	1.1	1927	NS		NS		NS		NS
		3.5	0.7	2039	NS		NS		NS		NS
		4	0.6	855	NS		NS		NS		NS
		4.5	4.6	886	NS		NS		NS		NS
		5	3.6	NR	80.0		< 10.0		138		138
Vertical 3	5/17/2016	SURFACE	0	23346	NS		NS		NS		NS
		0.5	0	2622	NS		NS		NS		NS
		1	NR	730	NS		NS		NS		NS
		1.5	NR	358	NS		NS		NS		NS
		2	NR	NR	144		< 10.0		90.7		90.7
Vertical 4	5/4/2016	SURFACE	6.2	520	NS		NS		NS		NS
		0.5	17	NR	160		< 10.0		35.6		35.6
Vertical 5	5/4/2016	SURFACE	6.1	173	NS		NS		NS		NS
		0.5	29.5	NR	< 16.0		< 10.0		< 10.0		-

NOTES:

ft. Feet
bgs Below ground surface
mg/kg Milligrams per kilogram
TPH Total Petroleum Hydrocarbons
GRO Gasoline Range Organics
DRO Diesel Range Organics
NR Not Reported
NS Not Sampled

1 Method SM4500Cl-B
2 Method 8015M

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
CONFIRMATION SAMPLING
CONOCOPHILLIPS
VACUUM ABO BATTERY #4 TRUNK LINE RELEASE
1RP-3714
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Chloride[1]		TPH[2]				
					GRO		DRO		TPH
					C_6 - C_{10}		>C_{10} - C_{28}		C_6 - C_{28}
		ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
PT.1 EXC @ 3.5'	7/22/2016	3.5	224		< 10.0		< 10.0		-
PT.2 EXC @ 3.5'	7/22/2016	3.5	592		< 10.0		< 10.0		-
PT.3 EXC @ 2.5'	7/22/2016	2.5	736		< 10.0		< 10.0		-
PT.4 EXC @ 0.5'	7/22/2016	0.5	768		< 10.0		14.8		14.8

NOTES:

ft. Feet
bgs Below ground surface
mg/kg Milligrams per kilogram
TPH Total Petroleum Hydrocarbons
GRO Gasoline Range Organics
DRO Diesel Range Organics

Bold and italicized values indicate exceedance of proposed RRALs

1 Method SM4500Cl-B
2 Method 8015M

TABLE 3
SUMMARY OF ANALYTICAL RESULTS
ADDITIONAL SOIL ASSESSMENT
CONOCOPHILLIPS
VACUUM ABO BATTERY #4 TRUNKLINE RELEASE
1RP-3714
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth Interval	Field Screening Results		Chloride[1]		BTEX[2]										TPH[3]							
			Chloride	PID			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)	
		ft. bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	
BH-1	10/13/2020	0-1	-	-	***642***		< 0.00106		0.00170	J	< 0.00266		0.000958	J	0.00266		0.0534	J	1.89	J	3.74	J	5.68	
		2-3	-	-	340		< 0.00107		< 0.00537		< 0.00268		< 0.00698		-		< 0.104		< 4.15		1.81	J	1.81	
		4-5	-	-	365		< 0.00115		< 0.00573		< 0.00287		< 0.00745		-		0.0443	J	< 4.29		< 4.29		0.0443	
		6-7	-	-	176		< 0.00111		< 0.00556		< 0.00278		< 0.00723		-		< 0.106		< 4.23		< 4.23		-	
		9-10	-	-	114		< 0.00107		< 0.00535		< 0.00268		< 0.00696		-		0.0672	J	< 4.14		< 4.14		0.0672	
		14-15	-	-	120		< 0.00110		< 0.00550		< 0.00275		< 0.00715		-		< 0.105		< 4.20		< 4.20		-	
		19-20	-	-	172		< 0.00119		< 0.00594		< 0.00297		< 0.00772		-		0.0502	J	< 4.37		< 4.37		0.0502	
BH-2	10/13/2020	0-1	-	-	***1000***		< 0.00103		< 0.00517		< 0.00259		< 0.00672		-		< 0.102		13.3		30.2		43.5	
		2-3	-	-	***1050***		< 0.00109		< 0.00543		< 0.00271		< 0.00705		-		0.0245	J	3.11	J	4.28		7.41	
		4-5	-	-	346		< 0.00105		< 0.00526		< 0.00263		< 0.00684		-		0.0313	J	< 4.11		< 4.11		0.0313	
		6-7	-	-	371		< 0.00109		< 0.00543		< 0.00271		< 0.00706		-		< 0.104		< 4.17		< 4.17		-	
		9-10	-	-	114		0.000544	J	< 0.00550		< 0.00275		< 0.00715		0.000544		< 0.105		< 4.20		< 4.20		-	
		14-15	-	-	986		< 0.00151		< 0.00753		< 0.00376		< 0.00978		-		< 0.125		< 5.00		< 5.00		-	
		19-20	-	-	471		< 0.00125		< 0.00626		< 0.00313		< 0.00813		-		0.0253	J	4.45	J	3.26	J	7.74	
		24-25	-	-	310		< 0.00111		< 0.00555		< 0.00277		< 0.00721		-		< 0.105		2.38	J	< 4.22		2.38	
		29-30	-	-	282		< 0.00109		< 0.00545		< 0.00272		< 0.00708		-		< 0.104		1.93	J	< 4.18		1.93	
		34-35	-	-	239		< 0.00108		< 0.00540		< 0.00270		< 0.00703		-		< 0.104		3.03	J	< 4.16		3.03	
		39-40	-	-	252		< 0.00108		< 0.00542		< 0.00271		0.00352	J	0.00352		0.0303	B J	2.53	J	1.12	B J	3.68	
BH-3	10/13/2020	0-1	-	-	***4650***		0.000547	J	< 0.00526		0.000911	J	0.00341	J	0.00487		0.0568	B J	99.7		136		***236***	
		2-3	-	-	***1530***		< 0.00106		< 0.00531		< 0.00266		< 0.00691		-		0.0346	B J	22.5		28.4		50.9	
		4-5	-	-	77.0		< 0.00103		< 0.00515		< 0.00257		< 0.00669		-		0.0336	B J	4.76		5.52		10.3	
		6-7	-	-	15.8	J	< 0.00114		< 0.00572		< 0.00286		< 0.00744		-		0.0307	B J	< 4.29		0.998	B J	1.03	
		9-10	-	-	66.2		< 0.00112		< 0.00558		< 0.00279		< 0.00726		-		0.0236	B J	< 4.23		1.68	B J	1.70	
		14-15	-	-	93.6		< 0.00118		< 0.00588		< 0.00294		< 0.00765		-		0.0275	B J	< 4.35		0.957	B J	0.985	
		19-20	-	-	55.3		< 0.00111		< 0.00554		< 0.00277		< 0.00720		-		0.0286	B J	2.73	J	0.911	B J	3.67	
BH-5	10/13/2020	0-1	99	-	< 20.3		0.000539	J	0.00144	J	< 0.00256		< 0.00667		0.00198		0.0423	B J	8.01		22.5		30.6	
BH-6	10/13/2020	0-1	130	-	35.8		0.00110		0.00274	J	< 0.00258		0.00134	J	0.00518		0.0348	B J	4.54		17.6		22.2	
BH-7	10/14/2020	0-1	-	-	20.8		< 0.00104		< 0.00518		< 0.00259		< 0.00673		-		0.0283	B J	18.9		188		***207***	
		2-3	-	-	16.5	J	< 0.00106		< 0.00532		< 0.00266		< 0.00691		-		0.0320	B J	4.01	J	28.4		32.4	
		4-5	-	-	96.9		< 0.00107		< 0.00535		< 0.00268		< 0.00696		-		0.0298	B J	< 4.14		2.68	B J	2.71	
		6-7	-	-	320		< 0.00114		< 0.00568		< 0.00284		< 0.00738		-		< 0.107		< 4.27		0.364	B J	0.364	
		9-10	-	-	341		< 0.00112		< 0.00559		< 0.00279		< 0.00727		-		0.0553	B J	< 4.23		< 4.23		0.0553	
BH-9	10/14/2020	0-1	-	-	36.3		< 0.00106		< 0.00528		< 0.00264		< 0.00686		-		0.0264	B J	< 4.11		1.36	B J	1.39	
		2-3	-	-	30.9		< 0.00110		< 0.00549		< 0.00274		< 0.00714		-		0.0250	B J	< 4.20		3.87	B J	3.90	
		4-5	-	-	31.7		< 0.00110		< 0.00552		< 0.00276		< 0.00718		-		0.0284	B J	< 4.21		1.53	B J	1.56	
BH-10	10/14/2020	0-1	-	-	47.4		< 0.00104		< 0.00520		< 0.00260		< 0.00675		-		0.0316	B J	2.34	J	8.13		10.5	
		2-3	-	-	37.5		< 0.00105		< 0.00524		< 0.00262		< 0.00681		-		0.0264	B J	< 4.10		1.34	B J	1.37	
		4-5	-	-	113		< 0.00111		< 0.00553		< 0.00277		< 0.00719		-		< 0.105		< 4.21		0.598	B J	0.598	
		6-7	-	-	80.6		< 0.00117		< 0.00583		< 0.00291		< 0.00757		-		0.0271	B J	< 4.33		0.425	B J	0.452	
		9-10	-	-	34.8		< 0.00111		< 0.00554		< 0.00277		< 0.00720		-		0.0522	B J	< 4.21		0.455	B J	0.507	
BH-11	10/13/2020	0-1	125	-	44.9		0.000971		< 0.00511		< 0.00255		< 0.00664		0.000971		0.0302	B J	9.69		29.5		39.2	
		1-2	225	-	163		0.00106		0.00134	J	< 0.00258		< 0.00672		0.00240		0.0289	B J	10.8		37.8		48.6	

TABLE 3
SUMMARY OF ANALYTICAL RESULTS
ADDITIONAL SOIL ASSESSMENT
CONOCOPHILLIPS
VACUUM ABO BATTERY #4 TRUNKLINE RELEASE
1RP-3714
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth Interval	Field Screening Results		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)	
			Chloride	PID																				
		ft. bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	
BH-12	10/13/2020	0-1	250	-	12.4	J	< 0.00109		< 0.00544		< 0.00272		0.00292	B J	0.00292		0.0448	B J	5.31		20.1		25.5	
		1-2	190	-	< 21.2		< 0.00112		< 0.00561		< 0.00281		0.00224	B J	0.00224		0.0307	B J	8.86		25.1		34.0	
BH-13	10/13/2020	0-1	260	-	24.9		< 0.00107		0.00166	J	0.000877	J	0.00321	B J	0.00575		0.0541	B J	10.9		38.3		49.3	
		1-2	305	-	55.6		< 0.00113		< 0.00565		< 0.00283		0.00101	B J	0.00101		0.102	J	6.46		21.3		27.9	
BH-14	10/13/2020	0-1	420	-	219		< 0.00110		< 0.00552		< 0.00276		0.00127	B J	0.00127		0.0447	J	9.10		21.7		30.8	
		1-2	450	-	452		< 0.00113		< 0.00566		< 0.00283		0.00736	B J	0.00736		0.0482	J	11.1		24.2		35.3	

NOTES:

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

Bold and italicized values indicate exceedance of proposed RRALs

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

QUALIFIERS:

B The same analyte was found in the associated blank.
J The identification of the analyte is acceptable; the reported value is an estimate.

APPENDIX A
C-141 Forms

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **ConocoPhillips**	Contact: **Jay Garcia**
Address: **29 Vacuum Complex Lane**	Telephone No. **575-704-2455**
Facility Name: **Vac Abo # 04**	Facility Type: **Trunk Line**

Surface Owner: NMOCD	Mineral Owner:	API No. 30-025-26931

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	05	18S	35E	2286	North	2080	West	**LEA**

Latitude 32.7779083,- **Longitude** 103.4816513

NATURE OF RELEASE

Type of Release: **Spill**	Volume of Release: 1 BO & 22.23 BPW	Volume Recovered. 5 BPW
Source of Release: **Trunk line leak.**	Date and Hour of Occurrence 07/06/2015 5:45 am	Date and Hour of Discovery 07/06/2015 5:45 am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Tomas Oberding- NMOCD**	
By Whom? **Jay Garcia**	Date and Hour: **07/06/2015 2:30 pm**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

RECEIVED
By OCD; Dr. Oberding at 3:47 pm, Jul 06, 2015

If a Watercourse was Impacted, Describe Fully.*

ENV – Agency Reportable – 1 BO & 22.23 BPW – Vac Abo 04 – RR II – MCBU – Buckeye – On Monday July 06, 2015 at 0540 MDT, a release occurred at Vac Abo Battery 4. MSO responded to a trunk line leak resulting in a release of 1 BO and 22.23 BPW with 5 BPW recovered. Immediate action was to shut down wells and facility and close valve to trunk line. A work order has been submitted for repairs. The affected area will be remediated according to NMOCD and COPC and guidelines.

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

Signature: *Jay Garcia*	OIL CONSERVATION DIVISION	
Printed Name: Jay Garcia	Approved by Environmental Specialist:	
Title: LEAD HSE	Approval Date: 07/06/2015	Expiration Date: 10/06/2015
E-mail Address: ***jay.c.garcia@conocophillips.com***	Conditions of Approval: Site samples required. Delineate and remeadiate as per OCD guides. Please provide geotagged photos of remediation.	Attached ☐
Date: 07/06/2015 Phone:575-704-2455		1RP-3714 217817 nTO1518757703 pTO1518936962

* Attach Additional Sheets If Necessary

State of New Mexico
Oil Conservation Division

Incident ID	nTO1518757703
District RP	1RP-3714
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	68 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☑ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nTO1518757703
District RP	1RP-3714
Facility ID	
Application ID	

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

Printed Name: Marvin Soriwei Title: Program Manager, Risk Management & Remediation

Signature: Date: 2/12/2021

email: marvin.soriwei@conocophillips.com Telephone: 8324862730

OCD Only

Received by: Date:

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	nTO1518757703
District RP	1RP-3714
Facility ID	
Application ID	

Remediation Plan

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

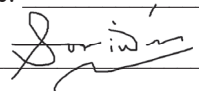
- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note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

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

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

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

Printed Name: Marvin Soriwei Title: Program Manager, Risk Management & Remediation

Signature:  Date: 2/12/2021

email: marvin.soriwei@conocophillips.com Telephone: 8324862730

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☑ Deferral Approved

Signature:  Date: 1/4/2023

APPENDIX B
Site Characterization Data

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

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 04250	L	LE				05	18S	35E	642378	3627565*	215	112	60	52
L 04664	L	LE		2	3	05	18S	35E	642171	3627371*	316	140	70	70
L 04931	L	LE		1	2	05	18S	35E	642561	3628183*	614	237	70	167
L 04591	L	LE		4	2	05	18S	35E	642970	3627785*	776	130	75	55

Average Depth to Water: **68 feet**

Minimum Depth: **60 feet**

Maximum Depth: **75 feet**

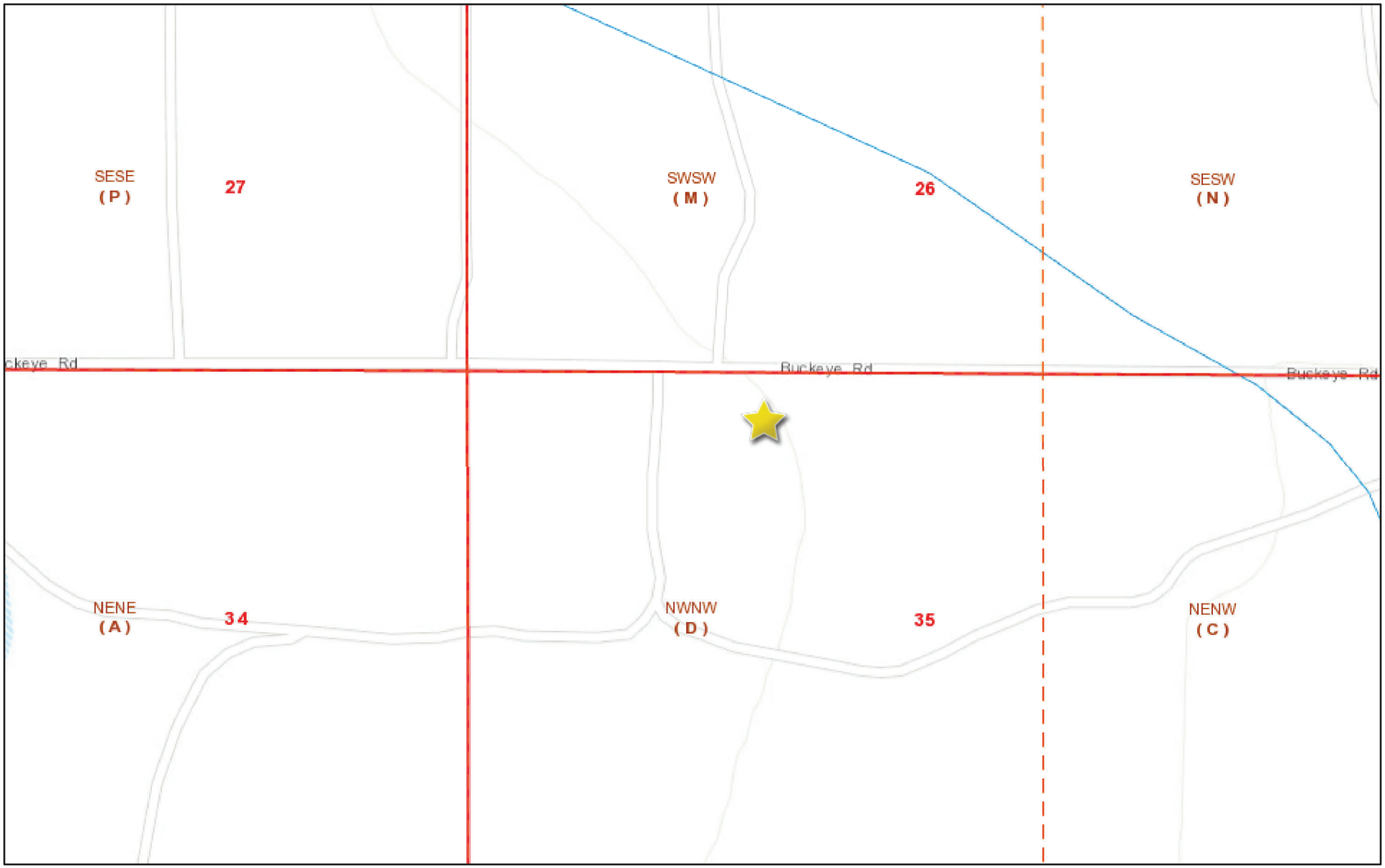
Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 642199.906 **Northing (Y):** 3627685.879 **Radius:** 800

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

Water Bodies



2/21/2020, 3:44:59 PM

1:4,514

0 0.03 0.07 0.13 mi

0 0.05 0.1 0.2 km

Vacuum Abo Battery #4

OCD Districts

OCD District Offices

PLSS First Division

PLSS Second Division

PLSS Townships

OSE Water-bodies

PLJV Probable Playas

OSE Streams

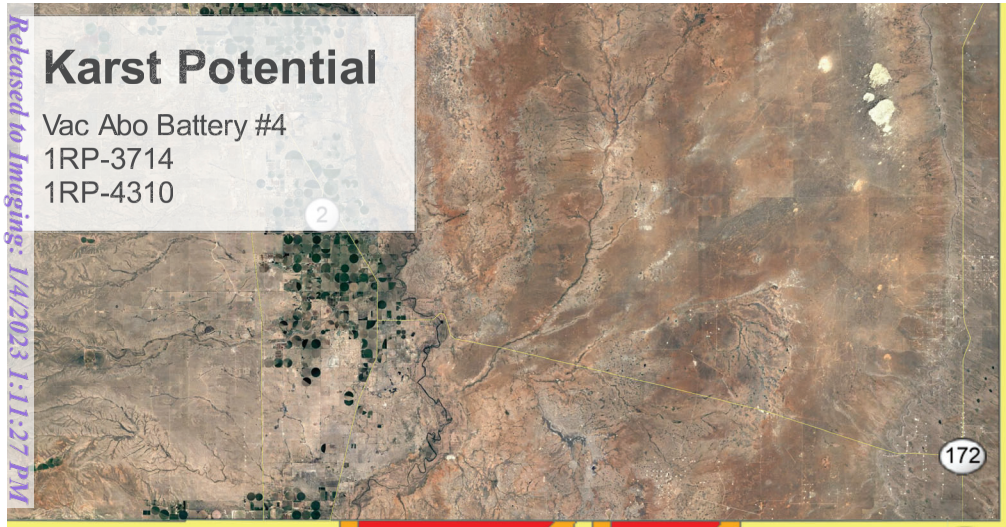
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,

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

Karst Potential

Vac Abo Battery #4
1RP-3714
1RP-4310



Legend

- Vac Abo Battery #4
- High
- Low
- Medium

APPENDIX C
Corrective Action Plan (May 24, 2016)

APPROVED

ConocoPhillips

CONOCOPHILLIPS
P.O. Box 2197
Houston, TX 77252-2197
Phone 281.293.1000

Vac Abo #04

(1RP-3714)

Corrective Action Plan

API No. 30-025-26931

Release Date: July 6th, 2015

Unit Letter D, Section 35, Township 17S, Range 35E

PO Box 2948 | Hobbs, NM 88241 | Phone 575.393.2967

May 24th, 2016

Jamie Keyes
Environmental Specialist – New Mexico Oil Conservation Division
Energy, Minerals and Natural Resources Department
1625 N. French Dr.
Hobbs, NM 88240

RE: **Corrective Action Plan**
ConocoPhillips Vac Abo #04 (1RP-3714)
UL/D sec. 35 T17S R35E
API No. 30-025-26931

Mr. Keyes:

ConocoPhillips (CoP) has retained Basin Environmental Service Technologies to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately 4.1 miles east of Buckeye, New Mexico. The initial C-141 states that the site is located at UL/F Sec. 5 T18S R35E. However, GIS mapping shows the site to be located within UL/D sec. 35 T17S R35E. NM OSE and Basin installed monitor well records indicate that groundwater will likely be encountered at a depth of approximately 57 +/- feet.

On July 6th, 2015, CoP discovered a release from a trunk line. A total of 1 barrel of oil and 22.23 barrels of produced water was released over 18,266 sq ft of lease pad and road with 5 barrels of produced water recovered. CoP covered the Highway with base course to soak up the fluid. NMOCD was notified of the release on July 6th, 2015, and an initial C-141 was submitted and approved by NMOCD on July 6th, 2015 (Appendix A).

On July 6th, 2015, Basin personnel were on site to assess the release. On May 3rd, 2016 three points within the release area were sampled with depth (Figure 1). All samples were field tested for chlorides and organic vapors, and representative samples were taken to a commercial laboratory for analysis (Appendix B).

Photo Documentation of these activities may be found in Appendix C.

Corrective Action Plan

Based on the assessment, CoP scraped the release on the lease pad to 6". The release around point 1 will be excavated down to 2.5 ft bgs, the release around point 2 will be excavated down to 3.5 ft bgs. The release around point 3 was scraped to 6". There are buried lines running throughout the release. To provide for the safety of people and equipment at the site, the excavation will remain 5 ft away from the buried lines.

All excavated soil will be taken to a NMOCD approved facility for disposal. Clean soil will be imported to the site to serve as backfill. A sample of the backfill soil will be taken to a commercial laboratory to confirm that the chloride reading is below regulatory standards. The lease pad will be backfilled with clean, imported soil. The site will be contoured to the surrounding location.

Once these activities have been completed, a report will be sent to NMOCD requesting 'remediation termination' and site closure.

Basin appreciates the opportunity to work with you on this project. Please contact me if you have any questions or wish to discuss the site.

Sincerely,

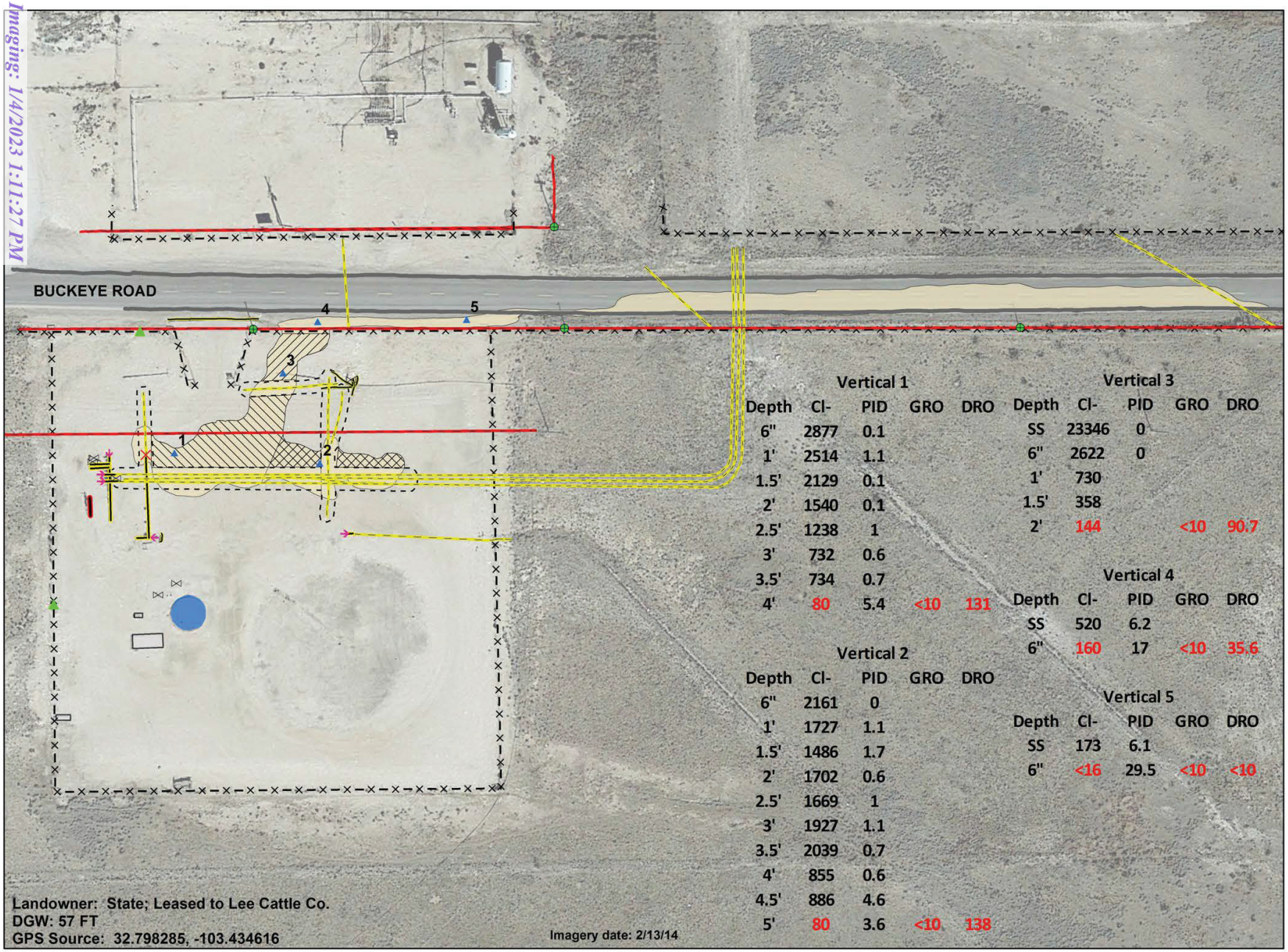
Kyle Norman
Project Lead
Basin Environmental Service Technologies
(575) 942-8542

Attachments:

- Figure 1 – Initial sampling data
- Appendix A – Initial C-141
- Appendix B – Laboratory Analysis
- Appendix C – Photo Documentation

Figures

Basin Environmental Service Technologies, LLC
P.O. Box 2948, Hobbs, NM 88241
Phone 575.393.2967



Basin Environmental Service Technologies
Effective Solutions

CONOCOPHILLIPS VACUUM ABO

1RP-3714

U/L M & N SECTION 26
U/L C & D SECTION 35
T-17-S R-35-E

Vertical 1

Depth	Cl-	PID	GRO	DRO
6"	2877	0.1		
1'	2514	1.1		
1.5'	2129	0.1		
2'	1540	0.1		
2.5'	1238	1		
3'	732	0.6		
3.5'	734	0.7		
4'	80	5.4	<10	131

Vertical 2

Depth	Cl-	PID	GRO	DRO
6"	2161	0		
1'	1727	1.1		
1.5'	1486	1.7		
2'	1702	0.6		
2.5'	1669	1		
3'	1927	1.1		
3.5'	2039	0.7		
4'	855	0.6		
4.5'	886	4.6		
5'	80	3.6	<10	138

Vertical 3

Depth	Cl-	PID	GRO	DRO
SS	23346	0		
6"	2622	0		
1'	730			
1.5'	358			
2'	144		<10	90.7

Vertical 4

Depth	Cl-	PID	GRO	DRO
SS	520	6.2		
6"	160	17	<10	35.6

Vertical 5

Depth	Cl-	PID	GRO	DRO
SS	173	6.1		
6"	<16	29.5	<10	<10

Legend

- SAMPLE POINT
- ELECTRIC POLE
- PIPELINE MARKER
- RISER END
- SOURCE
- VALVE
- BURIED PIPELINE
- ELECTIRC PANEL (ABD)
- FENCE
- OVERHEAD ELECTRIC LINE
- PAD/ROAD EDGE
- RISER
- SURFACE PIPELINE
- 5 FT PIPELINE BUFFER ZONE
- 6 IN SCRAPE
- PROPOSED 2.5 FT EXCAVATION
- PROPOSED 3.5 FT EXCAVATION
- CONCRETE BASE
- STAIN (18266 SQ FT)
- TANK BASE

0 50 100 Feet

N W E S

Landowner: State; Leased to Lee Cattle Co.
DGW: 57 FT
GPS Source: 32.798285, -103.434616

Imagery date: 2/13/14

GPS date: 7/06/15 BC, 5/9/16 JK
5/17/16 KN
Drawing date: 5/24/16
Drafted by: Brian Cooper, T. Grieco

Appendix A

Intial C-141

Basin Environmental Service Technologies, LLC
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **ConocoPhillips**	Contact: **Jay Garcia**
Address: **29 Vacuum Complex Lane**	Telephone No. **575-704-2455**
Facility Name: **Vac Abo # 04**	Facility Type: **Trunk Line**

Surface Owner: NMOCD	Mineral Owner:	API No. 30-025-26931

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	05	18S	35E	2286	North	2080	West	**LEA**

Latitude 32.7779083,- **Longitude** 103.4816513

NATURE OF RELEASE

Type of Release: **Spill**	Volume of Release: 1 BO & 22.23 BPW	Volume Recovered. 5 BPW
Source of Release: **Trunk line leak.**	Date and Hour of Occurrence 07/06/2015 5:45 am	Date and Hour of Discovery 07/06/2015 5:45 am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Tomas Oberding- NMOCD**	
By Whom? **Jay Garcia**	Date and Hour: **07/06/2015 2:30 pm**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		

RECEIVED
By OCD; Dr. Oberding at 3:47 pm, Jul 06, 2015

ENV – Agency Reportable – 1 BO & 22.23 BPW – Vac Abo 04 – RR II – MCBU – Buckeye – On Monday July 06, 2015 at 0540 MDT, a release occurred at Vac Abo Battery 4. MSO responded to a trunk line leak resulting in a release of 1 BO and 22.23 BPW with 5 BPW recovered. Immediate action was to shut down wells and facility and close valve to trunk line. A work order has been submitted for repairs. The affected area will be remediated according to NMOCD and COPC and guidelines.

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

Signature: *Jay Garcia*	OIL CONSERVATION DIVISION	
Printed Name: Jay Garcia	Approved by Environmental Specialist:	
Title: LEAD HSE	Approval Date: 07/06/2015	Expiration Date: 10/06/2015
E-mail Address: ***jay.c.garcia@conocophillips.com***	Conditions of Approval: Site samples required. Delineate and remeadiate as per OCD guides. Please provide geotagged photos of remediation.	Attached ☐ 1RP-3714 217817 nTO1518757703 pTO1518936962
Date: 07/06/2015 Phone:575-704-2455		

* Attach Additional Sheets If Necessary

Appendix B

Laboratory Analysis

Basin Environmental Service Technologies, LLC
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967

CARDINAL Laboratories

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

May 18, 2016

KYLE NORMAN

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: VAC ABO #4

Enclosed are the results of analyses for samples received by the laboratory on 05/18/16 8:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Basin Environmental Service
KYLE NORMAN
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	05/18/2016	Sampling Date:	05/17/2016
Reported:	05/18/2016	Sampling Type:	Soil
Project Name:	VAC ABO #4	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 1 @ 4' (H601085-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	05/18/2016	ND	416	104	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	05/18/2016	ND	169	84.4	200	0.716	
DRO >C10-C28	**131**	10.0	05/18/2016	ND	177	88.3	200	0.925	

Surrogate: 1-Chlorooctane	*82.9 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*119 %*	*28-171*

Sample ID: PT. 2 @ 5' (H601085-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	05/18/2016	ND	416	104	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	05/18/2016	ND	169	84.4	200	0.716	
DRO >C10-C28	**138**	10.0	05/18/2016	ND	177	88.3	200	0.925	

Surrogate: 1-Chlorooctane	*42.7 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*54.9 %*	*28-171*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Basin Environmental Service
KYLE NORMAN
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	05/18/2016	Sampling Date:	05/17/2016
Reported:	05/18/2016	Sampling Type:	Soil
Project Name:	VAC ABO #4	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 3 @ 2' (H601085-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	05/18/2016	ND	416	104	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	05/18/2016	ND	169	84.4	200	0.716	
DRO >C10-C28	**90.7**	10.0	05/18/2016	ND	177	88.3	200	0.925	

Surrogate: 1-Chlorooctane	*72.8 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*93.7 %*	*28-171*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Celey D. Keene, Lab Director/Quality Manager

RUSH

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name: Conoco Phillips	BILL TO
Project Manager: Kyle Norman	P.O. #:
Address:	Company: Basin Env
City: State: Zip:	Attn:
Phone #: Fax #:	Address:
Project #: Project Owner:	City:
Project Name:	State: Zip:
Project Location: Vac Abo # 4	Phone #:
Sampler Name: Jacob Kamplain	Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS						
H600185																										
1	Pt. 1 @ 4 ft.	G	1			✓					✓		5/17/16	8:00	✓	✓										
2	Pt. 2 @ 5 ft.	G	1			✓					✓		5/17/16	11:00	✓	✓										
3	Pt. 3 @ 2 ft.	G	1			✓					✓		5/17/16	1:30	✓	✓										

Relinquished By:	Date: 5-18-16	Received By: Jodi Henson	Phone Result: ☐ Yes ☑ No Add'l Phone #:
	Time: 8:45		Fax Result: ☐ Yes ☑ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: email results:knorman@basinenv.com; jkamplain@basinenv.com tgrieco@basinenv.com
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other: -8.4°c

Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials)

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

Corrected -8.3°c #54

CARDINAL Laboratories

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

May 18, 2016

KYLE NORMAN

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: VAC ABO #4

Enclosed are the results of analyses for samples received by the laboratory on 05/18/16 8:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Basin Environmental Service
KYLE NORMAN
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	05/18/2016	Sampling Date:	05/04/2016
Reported:	05/18/2016	Sampling Type:	Soil
Project Name:	VAC ABO #4	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 5 @ 6" (H601086-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/18/2016	ND	416	104	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	05/18/2016	ND	169	84.4	200	0.716	
DRO >C10-C28	<10.0	10.0	05/18/2016	ND	177	88.3	200	0.925	

Surrogate: 1-Chlorooctane	*83.2 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*96.6 %*	*28-171*

Sample ID: PT. 4 @ 6" (H601086-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	05/18/2016	ND	416	104	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	05/18/2016	ND	169	84.4	200	0.716	
DRO >C10-C28	**35.6**	10.0	05/18/2016	ND	177	88.3	200	0.925	

Surrogate: 1-Chlorooctane	*75.5 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*93.5 %*	*28-171*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Celey D. Keene, Lab Director/Quality Manager

RUSH

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name: Conoco Phillips	**BILL TO**
Project Manager: Kyle Norman	**P.O. #:**
Address:	**Company:** Basin Env
City: **State:** **Zip:**	**Attn:**
Phone #: **Fax #:**	**Address:**
Project #: **Project Owner:**	**City:**
Project Name:	**State:** **Zip:**
Project Location: Vac Abo # 4	**Phone #:**
Sampler Name: Jacob Kamplain	**Fax #:**

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	**Sample I.D.**	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	*TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS						
H601086																									
1	Pt. 5 @ 6 in.	G	1			✓					✓		5/4/16	11:30	✓	✓										
2	Pt. 4 @ 6 in.	G	1			✓					✓		5/4/16	11:30	✓	✓										

Relinquished By: Kyle N	**Date:** 5-18-16 **Time:** 8:45	**Received By:** Jodi Henson	Phone Result: ☐ Yes ☑ No Add'l Phone #:
Relinquished By:	**Date:** **Time:**	**Received By:**	Fax Result: ☐ Yes ☑ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: -8.4°C	**Sample Condition** Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	**CHECKED BY: (Initials)** AA	**REMARKS:** email results:knorman@basinenv.com; jkamplain@basinenv.com tgrieco@basinenv.com * Added TPH as per kyle. CK 5/17/16

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

-8.3°C #54

Appendix C

Photo Documentation

Basin Environmental Service Technologies, LLC
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967

CONOCOPHILLIPS VACUUM ABO #4

UL M & N Section 26 and UL C & D Section 35, T-17-S R-35-E

Source, facing east 7/6/15

Spill down roadway facing east 7/6/15

Vacuuming spill off road 7/6/15

Covering spill area on road with caliche facing east 7-6-15

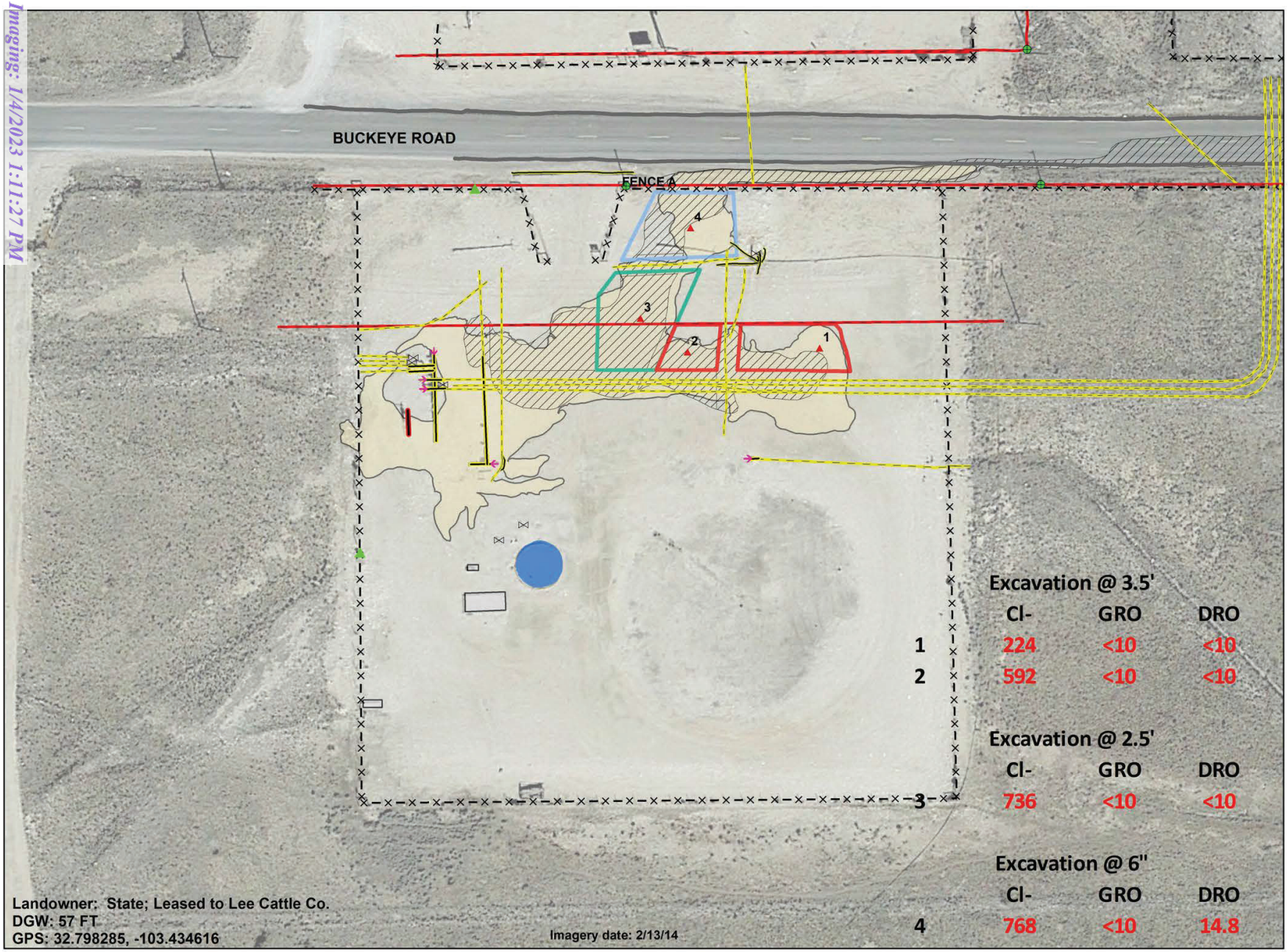
Backfilling vertical facing northwest 5/17/16

Road facing east 5/3/2016

Installing vertical facing northwest 5/17/16

Road facing west 5/3/2016

APPENDIX D
Basin Excavation Map



Basin Environmental Service Technologies
Effective Solutions

CONOCOPHILLIPS
VACUUM ABO

U/L M & N SECTION 26
U/L C & D SECTION 35
T-17-S R-35-E
LEA COUNTY, NM

Legend

- ELECTRIC POLE
- EXCAVATION SAMPLE POINT
- PIPELINE MARKER
- RISER END
- VALVE
- BURIED PIPELINE
- ELECTIRC PANEL (ABD)
- FENCE
- OVERHEAD ELECTRIC LINE
- PAD/ROAD EDGE
- RISER
- SURFACE PIPELINE
- CONCRETE BASE
- EXCAVATION @ 2.5 FT
- EXCAVATION @ 3.5 FT
- EXCAVATION @ 6 IN
- AD #1 STAIN (18,266 SQ FT)
- TANK BASE
- AD #2 STAIN - 18,425 SQ FT

0 25 50 Feet

N W E S

Excavation @ 3.5'

	Cl-	GRO	DRO
1	224	<10	<10
2	592	<10	<10

Excavation @ 2.5'

	Cl-	GRO	DRO
3	736	<10	<10

Excavation @ 6"

	Cl-	GRO	DRO
4	768	<10	14.8

Landowner: State; Leased to Lee Cattle Co.
DGW: 57 FT
GPS: 32.798285, -103.434616

Imagery date: 2/13/14

GPS date: 7/06/15 BC, 6/13/16 TG
Drawing date: 6/30/16
Drafted by: T. Grieco

CONOCOPHILLIPS VACUUM ABO #4

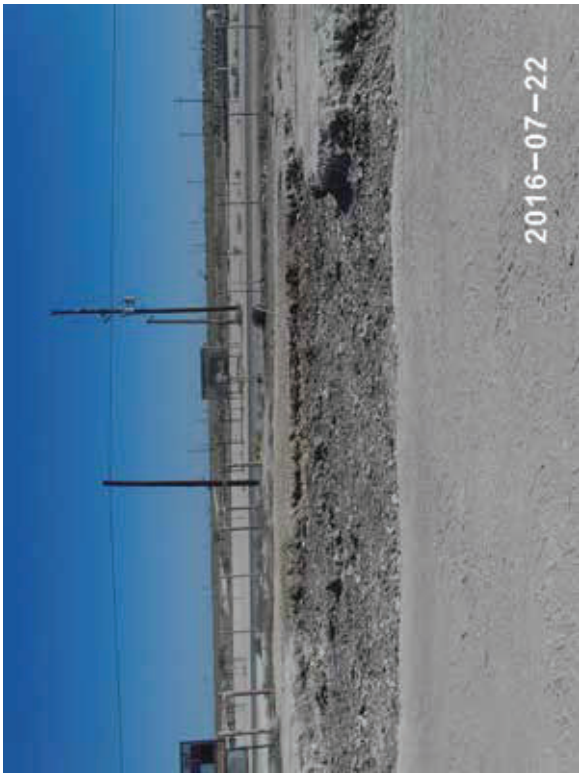
UL M & N Section 26 and UL C & D Section 35, T-17-S R-35-E

Initial Release, Facing W 6/13/2016

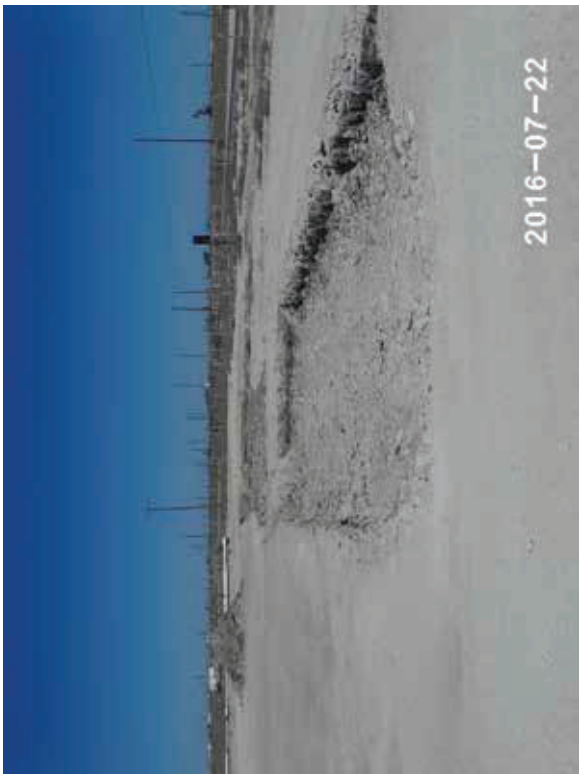
Initial Release, Facing NE 6/13/2016

Initial Release, Facing E 6/13/2016

Initial Release, Facing N 6/13/2016



Excavation, Facing N 7/22/2016



Excavation, Facing W 7/22/2016

APPENDIX E
Laboratory Analytical Data

CARDINAL Laboratories

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

May 18, 2016

KYLE NORMAN

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: VAC ABO #4

Enclosed are the results of analyses for samples received by the laboratory on 05/18/16 8:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Basin Environmental Service
KYLE NORMAN
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	05/18/2016	Sampling Date:	05/04/2016
Reported:	05/18/2016	Sampling Type:	Soil
Project Name:	VAC ABO #4	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 5 @ 6" (H601086-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/18/2016	ND	416	104	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	05/18/2016	ND	169	84.4	200	0.716	
DRO >C10-C28	<10.0	10.0	05/18/2016	ND	177	88.3	200	0.925	

Surrogate: 1-Chlorooctane	*83.2 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*96.6 %*	*28-171*

Sample ID: PT. 4 @ 6" (H601086-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	05/18/2016	ND	416	104	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	05/18/2016	ND	169	84.4	200	0.716	
DRO >C10-C28	**35.6**	10.0	05/18/2016	ND	177	88.3	200	0.925	

Surrogate: 1-Chlorooctane	*75.5 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*93.5 %*	*28-171*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Celey D. Keene, Lab Director/Quality Manager

RUSH

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name:	Conoco Phillips
Project Manager:	Kyle Norman
Address:	
City:	**State:** **Zip:**
Phone #:	**Fax #:**
Project #:	**Project Owner:**
Project Name:	
Project Location:	Vac Abo # 4
Sampler Name:	Jacob Kamplain

BILL TO

P.O. #:	
Company:	Basin Env
Attn:	
Address:	
City:	
State: **Zip:**	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chlorides	*TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS
H601086																				
1	Pt. 5 @ 6 in.	G	1			✓					✓		5/4/16	11:30	✓	✓				
2	Pt. 4 @ 6 in.	G	1			✓					✓		5/4/16	11:30	✓	✓				

Relinquished By: Kyle Norman	**Date:** 5-18-16 **Time:** 8:45	**Received By:** Jodi Henson	
Relinquished By:	**Date:** **Time:**	**Received By:**	

Delivered By: (Circle One) Sampler - UPS - Bus - Other: -8.4°C

Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No

CHECKED BY: (Initials) AA

Phone Result:	☐ Yes	☑ No	**Add'l Phone #:**
Fax Result:	☐ Yes	☑ No	**Add'l Fax #:**

REMARKS:
email results:knorman@basinenv.com;
jkamplain@basinenv.com tgrieco@basinenv.com
* Added TPH as per kyle. CK 5/17/16

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

-8.3°C #54

CARDINAL Laboratories

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

July 25, 2016

KYLE NORMAN

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: VAC ABO #4

Enclosed are the results of analyses for samples received by the laboratory on 07/22/16 11:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Basin Environmental Service
KYLE NORMAN
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	07/22/2016	Sampling Date:	07/22/2016
Reported:	07/25/2016	Sampling Type:	Soil
Project Name:	VAC ABO #4	Sampling Condition:	Cool & Intact
Project Number:	1RP-3714 & 1RP-4310	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 1 EXC @ 3.5' (H601642-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**224**	16.0	07/25/2016	ND	416	104	400	0.00	

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	07/22/2016	ND	174	87.0	200	7.80	
DRO >C10-C28	<10.0	10.0	07/22/2016	ND	177	88.4	200	9.00	

Surrogate: 1-Chlorooctane	*84.1 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*95.9 %*	*28-171*

Sample ID: PT. 2 EXC @ 3.5' (H601642-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**592**	16.0	07/25/2016	ND	416	104	400	0.00	

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	07/22/2016	ND	174	87.0	200	7.80	
DRO >C10-C28	<10.0	10.0	07/22/2016	ND	177	88.4	200	9.00	

Surrogate: 1-Chlorooctane	*86.6 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*96.3 %*	*28-171*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Basin Environmental Service
KYLE NORMAN
P.O. Box 301
Lovington NM, 88260
Fax To: (575) 396-1429

Received:	07/22/2016	Sampling Date:	07/22/2016
Reported:	07/25/2016	Sampling Type:	Soil
Project Name:	VAC ABO #4	Sampling Condition:	Cool & Intact
Project Number:	1RP-3714 & 1RP-4310	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 3 EXC @ 2.5' (H601642-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**736**	16.0	07/25/2016	ND	416	104	400	0.00	

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	07/22/2016	ND	174	87.0	200	7.80	
DRO >C10-C28	<10.0	10.0	07/22/2016	ND	177	88.4	200	9.00	

Surrogate: 1-Chlorooctane	*84.5 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*95.2 %*	*28-171*

Sample ID: PT. 4 EXC @ 6'' (H601642-04)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**768**	16.0	07/25/2016	ND	416	104	400	0.00	

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	07/22/2016	ND	174	87.0	200	7.80	
DRO >C10-C28	**14.8**	10.0	07/22/2016	ND	177	88.4	200	9.00	

Surrogate: 1-Chlorooctane	*90.7 %*	*35-147*
Surrogate: 1-Chlorooctadecane	*103 %*	*28-171*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Celey D. Keene, Lab Director/Quality Manager

RUSH

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name: Conoco Phillips	**BILL TO**
Project Manager: Kyle Norman	P.O. #:
Address:	Company: Basin Environmental
City: State: Zip:	Attn:
Phone #: Fax #:	Address: 419 W. Cain
Project #: Project Owner:	City: Hobbs
Project Name:	State: NM Zip: 88240
Project Location: Vac ABO #4 (IRP-3714) & (IRP-4310)	Phone #:
Sampler Name:	Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST										
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS					
H601642																									
1	P+1 Exc @ 3.5 ft	G	1			✓					✓		7-22-16	9:15	✓	✓									
2	P+2 Exc @ 3.5 ft	G	1			✓					✓		" "	9:30	✓	✓									
3	P+3 Exc @ 2.5 ft	G	1			✓					✓		" "	10:00	✓	✓									
4	P+4 Exc @ 6 inches	G	1			✓					✓		" "	10:30	✓	✓									

Relinquished By: Kyle M	Date: 7-22-16	Received By: Jodi Henson	Phone Result: ☐ Yes ☑ No Add'l Phone #:
	Time: 11:35		Fax Result: ☐ Yes ☑ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: email results:knorman@basinenv.com; jkamplain@basinenv.com; tgrieco@basinenv.com
	Time:		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	1.4°C	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)

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

#75

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

October 27, 2020

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1274488
Samples Received:	10/16/2020
Project Number:	212C-MD-02110
Description:	Vacuum ABO Battery #4 Releases

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-5 (0-1) L1274488-01 Solid

Collected by: Adrian Garcia | Collected date/time: 10/13/20 08:30 | Received date/time: 10/16/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1562859	1	10/22/20 04:12	10/22/20 04:25	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562895	1	10/21/20 21:05	10/21/20 23:49	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564026	1	10/21/20 15:43	10/23/20 00:16	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564415	1	10/21/20 15:43	10/24/20 05:20	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563260	1	10/22/20 10:19	10/23/20 19:34	JDG	Mt. Juliet, TN

BH-6 (0-1) L1274488-02 Solid

Collected by: Adrian Garcia | Collected date/time: 10/13/20 09:00 | Received date/time: 10/16/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1562859	1	10/22/20 04:12	10/22/20 04:25	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562895	1	10/21/20 21:05	10/22/20 00:08	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564026	1	10/21/20 15:43	10/23/20 00:37	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564334	1	10/21/20 15:43	10/23/20 22:19	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563260	1	10/22/20 10:19	10/23/20 04:36	JDG	Mt. Juliet, TN

BH-11 (0-1) L1274488-03 Solid

Collected by: Adrian Garcia | Collected date/time: 10/13/20 09:30 | Received date/time: 10/16/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1562859	1	10/22/20 04:12	10/22/20 04:25	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562895	1	10/21/20 21:05	10/22/20 00:17	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564026	1	10/21/20 15:43	10/23/20 00:58	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564334	1	10/21/20 15:43	10/23/20 22:38	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563260	2	10/22/20 10:19	10/23/20 19:07	JDG	Mt. Juliet, TN

BH-11 (1-2) L1274488-04 Solid

Collected by: Adrian Garcia | Collected date/time: 10/13/20 10:00 | Received date/time: 10/16/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1562859	1	10/22/20 04:12	10/22/20 04:25	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562895	1	10/21/20 21:05	10/22/20 00:27	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564026	1.01	10/21/20 15:43	10/23/20 01:40	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564334	1	10/21/20 15:43	10/23/20 22:57	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563260	1	10/22/20 10:19	10/23/20 20:14	JDG	Mt. Juliet, TN

BH-12 (0-1) L1274488-05 Solid

Collected by: Adrian Garcia | Collected date/time: 10/13/20 10:30 | Received date/time: 10/16/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1562859	1	10/22/20 04:12	10/22/20 04:25	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562895	1	10/21/20 21:05	10/22/20 00:36	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564026	1	10/21/20 15:43	10/23/20 02:00	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564657	1	10/21/20 15:43	10/24/20 04:42	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563260	1	10/22/20 10:19	10/23/20 05:16	JDG	Mt. Juliet, TN

BH-12 (1-2) L1274488-06 Solid

Collected by: Adrian Garcia | Collected date/time: 10/13/20 11:00 | Received date/time: 10/16/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1562859	1	10/22/20 04:12	10/22/20 04:25	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562895	1	10/21/20 21:05	10/22/20 00:46	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564026	1	10/21/20 15:43	10/23/20 02:21	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564657	1	10/21/20 15:43	10/24/20 05:02	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563260	1	10/22/20 10:19	10/23/20 05:29	JDG	Mt. Juliet, TN

BH-13 (0-1) L1274488-07 Solid

Collected by: Adrian Garcia | Collected date/time: 10/13/20 11:30 | Received date/time: 10/16/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1562859	1	10/22/20 04:12	10/22/20 04:25	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562895	1	10/21/20 21:05	10/22/20 00:55	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564026	1	10/21/20 15:43	10/23/20 02:41	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564657	1	10/21/20 15:43	10/24/20 05:23	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563260	1	10/22/20 10:19	10/23/20 20:00	JDG	Mt. Juliet, TN

BH-13 (1-2) L1274488-08 Solid

Collected by: Adrian Garcia | Collected date/time: 10/13/20 12:00 | Received date/time: 10/16/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1562859	1	10/22/20 04:12	10/22/20 04:25	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562895	1	10/21/20 21:05	10/22/20 01:24	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1563760	1	10/21/20 15:43	10/23/20 00:38	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564657	1	10/21/20 15:43	10/24/20 05:43	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563260	1	10/22/20 10:19	10/23/20 19:47	JDG	Mt. Juliet, TN

BH-14 (0-1) L1274488-09 Solid

Collected by: Adrian Garcia | Collected date/time: 10/13/20 12:30 | Received date/time: 10/16/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1562859	1	10/22/20 04:12	10/22/20 04:25	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562895	1	10/21/20 21:05	10/22/20 01:33	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1563760	1	10/21/20 15:43	10/23/20 01:00	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564657	1	10/21/20 15:43	10/24/20 06:04	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563260	1	10/22/20 10:19	10/23/20 19:20	JDG	Mt. Juliet, TN

BH-14 (1-2) L1274488-10 Solid

Collected by: Adrian Garcia | Collected date/time: 10/13/20 13:00 | Received date/time: 10/16/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1562862	1	10/22/20 04:01	10/22/20 04:11	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562895	1	10/21/20 21:05	10/22/20 01:43	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1563760	1	10/21/20 15:43	10/23/20 01:23	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564657	1	10/21/20 15:43	10/24/20 06:24	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563260	1	10/22/20 10:19	10/23/20 05:03	JDG	Mt. Juliet, TN

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

Chris McCord
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.7		1	10/22/2020 04:25	WG1562859

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		9.32	20.3	1	10/21/2020 23:49	WG1562895

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	0.0423	B J	0.0220	0.101	1	10/23/2020 00:16	WG1564026
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*77.0-120*		*10/23/2020 00:16*	WG1564026

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	0.000539	J	0.000479	0.00103	1	10/24/2020 05:20	WG1564415
Toluene	0.00144	J	0.00133	0.00513	1	10/24/2020 05:20	WG1564415
Ethylbenzene	U		0.000756	0.00256	1	10/24/2020 05:20	WG1564415
Total Xylenes	U		0.000903	0.00667	1	10/24/2020 05:20	WG1564415
(S) Toluene-d8	*106*			*75.0-131*		*10/24/2020 05:20*	WG1564415
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*		*10/24/2020 05:20*	WG1564415
(S) 1,2-Dichloroethane-d4	*81.4*			*70.0-130*		*10/24/2020 05:20*	WG1564415

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	8.01		1.63	4.05	1	10/23/2020 19:34	WG1563260
C28-C40 Oil Range	22.5		0.278	4.05	1	10/23/2020 19:34	WG1563260
(S) o-Terphenyl	*92.6*			*18.0-148*		*10/23/2020 19:34*	WG1563260

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.4		1	10/22/2020 04:25	WG1562859

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	35.8		9.35	20.3	1	10/22/2020 00:08	WG1562895

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	0.0348	B J	0.0220	0.102	1	10/23/2020 00:37	WG1564026
(S) a,a,a-Trifluorotoluene(FID)	*99.1*			*77.0-120*		*10/23/2020 00:37*	WG1564026

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	0.00110		0.000482	0.00103	1	10/23/2020 22:19	WG1564334
Toluene	0.00274	J	0.00134	0.00516	1	10/23/2020 22:19	WG1564334
Ethylbenzene	U		0.000761	0.00258	1	10/23/2020 22:19	WG1564334
Total Xylenes	0.00134	J	0.000908	0.00671	1	10/23/2020 22:19	WG1564334
(S) Toluene-d8	*108*			*75.0-131*		*10/23/2020 22:19*	WG1564334
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*10/23/2020 22:19*	WG1564334
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*10/23/2020 22:19*	WG1564334

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.54		1.64	4.06	1	10/23/2020 04:36	WG1563260
C28-C40 Oil Range	17.6		0.278	4.06	1	10/23/2020 04:36	WG1563260
(S) o-Terphenyl	*86.1*			*18.0-148*		*10/23/2020 04:36*	WG1563260

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.9		1	10/22/2020 04:25	WG1562859

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	44.9		9.30	20.2	1	10/22/2020 00:17	WG1562895

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0302	B J	0.0219	0.101	1	10/23/2020 00:58	WG1564026
(S) a,a,a-Trifluorotoluene(FID)	*98.6*			*77.0-120*		*10/23/2020 00:58*	WG1564026

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	0.000971	J	0.000477	0.00102	1	10/23/2020 22:38	WG1564334
Toluene	U		0.00133	0.00511	1	10/23/2020 22:38	WG1564334
Ethylbenzene	U		0.000753	0.00255	1	10/23/2020 22:38	WG1564334
Total Xylenes	U		0.000899	0.00664	1	10/23/2020 22:38	WG1564334
(S) Toluene-d8	*107*			*75.0-131*		*10/23/2020 22:38*	WG1564334
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*10/23/2020 22:38*	WG1564334
(S) 1,2-Dichloroethane-d4	*120*			*70.0-130*		*10/23/2020 22:38*	WG1564334

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	9.69		3.26	8.09	2	10/23/2020 19:07	WG1563260
C28-C40 Oil Range	29.5		0.554	8.09	2	10/23/2020 19:07	WG1563260
(S) o-Terphenyl	*92.2*			*18.0-148*		*10/23/2020 19:07*	WG1563260

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.4		1	10/22/2020 04:25	WG1562859

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	163		9.35	20.3	1	10/22/2020 00:27	WG1562895

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	0.0289	B J	0.0223	0.103	1.01	10/23/2020 01:40	WG1564026
(S) a,a,a-Trifluorotoluene(FID)	*98.3*			*77.0-120*		*10/23/2020 01:40*	WG1564026

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	0.00106		0.000483	0.00103	1	10/23/2020 22:57	WG1564334
Toluene	0.00134	J	0.00134	0.00517	1	10/23/2020 22:57	WG1564334
Ethylbenzene	U		0.000762	0.00258	1	10/23/2020 22:57	WG1564334
Total Xylenes	U		0.000909	0.00672	1	10/23/2020 22:57	WG1564334
(S) Toluene-d8	*106*			*75.0-131*		*10/23/2020 22:57*	WG1564334
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*10/23/2020 22:57*	WG1564334
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*		*10/23/2020 22:57*	WG1564334

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	10.8		1.64	4.07	1	10/23/2020 20:14	WG1563260
C28-C40 Oil Range	37.8		0.279	4.07	1	10/23/2020 20:14	WG1563260
(S) o-Terphenyl	*99.1*			*18.0-148*		*10/23/2020 20:14*	WG1563260

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.8		1	10/22/2020 04:25	WG1562859

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	12.4	J	9.60	20.9	1	10/22/2020 00:36	WG1562895

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	0.0448	B J	0.0226	0.104	1	10/23/2020 02:00	WG1564026
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*77.0-120*		*10/23/2020 02:00*	WG1564026

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	10/24/2020 04:42	WG1564657
Toluene	U		0.00141	0.00544	1	10/24/2020 04:42	WG1564657
Ethylbenzene	U		0.000801	0.00272	1	10/24/2020 04:42	WG1564657
Total Xylenes	0.00292	B J	0.000957	0.00707	1	10/24/2020 04:42	WG1564657
(S) Toluene-d8	*100*			*75.0-131*		*10/24/2020 04:42*	WG1564657
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*10/24/2020 04:42*	WG1564657
(S) 1,2-Dichloroethane-d4	*87.3*			*70.0-130*		*10/24/2020 04:42*	WG1564657

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	5.31		1.68	4.17	1	10/23/2020 05:16	WG1563260
C28-C40 Oil Range	20.1		0.286	4.17	1	10/23/2020 05:16	WG1563260
(S) o-Terphenyl	*94.0*			*18.0-148*		*10/23/2020 05:16*	WG1563260

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.2		1	10/22/2020 04:25	WG1562859

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		9.76	21.2	1	10/22/2020 00:46	WG1562895

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	0.0307	B J	0.0230	0.106	1	10/23/2020 02:21	WG1564026
(S) a,a,a-Trifluorotoluene(FID)	*99.1*			*77.0-120*		*10/23/2020 02:21*	WG1564026

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		0.000524	0.00112	1	10/24/2020 05:02	WG1564657
Toluene	U		0.00146	0.00561	1	10/24/2020 05:02	WG1564657
Ethylbenzene	U		0.000827	0.00281	1	10/24/2020 05:02	WG1564657
Total Xylenes	0.00224	B J	0.000988	0.00729	1	10/24/2020 05:02	WG1564657
(S) Toluene-d8	*102*			*75.0-131*		*10/24/2020 05:02*	WG1564657
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*10/24/2020 05:02*	WG1564657
(S) 1,2-Dichloroethane-d4	*84.1*			*70.0-130*		*10/24/2020 05:02*	WG1564657

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	8.86		1.71	4.24	1	10/23/2020 05:29	WG1563260
C28-C40 Oil Range	25.1		0.291	4.24	1	10/23/2020 05:29	WG1563260
(S) o-Terphenyl	*90.9*			*18.0-148*		*10/23/2020 05:29*	WG1563260

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.5		1	10/22/2020 04:25	WG1562859

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	24.9		9.53	20.7	1	10/22/2020 00:55	WG1562895

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	0.0541	B J	0.0225	0.104	1	10/23/2020 02:41	WG1564026
(S) a,a,a-Trifluorotoluene(FID)	*92.6*			*77.0-120*		*10/23/2020 02:41*	WG1564026

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	10/24/2020 05:23	WG1564657
Toluene	0.00166	J	0.00139	0.00536	1	10/24/2020 05:23	WG1564657
Ethylbenzene	0.000877	J	0.000790	0.00268	1	10/24/2020 05:23	WG1564657
Total Xylenes	0.00321	B J	0.000943	0.00697	1	10/24/2020 05:23	WG1564657
(S) Toluene-d8	*102*			*75.0-131*		*10/24/2020 05:23*	WG1564657
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*10/24/2020 05:23*	WG1564657
(S) 1,2-Dichloroethane-d4	*84.6*			*70.0-130*		*10/24/2020 05:23*	WG1564657

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	10.9		1.67	4.14	1	10/23/2020 20:00	WG1563260
C28-C40 Oil Range	38.3		0.284	4.14	1	10/23/2020 20:00	WG1563260
(S) o-Terphenyl	*97.4*			*18.0-148*		*10/23/2020 20:00*	WG1563260

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.9		1	10/22/2020 04:25	WG1562859

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	55.6		9.80	21.3	1	10/22/2020 01:24	WG1562895

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	0.102	J	0.0231	0.107	1	10/23/2020 00:38	WG1563760
(S) a,a,a-Trifluorotoluene(FID)	*99.6*			*77.0-120*		*10/23/2020 00:38*	WG1563760

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		0.000528	0.00113	1	10/24/2020 05:43	WG1564657
Toluene	U		0.00147	0.00565	1	10/24/2020 05:43	WG1564657
Ethylbenzene	U		0.000833	0.00283	1	10/24/2020 05:43	WG1564657
Total Xylenes	0.00101	B J	0.000994	0.00735	1	10/24/2020 05:43	WG1564657
(S) Toluene-d8	*100*			*75.0-131*		*10/24/2020 05:43*	WG1564657
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*10/24/2020 05:43*	WG1564657
(S) 1,2-Dichloroethane-d4	*84.7*			*70.0-130*		*10/24/2020 05:43*	WG1564657

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	6.46		1.71	4.26	1	10/23/2020 19:47	WG1563260
C28-C40 Oil Range	21.3		0.292	4.26	1	10/23/2020 19:47	WG1563260
(S) o-Terphenyl	*96.3*			*18.0-148*		*10/23/2020 19:47*	WG1563260

BH-14 (0-1)
Collected date/time: 10/13/20 12:30

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.1		1	10/22/2020 04:25	WG1562859

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	219		9.68	21.0	1	10/22/2020 01:33	WG1562895

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	0.0447	J	0.0228	0.105	1	10/23/2020 01:00	WG1563760
(S) a,a,a-Trifluorotoluene(FID)	*99.9*			*77.0-120*		*10/23/2020 01:00*	WG1563760

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	10/24/2020 06:04	WG1564657
Toluene	U		0.00143	0.00552	1	10/24/2020 06:04	WG1564657
Ethylbenzene	U		0.000813	0.00276	1	10/24/2020 06:04	WG1564657
Total Xylenes	0.00127	B J	0.000971	0.00717	1	10/24/2020 06:04	WG1564657
(S) Toluene-d8	*101*			*75.0-131*		*10/24/2020 06:04*	WG1564657
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*10/24/2020 06:04*	WG1564657
(S) 1,2-Dichloroethane-d4	*86.1*			*70.0-130*		*10/24/2020 06:04*	WG1564657

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	9.10		1.69	4.21	1	10/23/2020 19:20	WG1563260
C28-C40 Oil Range	21.7		0.288	4.21	1	10/23/2020 19:20	WG1563260
(S) o-Terphenyl	*91.5*			*18.0-148*		*10/23/2020 19:20*	WG1563260

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.8		1	10/22/2020 04:11	WG1562862

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	452		9.81	21.3	1	10/22/2020 01:43	WG1562895

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	0.0482	J	0.0231	0.107	1	10/23/2020 01:23	WG1563760
(S) a,a,a-Trifluorotoluene(FID)	*99.8*			*77.0-120*		*10/23/2020 01:23*	WG1563760

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		0.000529	0.00113	1	10/24/2020 06:24	WG1564657
Toluene	U		0.00147	0.00566	1	10/24/2020 06:24	WG1564657
Ethylbenzene	U		0.000835	0.00283	1	10/24/2020 06:24	WG1564657
Total Xylenes	0.00114	B J	0.000997	0.00736	1	10/24/2020 06:24	WG1564657
(S) Toluene-d8	*100*			*75.0-131*		*10/24/2020 06:24*	WG1564657
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*10/24/2020 06:24*	WG1564657
(S) 1,2-Dichloroethane-d4	*85.5*			*70.0-130*		*10/24/2020 06:24*	WG1564657

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	11.1		1.72	4.27	1	10/23/2020 05:03	WG1563260
C28-C40 Oil Range	24.2		0.292	4.27	1	10/23/2020 05:03	WG1563260
(S) o-Terphenyl	*84.9*			*18.0-148*		*10/23/2020 05:03*	WG1563260

Method Blank (MB)

(MB) R3584398-1 10/22/20 04:25

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

L1274488-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1274488-05 10/22/20 04:25 • (DUP) R3584398-3 10/22/20 04:25

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	95.8	95.9	1	0.101		10

Laboratory Control Sample (LCS)

(LCS) R3584398-2 10/22/20 04:25

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

Method Blank (MB)

(MB) R3584393-1 10/22/20 04:11

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

L1274494-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1274494-02 10/22/20 04:11 • (DUP) R3584393-3 10/22/20 04:11

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	87.7	87.3	1	0.465		10

Laboratory Control Sample (LCS)

(LCS) R3584393-2 10/22/20 04:11

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) R3584435-1 10/21/20 23:07

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

L1274488-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1274488-01 10/21/20 23:49 • (DUP) R3584435-3 10/21/20 23:58

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

L1274959-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1274959-09 10/22/20 03:47 • (DUP) R3584435-6 10/22/20 03:56

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) R3584435-2 10/21/20 23:16

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

L1274488-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274488-10 10/22/20 01:43 • (MS) R3584435-4 10/22/20 01:52 • (MSD) R3584435-5 10/22/20 02:02

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	533	452	1010	996	104	102	1	80.0-120			1.22	20

Method Blank (MB)

(MB) R3585026-3 10/22/20 20:08

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)	*101*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3585026-2 10/22/20 19:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.18	112	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*77.0-120*	

Method Blank (MB)

(MB) R3584835-2 10/22/20 19:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0347	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3584835-1 10/22/20 18:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.74	104	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*114*	*77.0-120*	

L1274550-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274550-03 10/23/20 03:02 • (MS) R3584835-3 10/23/20 06:08 • (MSD) R3584835-4 10/23/20 06:29

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	106	2.00	83.7	87.7	77.1	80.8	25	10.0-151			4.67	28
(S) a,a,a-Trifluorotoluene(FID)					*113*	*112*		*77.0-120*				

Method Blank (MB)

(MB) R3585116-3 10/23/20 16:24

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	*111*			*75.0-131*
(S) 4-Bromofluorobenzene	*105*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

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

(LCS) R3585116-1 10/23/20 15:27 • (LCSD) R3585116-2 10/23/20 15:46

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	0.107	0.109	85.6	87.2	70.0-123			1.85	20
Ethylbenzene	0.125	0.132	0.133	106	106	74.0-126			0.755	20
Toluene	0.125	0.135	0.134	108	107	75.0-121			0.743	20
Xylenes, Total	0.375	0.423	0.414	113	110	72.0-127			2.15	20
(S) Toluene-d8				*108*	*109*	*75.0-131*				
(S) 4-Bromofluorobenzene				*106*	*104*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*105*	*102*	*70.0-130*				

L1274488-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274488-04 10/23/20 22:57 • (MS) R3585116-4 10/24/20 00:12 • (MSD) R3585116-5 10/24/20 00:31

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.129	0.00106	0.117	0.103	89.6	79.2	1	10.0-149			12.2	37
Ethylbenzene	0.129	U	0.156	0.141	121	109	1	10.0-160			10.5	38
Toluene	0.129	0.00134	0.161	0.142	125	110	1	10.0-156			13.0	38
Xylenes, Total	0.388	U	0.489	0.431	126	111	1	10.0-160			12.6	38
(S) Toluene-d8					*110*	*107*		*75.0-131*				
(S) 4-Bromofluorobenzene					*107*	*107*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*95.4*	*96.9*		*70.0-130*				

Method Blank (MB)

(MB) R3585299-3 10/24/20 04:59

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	*108*			*75.0-131*
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*82.2*			*70.0-130*

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

(LCS) R3585299-1 10/24/20 03:37 • (LCSD) R3585299-2 10/24/20 03:58

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	0.131	0.130	105	104	70.0-123			0.766	20
Ethylbenzene	0.125	0.116	0.108	92.8	86.4	74.0-126			7.14	20
Toluene	0.125	0.129	0.117	103	93.6	75.0-121			9.76	20
Xylenes, Total	0.375	0.347	0.329	92.5	87.7	72.0-127			5.33	20
(S) Toluene-d8				*106*	*100*	*75.0-131*				
(S) 4-Bromofluorobenzene				*92.8*	*96.7*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*87.1*	*85.8*	*70.0-130*				

L1274699-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274699-17 10/24/20 10:27 • (MS) R3585299-4 10/24/20 12:09 • (MSD) R3585299-5 10/24/20 12:29

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	1.00	0.223	1.62	1.52	140	130	8	10.0-149			6.37	37
Ethylbenzene	1.00	0.113	1.17	1.04	106	92.7	8	10.0-160			11.8	38
Toluene	1.00	0.292	1.83	1.67	154	138	8	10.0-156			9.14	38
Xylenes, Total	3.00	0.508	4.06	3.71	118	107	8	10.0-160			9.01	38
(S) Toluene-d8					*107*	*103*		*75.0-131*				
(S) 4-Bromofluorobenzene					*95.4*	*94.5*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*83.9*	*86.8*		*70.0-130*				

Method Blank (MB)

(MB) R3585682-2 10/24/20 04:22

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	0.00198	J	0.000880	0.00650
(S) Toluene-d8	*99.9*			*75.0-131*
(S) 4-Bromofluorobenzene	*105*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*84.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3585682-1 10/24/20 03:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.121	96.8	70.0-123	
Ethylbenzene	0.125	0.119	95.2	74.0-126	
Toluene	0.125	0.112	89.6	75.0-121	
Xylenes, Total	0.375	0.369	98.4	72.0-127	
(S) Toluene-d8			*100*	*75.0-131*	
(S) 4-Bromofluorobenzene			*104*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*89.3*	*70.0-130*	

Method Blank (MB)

(MB) R3584675-1 10/22/20 22:20

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	*86.5*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3584675-2 10/22/20 22:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	48.3	96.6	50.0-150	
(S) o-Terphenyl			*113*	*18.0-148*	

L1274449-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274449-02 10/22/20 23:26 • (MS) R3584675-3 10/22/20 23:40 • (MSD) R3584675-4 10/22/20 23:53

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	49.7	U	46.4	47.3	93.4	95.2	1	50.0-150			1.92	20
(S) o-Terphenyl					*105*	*108*		*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.

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

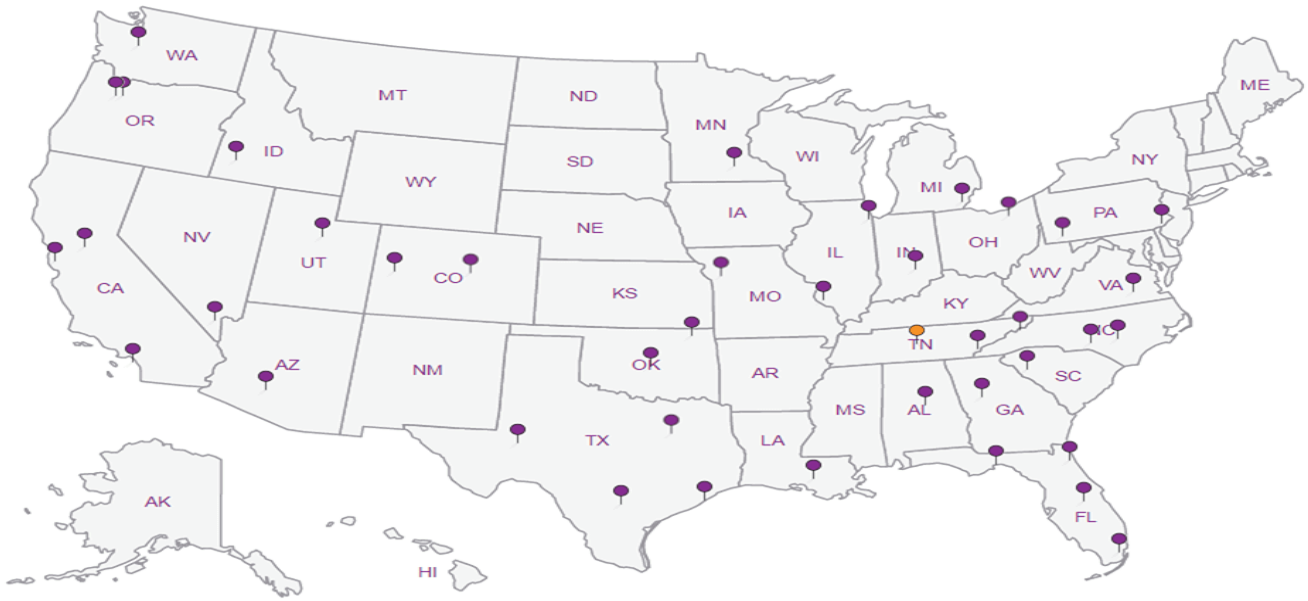
Third Party Federal Accreditations

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

U274488 Page : 1 of 1

Tetra Tech, Inc.

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

D233

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	Vacuum ABO Battery # 4 Releases	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02110
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Adrian Garcia

Comments: COPTETRA Acctnum

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 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
	BH-5 (0-1)	10/13/2020	830		X			X		1	N	X		X												X						-01
	BH-6 (0-1)	10/13/2020	900		X			X		1	N	X		X												X						-02
	BH-11 (0-1)	10/13/2020	930		X			X		1	N	X		X												X						-03
	BH-11 (1-2)	10/13/2020	1000		X			X		1	N	X		X												X						-04
	BH-12 (0-1)	10/13/2020	1030		X			X		1	N	X		X												X						-05
	BH-12 (1-2)	10/13/2020	1100		X			X		1	N	X		X												X						-06
	BH-13 (0-1)	10/13/2020	1130		X			X		1	N	X		X												X						-07
	BH-13 (1-2)	10/13/2020	1200		X			X		1	N	X		X												X						-08
	BH-14 (0-1)	10/13/2020	1230		X			X		1	N	X		X												X						-09
	BH-14 (1-2)	10/13/2020	1300		X			X		1	N	X		X												X						-10

Relinquished by: Adrian Garcia	Date: 10/15/20	Time: 13:00	Received by: [signature] Date: 10.15.20 Time: 13:00
Relinquished by: [signature]	Date: 10.15.20	Time: 1615	Received by: [signature] Date: 10-15-20 Time: 16:15
Relinquished by:	Date:	Time:	Received by: [signature] Date: 10-16 Time: 0900

2.5-1=2.4 dk

ORIGINAL COPY

RAD SCREEN: <0.5 mR/hr

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] Standard
- [ ] RUSH: Same Day 24 hr. 48 hr. 72 hr. dk
- [ ] 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: COPTERRA	L1274488	
Cooler Received/Opened On: 10 / 16 / 20 Temperature:	2.4	
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?			

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

October 27, 2020

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1274845
Samples Received:	10/17/2020
Project Number:	212C-MD-02110
Description:	Vacuum ABO Battery #4 Releases

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

Entire Report Reviewed By:

Chris McCord
Project Manager

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

TABLE OF CONTENTS

BH-1 (0'-1') L1274845-01 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 10:00 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563471	1	10/23/20 00:48	10/23/20 01:13	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 01:39	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 03:57	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1565717	1	10/22/20 18:51	10/26/20 16:25	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 10:01	JN	Mt. Juliet, TN

BH-1 (2'-3') L1274845-02 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 10:10 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563472	1	10/22/20 16:08	10/22/20 16:16	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 01:58	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 04:18	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 07:04	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 09:34	JN	Mt. Juliet, TN

BH-1 (4'-5') L1274845-03 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 10:20 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563472	1	10/22/20 16:08	10/22/20 16:16	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 02:07	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 04:39	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 07:23	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 06:31	JN	Mt. Juliet, TN

BH-1 (6'-7') L1274845-04 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 10:30 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563472	1	10/22/20 16:08	10/22/20 16:16	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 02:17	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 05:00	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 07:42	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 06:44	JN	Mt. Juliet, TN

BH-1 (9'-10') L1274845-05 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 10:40 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563472	1	10/22/20 16:08	10/22/20 16:16	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 02:26	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 05:21	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 08:00	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 06:57	JN	Mt. Juliet, TN

BH-1 (14'-15') L1274845-06 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 11:00 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563472	1	10/22/20 16:08	10/22/20 16:16	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 02:36	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 05:42	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 08:19	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 07:10	JN	Mt. Juliet, TN

BH-1 (19'-20') L1274845-07 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 11:20 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563472	1	10/22/20 16:08	10/22/20 16:16	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 02:46	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 06:03	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 08:38	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 07:23	JN	Mt. Juliet, TN

BH-2 (0'-1') L1274845-08 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 12:00 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563472	1	10/22/20 16:08	10/22/20 16:16	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	5	10/22/20 20:15	10/23/20 03:14	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 06:24	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 08:56	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 10:40	JN	Mt. Juliet, TN

BH-2 (2'-3') L1274845-09 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 12:10 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563472	1	10/22/20 16:08	10/22/20 16:16	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	5	10/22/20 20:15	10/23/20 03:24	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 06:45	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 09:15	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 09:47	JN	Mt. Juliet, TN

BH-2 (4'-5') L1274845-10 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 12:20 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563472	1	10/22/20 16:08	10/22/20 16:16	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 03:33	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 07:06	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 09:34	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 07:36	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') L1274845-11 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 12:30 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563472	1	10/22/20 16:08	10/22/20 16:16	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 04:02	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 07:26	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 09:53	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 07:49	JN	Mt. Juliet, TN

BH-2 (9'-10') L1274845-12 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 12:40 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563473	1	10/23/20 00:28	10/23/20 00:45	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 04:11	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 07:49	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 10:12	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 09:21	JN	Mt. Juliet, TN

BH-2 (14'-15') L1274845-13 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 13:00 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563473	1	10/23/20 00:28	10/23/20 00:45	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 04:21	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 08:09	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 10:30	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 09:08	JN	Mt. Juliet, TN

BH-2 (19'-20') L1274845-14 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 13:20 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563473	1	10/23/20 00:28	10/23/20 00:45	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 04:30	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 08:30	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 11:36	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 08:55	JN	Mt. Juliet, TN

BH-2 (24'-25') L1274845-15 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 13:40 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563473	1	10/23/20 00:28	10/23/20 00:45	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 04:44	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 08:51	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 11:55	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 08:02	JN	Mt. Juliet, TN

BH-2 (29'-30') L1274845-16 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 14:00 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563473	1	10/23/20 00:28	10/23/20 00:45	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 05:12	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 10:00	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 12:14	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 08:16	JN	Mt. Juliet, TN

BH-2 (34'-35') L1274845-17 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 14:30 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563473	1	10/23/20 00:28	10/23/20 00:45	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	1	10/22/20 20:15	10/23/20 05:22	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564078	1	10/22/20 18:51	10/23/20 10:21	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564932	1	10/22/20 18:51	10/26/20 12:33	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 08:29	JN	Mt. Juliet, TN

BH-3 (0'-1') L1274845-18 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 15:30 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563473	1	10/23/20 00:28	10/23/20 00:45	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	10	10/22/20 20:15	10/23/20 05:31	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564282	1	10/22/20 18:51	10/23/20 16:14	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 18:51	10/25/20 23:50	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563733	1	10/23/20 19:01	10/24/20 10:53	JN	Mt. Juliet, TN

BH-3 (2'-3') L1274845-19 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 15:40 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563473	1	10/23/20 00:28	10/23/20 00:45	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1562896	5	10/22/20 20:15	10/23/20 05:41	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564282	1	10/22/20 18:51	10/23/20 16:35	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 18:51	10/26/20 00:09	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1564572	1	10/24/20 07:36	10/24/20 22:10	JN	Mt. Juliet, TN

BH-3 (4'-5') L1274845-20 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 15:50 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563473	1	10/23/20 00:28	10/23/20 00:45	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/24/20 23:00	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564282	1	10/22/20 18:51	10/23/20 16:56	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 18:51	10/26/20 00:28	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 13:28	JN	Mt. Juliet, TN

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

BH-3 (6'-7') L1274845-21 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 16:00 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563473	1	10/23/20 00:28	10/23/20 00:45	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/24/20 23:19	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564282	1	10/22/20 20:54	10/23/20 17:16	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 00:47	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 09:52	JN	Mt. Juliet, TN

BH-3 (9'-10') L1274845-22 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 16:20 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563474	1	10/22/20 23:42	10/23/20 00:02	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/24/20 23:47	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564282	1	10/22/20 20:54	10/23/20 17:37	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 01:06	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 10:04	JN	Mt. Juliet, TN

BH-3 (14'-15') L1274845-23 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 16:40 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563474	1	10/22/20 23:42	10/23/20 00:02	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/24/20 23:57	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564282	1	10/22/20 20:54	10/23/20 17:57	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 01:25	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 12:37	JN	Mt. Juliet, TN

BH-3 (19'-20') L1274845-24 Solid

Collected by: Joe Tyler | Collected date/time: 10/13/20 17:00 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563474	1	10/22/20 23:42	10/23/20 00:02	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 00:06	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 02:58	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 01:44	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 10:17	JN	Mt. Juliet, TN

BH-7 (0'-1') L1274845-25 Solid

Collected by: Joe Tyler | Collected date/time: 10/14/20 10:00 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563474	1	10/22/20 23:42	10/23/20 00:02	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 00:35	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 03:19	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 02:03	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 14:19	JN	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	2	10/24/20 17:28	10/26/20 08:19	JN	Mt. Juliet, TN

BH-7 (2'-3') L1274845-26 Solid

Collected by: Joe Tyler | Collected date/time: 10/14/20 10:10 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563474	1	10/22/20 23:42	10/23/20 00:02	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 00:44	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 03:40	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 02:22	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 12:50	JN	Mt. Juliet, TN

BH-7 (4'-5') L1274845-27 Solid

Collected by: Joe Tyler | Collected date/time: 10/14/20 10:20 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563474	1	10/22/20 23:42	10/23/20 00:02	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 00:54	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 04:00	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 02:41	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 10:30	JN	Mt. Juliet, TN

BH-7 (6'-7') L1274845-28 Solid

Collected by: Joe Tyler | Collected date/time: 10/14/20 10:30 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563474	1	10/22/20 23:42	10/23/20 00:02	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 01:03	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 04:21	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 02:59	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 10:42	JN	Mt. Juliet, TN

BH-7 (9'-10') L1274845-29 Solid

Collected by: Joe Tyler | Collected date/time: 10/14/20 10:40 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563474	1	10/22/20 23:42	10/23/20 00:02	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 01:13	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 04:42	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 03:18	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 10:55	JN	Mt. Juliet, TN

BH-9 (0'-1') L1274845-30 Solid

Collected by: Joe Tyler | Collected date/time: 10/14/20 11:00 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563474	1	10/22/20 23:42	10/23/20 00:02	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 01:22	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 05:02	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 03:37	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 11:08	JN	Mt. Juliet, TN

BH-9 (2'-3') L1274845-31 Solid

Collected by: Joe Tyler | Collected date/time: 10/14/20 11:10 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563474	1	10/22/20 23:42	10/23/20 00:02	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 01:32	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 05:23	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 03:56	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 13:15	JN	Mt. Juliet, TN

BH-9 (4'-5') L1274845-32 Solid

Collected by: Joe Tyler | Collected date/time: 10/14/20 11:20 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563475	1	10/22/20 23:19	10/22/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 01:41	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 05:44	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 04:15	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 11:21	JN	Mt. Juliet, TN

BH-10 (0'-1') L1274845-33 Solid

Collected by: Joe Tyler | Collected date/time: 10/14/20 12:00 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563475	1	10/22/20 23:19	10/22/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 09:55	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 06:04	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 04:33	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 14:07	JN	Mt. Juliet, TN

BH-10 (2'-3') L1274845-34 Solid

Collected by: Joe Tyler | Collected date/time: 10/14/20 12:10 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563475	1	10/22/20 23:19	10/22/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 10:04	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 06:25	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 04:52	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 12:24	JN	Mt. Juliet, TN

BH-10 (4'-5') L1274845-35 Solid

Collected by: Joe Tyler | Collected date/time: 10/14/20 12:20 | Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563475	1	10/22/20 23:19	10/22/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 10:33	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 06:45	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 05:11	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 12:12	JN	Mt. Juliet, TN

BH-10 (6'-7') L1274845-36 Solid

Collected by: Joe Tyler
Collected date/time: 10/14/20 12:40
Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563475	1	10/22/20 23:19	10/22/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 10:42	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564405	1	10/22/20 20:54	10/24/20 07:06	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 05:30	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 11:34	JN	Mt. Juliet, TN

BH-10 (9'-10') L1274845-37 Solid

Collected by: Joe Tyler
Collected date/time: 10/14/20 13:00
Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563475	1	10/22/20 23:19	10/22/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 10:52	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564689	1	10/22/20 20:54	10/24/20 09:16	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564979	1	10/22/20 20:54	10/26/20 05:49	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 11:46	JN	Mt. Juliet, TN

BH-2 (39'-40') L1274845-38 Solid

Collected by: Joe Tyler
Collected date/time: 10/13/20 00:00
Received date/time: 10/17/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1563475	1	10/22/20 23:19	10/22/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1564050	1	10/24/20 12:35	10/25/20 11:01	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1564689	1	10/22/20 20:54	10/24/20 09:39	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1564981	1	10/22/20 20:54	10/25/20 04:12	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1563737	1	10/24/20 17:28	10/25/20 11:59	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	96.9		1	10/23/2020 01:13	WG1563471

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	642		9.50	20.6	1	10/23/2020 01:39	WG1562896

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	0.0534	J	0.0224	0.103	1	10/23/2020 03:57	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*10/23/2020 03:57*	WG1564078

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		0.000497	0.00106	1	10/26/2020 16:25	WG1565717
Toluene	0.00170	J	0.00138	0.00532	1	10/26/2020 16:25	WG1565717
Ethylbenzene	U		0.000785	0.00266	1	10/26/2020 16:25	WG1565717
Total Xylenes	0.000958	J	0.000937	0.00692	1	10/26/2020 16:25	WG1565717
(S) Toluene-d8	*98.9*			*75.0-131*		*10/26/2020 16:25*	WG1565717
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*10/26/2020 16:25*	WG1565717
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*10/26/2020 16:25*	WG1565717

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	1.66	4.13	1	10/24/2020 10:01	WG1563733
C28-C40 Oil Range	3.74	J	0.283	4.13	1	10/24/2020 10:01	WG1563733
(S) o-Terphenyl	*84.5*			*18.0-148*		*10/24/2020 10:01*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.4		1	10/22/2020 16:16	WG1563472

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	340		9.54	20.7	1	10/23/2020 01:58	WG1562896

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	10/23/2020 04:18	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*10/23/2020 04:18*	WG1564078

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000501	0.00107	1	10/26/2020 07:04	WG1564932
Toluene	U		0.00140	0.00537	1	10/26/2020 07:04	WG1564932
Ethylbenzene	U		0.000791	0.00268	1	10/26/2020 07:04	WG1564932
Total Xylenes	U		0.000945	0.00698	1	10/26/2020 07:04	WG1564932
(S) Toluene-d8	*97.0*			*75.0-131*		*10/26/2020 07:04*	WG1564932
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*10/26/2020 07:04*	WG1564932
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*10/26/2020 07:04*	WG1564932

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.67	4.15	1	10/24/2020 09:34	WG1563733
C28-C40 Oil Range	1.81	J	0.284	4.15	1	10/24/2020 09:34	WG1563733
(S) o-Terphenyl	*88.1*			*18.0-148*		*10/24/2020 09:34*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.2		1	10/22/2020 16:16	WG1563472

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	365		9.87	21.5	1	10/23/2020 02:07	WG1562896

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	0.0443	J	0.0233	0.107	1	10/23/2020 04:39	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*105*			*77.0-120*		*10/23/2020 04:39*	WG1564078

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		0.000536	0.00115	1	10/26/2020 07:23	WG1564932
Toluene	U		0.00149	0.00573	1	10/26/2020 07:23	WG1564932
Ethylbenzene	U		0.000845	0.00287	1	10/26/2020 07:23	WG1564932
Total Xylenes	U		0.00101	0.00745	1	10/26/2020 07:23	WG1564932
(S) Toluene-d8	*97.8*			*75.0-131*		*10/26/2020 07:23*	WG1564932
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*10/26/2020 07:23*	WG1564932
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*10/26/2020 07:23*	WG1564932

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		1.73	4.29	1	10/24/2020 06:31	WG1563733
C28-C40 Oil Range	U		0.294	4.29	1	10/24/2020 06:31	WG1563733
(S) o-Terphenyl	*85.6*			*18.0-148*		*10/24/2020 06:31*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.7		1	10/22/2020 16:16	WG1563472

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		9.72	21.1	1	10/23/2020 02:17	WG1562896

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	10/23/2020 05:00	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*111*			*77.0-120*		*10/23/2020 05:00*	WG1564078

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		0.000520	0.00111	1	10/26/2020 07:42	WG1564932
Toluene	U		0.00145	0.00556	1	10/26/2020 07:42	WG1564932
Ethylbenzene	U		0.000820	0.00278	1	10/26/2020 07:42	WG1564932
Total Xylenes	U		0.000979	0.00723	1	10/26/2020 07:42	WG1564932
(S) Toluene-d8	*97.4*			*75.0-131*		*10/26/2020 07:42*	WG1564932
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*10/26/2020 07:42*	WG1564932
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*10/26/2020 07:42*	WG1564932

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	10/24/2020 06:44	WG1563733
C28-C40 Oil Range	U		0.289	4.23	1	10/24/2020 06:44	WG1563733
(S) o-Terphenyl	*89.0*			*18.0-148*		*10/24/2020 06:44*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	10/22/2020 16:16	WG1563472

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	114		9.52	20.7	1	10/23/2020 02:26	WG1562896

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	0.0672	J	0.0225	0.104	1	10/23/2020 05:21	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*10/23/2020 05:21*	WG1564078

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	10/26/2020 08:00	WG1564932
Toluene	U		0.00139	0.00535	1	10/26/2020 08:00	WG1564932
Ethylbenzene	U		0.000789	0.00268	1	10/26/2020 08:00	WG1564932
Total Xylenes	U		0.000942	0.00696	1	10/26/2020 08:00	WG1564932
(S) Toluene-d8	*100*			*75.0-131*		*10/26/2020 08:00*	WG1564932
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*10/26/2020 08:00*	WG1564932
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*10/26/2020 08:00*	WG1564932

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	10/24/2020 06:57	WG1563733
C28-C40 Oil Range	U		0.284	4.14	1	10/24/2020 06:57	WG1563733
(S) o-Terphenyl	*90.7*			*18.0-148*		*10/24/2020 06:57*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.2		1	10/22/2020 16:16	WG1563472

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	120		9.66	21.0	1	10/23/2020 02:36	WG1562896

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	10/23/2020 05:42	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*10/23/2020 05:42*	WG1564078

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		0.000514	0.00110	1	10/26/2020 08:19	WG1564932
Toluene	U		0.00143	0.00550	1	10/26/2020 08:19	WG1564932
Ethylbenzene	U		0.000811	0.00275	1	10/26/2020 08:19	WG1564932
Total Xylenes	U		0.000969	0.00715	1	10/26/2020 08:19	WG1564932
(S) Toluene-d8	*96.7*			*75.0-131*		*10/26/2020 08:19*	WG1564932
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*10/26/2020 08:19*	WG1564932
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*10/26/2020 08:19*	WG1564932

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	10/24/2020 07:10	WG1563733
C28-C40 Oil Range	U		0.288	4.20	1	10/24/2020 07:10	WG1563733
(S) o-Terphenyl	*85.0*			*18.0-148*		*10/24/2020 07:10*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.5		1	10/22/2020 16:16	WG1563472

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	172		10.1	21.9	1	10/23/2020 02:46	WG1562896

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	0.0502	J	0.0237	0.109	1	10/23/2020 06:03	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*10/23/2020 06:03*	WG1564078

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		0.000555	0.00119	1	10/26/2020 08:38	WG1564932
Toluene	U		0.00154	0.00594	1	10/26/2020 08:38	WG1564932
Ethylbenzene	U		0.000876	0.00297	1	10/26/2020 08:38	WG1564932
Total Xylenes	U		0.00105	0.00772	1	10/26/2020 08:38	WG1564932
(S) Toluene-d8	*98.9*			*75.0-131*		*10/26/2020 08:38*	WG1564932
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*10/26/2020 08:38*	WG1564932
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*10/26/2020 08:38*	WG1564932

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.76	4.37	1	10/24/2020 07:23	WG1563733
C28-C40 Oil Range	U		0.300	4.37	1	10/24/2020 07:23	WG1563733
(S) o-Terphenyl	*83.1*			*18.0-148*		*10/24/2020 07:23*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.3		1	10/22/2020 16:16	WG1563472

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	1000		46.8	102	5	10/23/2020 03:14	WG1562896

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	10/23/2020 06:24	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*10/23/2020 06:24*	WG1564078

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	10/26/2020 08:56	WG1564932
Toluene	U		0.00134	0.00517	1	10/26/2020 08:56	WG1564932
Ethylbenzene	U		0.000762	0.00259	1	10/26/2020 08:56	WG1564932
Total Xylenes	U		0.000910	0.00672	1	10/26/2020 08:56	WG1564932
(S) Toluene-d8	*96.8*			*75.0-131*		*10/26/2020 08:56*	WG1564932
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*10/26/2020 08:56*	WG1564932
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*10/26/2020 08:56*	WG1564932

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	13.3		1.64	4.07	1	10/24/2020 10:40	WG1563733
C28-C40 Oil Range	30.2		0.279	4.07	1	10/24/2020 10:40	WG1563733
(S) o-Terphenyl	*95.3*			*18.0-148*		*10/24/2020 10:40*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.9		1	10/22/2020 16:16	WG1563472

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	1050		47.9	104	5	10/23/2020 03:24	WG1562896

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0245	J	0.0226	0.104	1	10/23/2020 06:45	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*10/23/2020 06:45*	WG1564078

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		0.000507	0.00109	1	10/26/2020 09:15	WG1564932
Toluene	U		0.00141	0.00543	1	10/26/2020 09:15	WG1564932
Ethylbenzene	U		0.000800	0.00271	1	10/26/2020 09:15	WG1564932
Total Xylenes	U		0.000955	0.00705	1	10/26/2020 09:15	WG1564932
(S) Toluene-d8	*101*			*75.0-131*		*10/26/2020 09:15*	WG1564932
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*10/26/2020 09:15*	WG1564932
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*10/26/2020 09:15*	WG1564932

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	3.11	J	1.68	4.17	1	10/24/2020 09:47	WG1563733
C28-C40 Oil Range	4.28		0.286	4.17	1	10/24/2020 09:47	WG1563733
(S) o-Terphenyl	*84.1*			*18.0-148*		*10/24/2020 09:47*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	10/22/2020 16:16	WG1563472

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	346		9.44	20.5	1	10/23/2020 03:33	WG1562896

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	0.0313	J	0.0223	0.103	1	10/23/2020 07:06	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*10/23/2020 07:06*	WG1564078

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	10/26/2020 09:34	WG1564932
Toluene	U		0.00137	0.00526	1	10/26/2020 09:34	WG1564932
Ethylbenzene	U		0.000776	0.00263	1	10/26/2020 09:34	WG1564932
Total Xylenes	U		0.000926	0.00684	1	10/26/2020 09:34	WG1564932
(S) Toluene-d8	*97.4*			*75.0-131*		*10/26/2020 09:34*	WG1564932
(S) 4-Bromofluorobenzene	*97.8*			*67.0-138*		*10/26/2020 09:34*	WG1564932
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*10/26/2020 09:34*	WG1564932

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.65	4.11	1	10/24/2020 07:36	WG1563733
C28-C40 Oil Range	U		0.281	4.11	1	10/24/2020 07:36	WG1563733
(S) o-Terphenyl	*86.1*			*18.0-148*		*10/24/2020 07:36*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.9		1	10/22/2020 16:16	WG1563472

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	371		9.60	20.9	1	10/23/2020 04:02	WG1562896

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	10/23/2020 07:26	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*10/23/2020 07:26*	WG1564078

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		0.000507	0.00109	1	10/26/2020 09:53	WG1564932
Toluene	U		0.00141	0.00543	1	10/26/2020 09:53	WG1564932
Ethylbenzene	U		0.000800	0.00271	1	10/26/2020 09:53	WG1564932
Total Xylenes	U		0.000956	0.00706	1	10/26/2020 09:53	WG1564932
(S) Toluene-d8	*97.7*			*75.0-131*		*10/26/2020 09:53*	WG1564932
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*10/26/2020 09:53*	WG1564932
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*10/26/2020 09:53*	WG1564932

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.68	4.17	1	10/24/2020 07:49	WG1563733
C28-C40 Oil Range	U		0.286	4.17	1	10/24/2020 07:49	WG1563733
(S) o-Terphenyl	*91.9*			*18.0-148*		*10/24/2020 07:49*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.3		1	10/23/2020 00:45	WG1563473

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	144		9.66	21.0	1	10/23/2020 04:11	WG1562896

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	10/23/2020 07:49	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*10/23/2020 07:49*	WG1564078

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	0.000544	J	0.000514	0.00110	1	10/26/2020 10:12	WG1564932
Toluene	U		0.00143	0.00550	1	10/26/2020 10:12	WG1564932
Ethylbenzene	U		0.000811	0.00275	1	10/26/2020 10:12	WG1564932
Total Xylenes	U		0.000968	0.00715	1	10/26/2020 10:12	WG1564932
(S) Toluene-d8	*97.3*			*75.0-131*		*10/26/2020 10:12*	WG1564932
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*10/26/2020 10:12*	WG1564932
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*10/26/2020 10:12*	WG1564932

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	10/24/2020 09:21	WG1563733
C28-C40 Oil Range	U		0.288	4.20	1	10/24/2020 09:21	WG1563733
(S) o-Terphenyl	*81.0*			*18.0-148*		*10/24/2020 09:21*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.9		1	10/23/2020 00:45	WG1563473

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	986		11.5	25.0	1	10/23/2020 04:21	WG1562896

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		0.0271	0.125	1	10/23/2020 08:09	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*112*			*77.0-120*		*10/23/2020 08:09*	WG1564078

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		0.000703	0.00151	1	10/26/2020 10:30	WG1564932
Toluene	U		0.00196	0.00753	1	10/26/2020 10:30	WG1564932
Ethylbenzene	U		0.00111	0.00376	1	10/26/2020 10:30	WG1564932
Total Xylenes	U		0.00132	0.00978	1	10/26/2020 10:30	WG1564932
(S) Toluene-d8	*98.1*			*75.0-131*		*10/26/2020 10:30*	WG1564932
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*10/26/2020 10:30*	WG1564932
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*10/26/2020 10:30*	WG1564932

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		2.01	5.00	1	10/24/2020 09:08	WG1563733
C28-C40 Oil Range	U		0.343	5.00	1	10/24/2020 09:08	WG1563733
(S) o-Terphenyl	*80.0*			*18.0-148*		*10/24/2020 09:08*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.9		1	10/23/2020 00:45	WG1563473

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	471		10.4	22.5	1	10/23/2020 04:30	WG1562896

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0253	J	0.0244	0.113	1	10/23/2020 08:30	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*10/23/2020 08:30*	WG1564078

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		0.000584	0.00125	1	10/26/2020 11:36	WG1564932
Toluene	U		0.00163	0.00626	1	10/26/2020 11:36	WG1564932
Ethylbenzene	U		0.000922	0.00313	1	10/26/2020 11:36	WG1564932
Total Xylenes	U		0.00110	0.00813	1	10/26/2020 11:36	WG1564932
(S) Toluene-d8	*99.7*			*75.0-131*		*10/26/2020 11:36*	WG1564932
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*10/26/2020 11:36*	WG1564932
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*10/26/2020 11:36*	WG1564932

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.45	J	1.81	4.50	1	10/24/2020 08:55	WG1563733
C28-C40 Oil Range	3.26	J	0.308	4.50	1	10/24/2020 08:55	WG1563733
(S) o-Terphenyl	*89.9*			*18.0-148*		*10/24/2020 08:55*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.9		1	10/23/2020 00:45	WG1563473

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	310		9.70	21.1	1	10/23/2020 04:44	WG1562896

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	10/23/2020 08:51	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*10/23/2020 08:51*	WG1564078

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	10/26/2020 11:55	WG1564932
Toluene	U		0.00144	0.00555	1	10/26/2020 11:55	WG1564932
Ethylbenzene	U		0.000817	0.00277	1	10/26/2020 11:55	WG1564932
Total Xylenes	U		0.000976	0.00721	1	10/26/2020 11:55	WG1564932
(S) Toluene-d8	*98.8*			*75.0-131*		*10/26/2020 11:55*	WG1564932
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*10/26/2020 11:55*	WG1564932
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*10/26/2020 11:55*	WG1564932

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	2.38	J	1.70	4.22	1	10/24/2020 08:02	WG1563733
C28-C40 Oil Range	U		0.289	4.22	1	10/24/2020 08:02	WG1563733
(S) o-Terphenyl	*86.9*			*18.0-148*		*10/24/2020 08:02*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.7		1	10/23/2020 00:45	WG1563473

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	282		9.61	20.9	1	10/23/2020 05:12	WG1562896

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	10/23/2020 10:00	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*10/23/2020 10:00*	WG1564078

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		0.000509	0.00109	1	10/26/2020 12:14	WG1564932
Toluene	U		0.00142	0.00545	1	10/26/2020 12:14	WG1564932
Ethylbenzene	U		0.000803	0.00272	1	10/26/2020 12:14	WG1564932
Total Xylenes	U		0.000959	0.00708	1	10/26/2020 12:14	WG1564932
(S) Toluene-d8	*101*			*75.0-131*		*10/26/2020 12:14*	WG1564932
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*10/26/2020 12:14*	WG1564932
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*10/26/2020 12:14*	WG1564932

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	1.93	J	1.68	4.18	1	10/24/2020 08:16	WG1563733
C28-C40 Oil Range	U		0.286	4.18	1	10/24/2020 08:16	WG1563733
(S) o-Terphenyl	*83.5*			*18.0-148*		*10/24/2020 08:16*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.1		1	10/23/2020 00:45	WG1563473

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	239		9.57	20.8	1	10/23/2020 05:22	WG1562896

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	10/23/2020 10:21	WG1564078
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*10/23/2020 10:21*	WG1564078

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	10/26/2020 12:33	WG1564932
Toluene	U		0.00141	0.00540	1	10/26/2020 12:33	WG1564932
Ethylbenzene	U		0.000797	0.00270	1	10/26/2020 12:33	WG1564932
Total Xylenes	U		0.000951	0.00703	1	10/26/2020 12:33	WG1564932
(S) Toluene-d8	*101*			*75.0-131*		*10/26/2020 12:33*	WG1564932
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*10/26/2020 12:33*	WG1564932
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*10/26/2020 12:33*	WG1564932

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	3.03	J	1.67	4.16	1	10/24/2020 08:29	WG1563733
C28-C40 Oil Range	U		0.285	4.16	1	10/24/2020 08:29	WG1563733
(S) o-Terphenyl	*84.3*			*18.0-148*		*10/24/2020 08:29*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.5		1	10/23/2020 00:45	WG1563473

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	4650		94.4	205	10	10/23/2020 05:31	WG1562896

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	0.0568	B J	0.0223	0.103	1	10/23/2020 16:14	WG1564282
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*77.0-120*		*10/23/2020 16:14*	WG1564282

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	0.000547	J	0.000491	0.00105	1	10/25/2020 23:50	WG1564979
Toluene	U		0.00137	0.00526	1	10/25/2020 23:50	WG1564979
Ethylbenzene	0.000911	J	0.000775	0.00263	1	10/25/2020 23:50	WG1564979
Total Xylenes	0.00341	J	0.000926	0.00684	1	10/25/2020 23:50	WG1564979
(S) Toluene-d8	*114*			*75.0-131*		*10/25/2020 23:50*	WG1564979
(S) 4-Bromofluorobenzene	*92.7*			*67.0-138*		*10/25/2020 23:50*	WG1564979
(S) 1,2-Dichloroethane-d4	*80.8*			*70.0-130*		*10/25/2020 23:50*	WG1564979

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	99.7		1.65	4.10	1	10/24/2020 10:53	WG1563733
C28-C40 Oil Range	136		0.281	4.10	1	10/24/2020 10:53	WG1563733
(S) o-Terphenyl	*72.1*			*18.0-148*		*10/24/2020 10:53*	WG1563733

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.0		1	10/23/2020 00:45	WG1563473

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	1530		47.4	103	5	10/23/2020 05:41	WG1562896

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	0.0346	B J	0.0224	0.103	1	10/23/2020 16:35	WG1564282
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*10/23/2020 16:35*	WG1564282

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	10/26/2020 00:09	WG1564979
Toluene	U		0.00138	0.00531	1	10/26/2020 00:09	WG1564979
Ethylbenzene	U		0.000783	0.00266	1	10/26/2020 00:09	WG1564979
Total Xylenes	U		0.000935	0.00691	1	10/26/2020 00:09	WG1564979
(S) Toluene-d8	*116*			*75.0-131*		*10/26/2020 00:09*	WG1564979
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*		*10/26/2020 00:09*	WG1564979
(S) 1,2-Dichloroethane-d4	*79.1*			*70.0-130*		*10/26/2020 00:09*	WG1564979

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	22.5		1.66	4.12	1	10/24/2020 22:10	WG1564572
C28-C40 Oil Range	28.4		0.283	4.12	1	10/24/2020 22:10	WG1564572
(S) o-Terphenyl	*79.3*			*18.0-148*		*10/24/2020 22:10*	WG1564572

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.6		1	10/23/2020 00:45	WG1563473

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	77.0		9.33	20.3	1	10/24/2020 23:00	WG1564050

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	0.0336	B J	0.0220	0.101	1	10/23/2020 16:56	WG1564282
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*77.0-120*		*10/23/2020 16:56*	WG1564282

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		0.000481	0.00103	1	10/26/2020 00:28	WG1564979
Toluene	U		0.00134	0.00515	1	10/26/2020 00:28	WG1564979
Ethylbenzene	U		0.000759	0.00257	1	10/26/2020 00:28	WG1564979
Total Xylenes	U		0.000906	0.00669	1	10/26/2020 00:28	WG1564979
(S) Toluene-d8	*114*			*75.0-131*		*10/26/2020 00:28*	WG1564979
(S) 4-Bromofluorobenzene	*89.8*			*67.0-138*		*10/26/2020 00:28*	WG1564979
(S) 1,2-Dichloroethane-d4	*80.9*			*70.0-130*		*10/26/2020 00:28*	WG1564979

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.76		1.63	4.06	1	10/25/2020 13:28	WG1563737
C28-C40 Oil Range	5.52		0.278	4.06	1	10/25/2020 13:28	WG1563737
(S) o-Terphenyl	*68.3*			*18.0-148*		*10/25/2020 13:28*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.3		1	10/23/2020 00:45	WG1563473

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	15.8	J	9.86	21.4	1	10/24/2020 23:19	WG1564050

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	0.0307	B J	0.0233	0.107	1	10/23/2020 17:16	WG1564282
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*		*10/23/2020 17:16*	WG1564282

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		0.000534	0.00114	1	10/26/2020 00:47	WG1564979
Toluene	U		0.00149	0.00572	1	10/26/2020 00:47	WG1564979
Ethylbenzene	U		0.000843	0.00286	1	10/26/2020 00:47	WG1564979
Total Xylenes	U		0.00101	0.00744	1	10/26/2020 00:47	WG1564979
(S) Toluene-d8	*117*			*75.0-131*		*10/26/2020 00:47*	WG1564979
(S) 4-Bromofluorobenzene	*92.5*			*67.0-138*		*10/26/2020 00:47*	WG1564979
(S) 1,2-Dichloroethane-d4	*78.1*			*70.0-130*		*10/26/2020 00:47*	WG1564979

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		1.73	4.29	1	10/25/2020 09:52	WG1563737
C28-C40 Oil Range	0.998	B J	0.294	4.29	1	10/25/2020 09:52	WG1563737
(S) o-Terphenyl	*56.6*			*18.0-148*		*10/25/2020 09:52*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	10/23/2020 00:02	WG1563474

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	66.2		9.73	21.2	1	10/24/2020 23:47	WG1564050

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	0.0236	B J	0.0230	0.106	1	10/23/2020 17:37	WG1564282
(S) a,a,a-Trifluorotoluene(FID)	*99.1*			*77.0-120*		*10/23/2020 17:37*	WG1564282

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	10/26/2020 01:06	WG1564979
Toluene	U		0.00145	0.00558	1	10/26/2020 01:06	WG1564979
Ethylbenzene	U		0.000823	0.00279	1	10/26/2020 01:06	WG1564979
Total Xylenes	U		0.000983	0.00726	1	10/26/2020 01:06	WG1564979
(S) Toluene-d8	*114*			*75.0-131*		*10/26/2020 01:06*	WG1564979
(S) 4-Bromofluorobenzene	*91.7*			*67.0-138*		*10/26/2020 01:06*	WG1564979
(S) 1,2-Dichloroethane-d4	*83.3*			*70.0-130*		*10/26/2020 01:06*	WG1564979

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	10/25/2020 10:04	WG1563737
C28-C40 Oil Range	1.68	B J	0.290	4.23	1	10/25/2020 10:04	WG1563737
(S) o-Terphenyl	*60.6*			*18.0-148*		*10/25/2020 10:04*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.9		1	10/23/2020 00:02	WG1563474

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	93.6		10.0	21.8	1	10/24/2020 23:57	WG1564050

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	0.0275	B J	0.0236	0.109	1	10/23/2020 17:57	WG1564282
(S) a,a,a-Trifluorotoluene(FID)	*99.6*			*77.0-120*		*10/23/2020 17:57*	WG1564282

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		0.000549	0.00118	1	10/26/2020 01:25	WG1564979
Toluene	U		0.00153	0.00588	1	10/26/2020 01:25	WG1564979
Ethylbenzene	U		0.000867	0.00294	1	10/26/2020 01:25	WG1564979
Total Xylenes	U		0.00104	0.00765	1	10/26/2020 01:25	WG1564979
(S) Toluene-d8	*113*			*75.0-131*		*10/26/2020 01:25*	WG1564979
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*10/26/2020 01:25*	WG1564979
(S) 1,2-Dichloroethane-d4	*81.1*			*70.0-130*		*10/26/2020 01:25*	WG1564979

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		1.75	4.35	1	10/25/2020 12:37	WG1563737
C28-C40 Oil Range	0.957	B J	0.298	4.35	1	10/25/2020 12:37	WG1563737
(S) o-Terphenyl	*67.2*			*18.0-148*		*10/25/2020 12:37*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.9		1	10/23/2020 00:02	WG1563474

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	55.3		9.70	21.1	1	10/25/2020 00:06	WG1564050

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	0.0286	B J	0.0229	0.105	1	10/24/2020 02:58	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*93.5*			*77.0-120*		*10/24/2020 02:58*	WG1564405

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000517	0.00111	1	10/26/2020 01:44	WG1564979
Toluene	U		0.00144	0.00554	1	10/26/2020 01:44	WG1564979
Ethylbenzene	U		0.000817	0.00277	1	10/26/2020 01:44	WG1564979
Total Xylenes	U		0.000975	0.00720	1	10/26/2020 01:44	WG1564979
(S) Toluene-d8	*115*			*75.0-131*		*10/26/2020 01:44*	WG1564979
(S) 4-Bromofluorobenzene	*89.6*			*67.0-138*		*10/26/2020 01:44*	WG1564979
(S) 1,2-Dichloroethane-d4	*83.3*			*70.0-130*		*10/26/2020 01:44*	WG1564979

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.73	J	1.70	4.22	1	10/25/2020 10:17	WG1563737
C28-C40 Oil Range	0.911	B J	0.289	4.22	1	10/25/2020 10:17	WG1563737
(S) o-Terphenyl	*68.8*			*18.0-148*		*10/25/2020 10:17*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.2		1	10/23/2020 00:02	WG1563474

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	20.8		9.36	20.4	1	10/25/2020 00:35	WG1564050

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	0.0283	B J	0.0221	0.102	1	10/24/2020 03:19	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*93.0*			*77.0-120*		*10/24/2020 03:19*	WG1564405

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		0.000484	0.00104	1	10/26/2020 02:03	WG1564979
Toluene	U		0.00135	0.00518	1	10/26/2020 02:03	WG1564979
Ethylbenzene	U		0.000763	0.00259	1	10/26/2020 02:03	WG1564979
Total Xylenes	U		0.000912	0.00673	1	10/26/2020 02:03	WG1564979
(S) Toluene-d8	*116*			*75.0-131*		*10/26/2020 02:03*	WG1564979
(S) 4-Bromofluorobenzene	*87.7*			*67.0-138*		*10/26/2020 02:03*	WG1564979
(S) 1,2-Dichloroethane-d4	*70.2*			*70.0-130*		*10/26/2020 02:03*	WG1564979

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	18.9		1.64	4.07	1	10/25/2020 14:19	WG1563737
C28-C40 Oil Range	188		0.558	8.14	2	10/26/2020 08:19	WG1563737
(S) o-Terphenyl	*59.5*			*18.0-148*		*10/25/2020 14:19*	WG1563737
(S) o-Terphenyl	*83.7*			*18.0-148*		*10/26/2020 08:19*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.9		1	10/23/2020 00:02	WG1563474

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	16.5	J	9.49	20.6	1	10/25/2020 00:44	WG1564050

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	0.0320	B J	0.0224	0.103	1	10/24/2020 03:40	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*92.5*			*77.0-120*		*10/24/2020 03:40*	WG1564405

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		0.000497	0.00106	1	10/26/2020 02:22	WG1564979
Toluene	U		0.00138	0.00532	1	10/26/2020 02:22	WG1564979
Ethylbenzene	U		0.000784	0.00266	1	10/26/2020 02:22	WG1564979
Total Xylenes	U		0.000936	0.00691	1	10/26/2020 02:22	WG1564979
(S) Toluene-d8	*114*			*75.0-131*		*10/26/2020 02:22*	WG1564979
(S) 4-Bromofluorobenzene	*93.9*			*67.0-138*		*10/26/2020 02:22*	WG1564979
(S) 1,2-Dichloroethane-d4	*81.7*			*70.0-130*		*10/26/2020 02:22*	WG1564979

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.01	J	1.66	4.13	1	10/25/2020 12:50	WG1563737
C28-C40 Oil Range	28.4		0.283	4.13	1	10/25/2020 12:50	WG1563737
(S) o-Terphenyl	*56.1*			*18.0-148*		*10/25/2020 12:50*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	10/23/2020 00:02	WG1563474

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	96.9		9.52	20.7	1	10/25/2020 00:54	WG1564050

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	0.0298	B J	0.0225	0.104	1	10/24/2020 04:00	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*93.3*			*77.0-120*		*10/24/2020 04:00*	WG1564405

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	10/26/2020 02:41	WG1564979
Toluene	U		0.00139	0.00535	1	10/26/2020 02:41	WG1564979
Ethylbenzene	U		0.000789	0.00268	1	10/26/2020 02:41	WG1564979
Total Xylenes	U		0.000942	0.00696	1	10/26/2020 02:41	WG1564979
(S) Toluene-d8	*113*			*75.0-131*		*10/26/2020 02:41*	WG1564979
(S) 4-Bromofluorobenzene	*91.1*			*67.0-138*		*10/26/2020 02:41*	WG1564979
(S) 1,2-Dichloroethane-d4	*81.4*			*70.0-130*		*10/26/2020 02:41*	WG1564979

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	10/25/2020 10:30	WG1563737
C28-C40 Oil Range	2.68	B J	0.284	4.14	1	10/25/2020 10:30	WG1563737
(S) o-Terphenyl	*72.6*			*18.0-148*		*10/25/2020 10:30*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.7		1	10/23/2020 00:02	WG1563474

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	320		9.82	21.3	1	10/25/2020 01:03	WG1564050

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		0.0232	0.107	1	10/24/2020 04:21	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*94.0*			*77.0-120*		*10/24/2020 04:21*	WG1564405

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		0.000530	0.00114	1	10/26/2020 02:59	WG1564979
Toluene	U		0.00148	0.00568	1	10/26/2020 02:59	WG1564979
Ethylbenzene	U		0.000837	0.00284	1	10/26/2020 02:59	WG1564979
Total Xylenes	U		0.000999	0.00738	1	10/26/2020 02:59	WG1564979
(S) Toluene-d8	*116*			*75.0-131*		*10/26/2020 02:59*	WG1564979
(S) 4-Bromofluorobenzene	*93.9*			*67.0-138*		*10/26/2020 02:59*	WG1564979
(S) 1,2-Dichloroethane-d4	*80.7*			*70.0-130*		*10/26/2020 02:59*	WG1564979

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.72	4.27	1	10/25/2020 10:42	WG1563737
C28-C40 Oil Range	0.364	B J	0.292	4.27	1	10/25/2020 10:42	WG1563737
(S) o-Terphenyl	*68.9*			*18.0-148*		*10/25/2020 10:42*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	10/23/2020 00:02	WG1563474

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	341		9.74	21.2	1	10/25/2020 01:13	WG1564050

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	0.0553	B J	0.0230	0.106	1	10/24/2020 04:42	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*94.0*			*77.0-120*		*10/24/2020 04:42*	WG1564405

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	10/26/2020 03:18	WG1564979
Toluene	U		0.00145	0.00559	1	10/26/2020 03:18	WG1564979
Ethylbenzene	U		0.000824	0.00279	1	10/26/2020 03:18	WG1564979
Total Xylenes	U		0.000984	0.00727	1	10/26/2020 03:18	WG1564979
(S) Toluene-d8	*113*			*75.0-131*		*10/26/2020 03:18*	WG1564979
(S) 4-Bromofluorobenzene	*92.1*			*67.0-138*		*10/26/2020 03:18*	WG1564979
(S) 1,2-Dichloroethane-d4	*91.2*			*70.0-130*		*10/26/2020 03:18*	WG1564979

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	10/25/2020 10:55	WG1563737
C28-C40 Oil Range	U		0.290	4.23	1	10/25/2020 10:55	WG1563737
(S) o-Terphenyl	*57.7*			*18.0-148*		*10/25/2020 10:55*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.3		1	10/23/2020 00:02	WG1563474

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	36.3		9.46	20.6	1	10/25/2020 01:22	WG1564050

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	0.0264	B J	0.0223	0.103	1	10/24/2020 05:02	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*91.8*			*77.0-120*		*10/24/2020 05:02*	WG1564405

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	10/26/2020 03:37	WG1564979
Toluene	U		0.00137	0.00528	1	10/26/2020 03:37	WG1564979
Ethylbenzene	U		0.000778	0.00264	1	10/26/2020 03:37	WG1564979
Total Xylenes	U		0.000929	0.00686	1	10/26/2020 03:37	WG1564979
(S) Toluene-d8	*114*			*75.0-131*		*10/26/2020 03:37*	WG1564979
(S) 4-Bromofluorobenzene	*91.4*			*67.0-138*		*10/26/2020 03:37*	WG1564979
(S) 1,2-Dichloroethane-d4	*82.0*			*70.0-130*		*10/26/2020 03:37*	WG1564979

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.65	4.11	1	10/25/2020 11:08	WG1563737
C28-C40 Oil Range	1.36	B J	0.282	4.11	1	10/25/2020 11:08	WG1563737
(S) o-Terphenyl	*80.5*			*18.0-148*		*10/25/2020 11:08*	WG1563737

BH-3 (2-3')
Collected date/time: 10/14/20 11:10

SAMPLE RESULTS - 31

L1274845

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.3		1	10/23/2020 00:02	WG1563474

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	30.9		9.65	21.0	1	10/25/2020 01:32	WG1564050

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	0.0250	B J	0.0228	0.105	1	10/24/2020 05:23	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*93.5*			*77.0-120*		*10/24/2020 05:23*	WG1564405

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	10/26/2020 03:56	WG1564979
Toluene	U		0.00143	0.00549	1	10/26/2020 03:56	WG1564979
Ethylbenzene	U		0.000809	0.00274	1	10/26/2020 03:56	WG1564979
Total Xylenes	U		0.000966	0.00714	1	10/26/2020 03:56	WG1564979
(S) Toluene-d8	*113*			*75.0-131*		*10/26/2020 03:56*	WG1564979
(S) 4-Bromofluorobenzene	*91.6*			*67.0-138*		*10/26/2020 03:56*	WG1564979
(S) 1,2-Dichloroethane-d4	*83.3*			*70.0-130*		*10/26/2020 03:56*	WG1564979

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	10/25/2020 13:15	WG1563737
C28-C40 Oil Range	3.87	B J	0.287	4.20	1	10/25/2020 13:15	WG1563737
(S) o-Terphenyl	*67.9*			*18.0-148*		*10/25/2020 13:15*	WG1563737

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.1		1	10/22/2020 23:34	WG1563475

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	31.7		9.68	21.0	1	10/25/2020 01:41	WG1564050

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	0.0284	B J	0.0228	0.105	1	10/24/2020 05:44	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*93.7*			*77.0-120*		*10/24/2020 05:44*	WG1564405

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	10/26/2020 04:15	WG1564979
Toluene	U		0.00144	0.00552	1	10/26/2020 04:15	WG1564979
Ethylbenzene	U		0.000814	0.00276	1	10/26/2020 04:15	WG1564979
Total Xylenes	U		0.000972	0.00718	1	10/26/2020 04:15	WG1564979
(S) Toluene-d8	*115*			*75.0-131*		*10/26/2020 04:15*	WG1564979
(S) 4-Bromofluorobenzene	*94.4*			*67.0-138*		*10/26/2020 04:15*	WG1564979
(S) 1,2-Dichloroethane-d4	*84.0*			*70.0-130*		*10/26/2020 04:15*	WG1564979

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	10/25/2020 11:21	WG1563737
C28-C40 Oil Range	1.53	B J	0.288	4.21	1	10/25/2020 11:21	WG1563737
(S) o-Terphenyl	*56.6*			*18.0-148*		*10/25/2020 11:21*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.1		1	10/22/2020 23:34	WG1563475

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	47.4		9.38	20.4	1	10/25/2020 09:55	WG1564050

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	0.0316	B J	0.0221	0.102	1	10/24/2020 06:04	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*93.6*			*77.0-120*		*10/24/2020 06:04*	WG1564405

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	10/26/2020 04:33	WG1564979
Toluene	U		0.00135	0.00520	1	10/26/2020 04:33	WG1564979
Ethylbenzene	U		0.000766	0.00260	1	10/26/2020 04:33	WG1564979
Total Xylenes	U		0.000915	0.00675	1	10/26/2020 04:33	WG1564979
(S) Toluene-d8	*115*			*75.0-131*		*10/26/2020 04:33*	WG1564979
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*		*10/26/2020 04:33*	WG1564979
(S) 1,2-Dichloroethane-d4	*84.6*			*70.0-130*		*10/26/2020 04:33*	WG1564979

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	2.34	J	1.64	4.08	1	10/25/2020 14:07	WG1563737
C28-C40 Oil Range	8.13		0.279	4.08	1	10/25/2020 14:07	WG1563737
(S) o-Terphenyl	*63.5*			*18.0-148*		*10/25/2020 14:07*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.7		1	10/22/2020 23:34	WG1563475

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	37.5		9.42	20.5	1	10/25/2020 10:04	WG1564050

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	0.0264	B J	0.0222	0.102	1	10/24/2020 06:25	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*93.3*			*77.0-120*		*10/24/2020 06:25*	WG1564405

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		0.000490	0.00105	1	10/26/2020 04:52	WG1564979
Toluene	U		0.00136	0.00524	1	10/26/2020 04:52	WG1564979
Ethylbenzene	U		0.000773	0.00262	1	10/26/2020 04:52	WG1564979
Total Xylenes	U		0.000923	0.00681	1	10/26/2020 04:52	WG1564979
(S) Toluene-d8	*113*			*75.0-131*		*10/26/2020 04:52*	WG1564979
(S) 4-Bromofluorobenzene	*91.0*			*67.0-138*		*10/26/2020 04:52*	WG1564979
(S) 1,2-Dichloroethane-d4	*83.3*			*70.0-130*		*10/26/2020 04:52*	WG1564979

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.65	4.10	1	10/25/2020 12:24	WG1563737
C28-C40 Oil Range	1.34	B J	0.281	4.10	1	10/25/2020 12:24	WG1563737
(S) o-Terphenyl	*69.3*			*18.0-148*		*10/25/2020 12:24*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.9		1	10/22/2020 23:34	WG1563475

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	113		9.69	21.1	1	10/25/2020 10:33	WG1564050

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	10/24/2020 06:45	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*92.5*			*77.0-120*		*10/24/2020 06:45*	WG1564405

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000517	0.00111	1	10/26/2020 05:11	WG1564979
Toluene	U		0.00144	0.00553	1	10/26/2020 05:11	WG1564979
Ethylbenzene	U		0.000816	0.00277	1	10/26/2020 05:11	WG1564979
Total Xylenes	U		0.000974	0.00719	1	10/26/2020 05:11	WG1564979
(S) Toluene-d8	*115*			*75.0-131*		*10/26/2020 05:11*	WG1564979
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*		*10/26/2020 05:11*	WG1564979
(S) 1,2-Dichloroethane-d4	*78.3*			*70.0-130*		*10/26/2020 05:11*	WG1564979

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.70	4.21	1	10/25/2020 12:12	WG1563737
C28-C40 Oil Range	0.598	B J	0.289	4.21	1	10/25/2020 12:12	WG1563737
(S) o-Terphenyl	*70.3*			*18.0-148*		*10/25/2020 12:12*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.4		1	10/22/2020 23:34	WG1563475

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	80.6		9.96	21.6	1	10/25/2020 10:42	WG1564050

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	0.0271	B J	0.0235	0.108	1	10/24/2020 07:06	WG1564405
(S) a,a,a-Trifluorotoluene(FID)	*93.6*			*77.0-120*		*10/24/2020 07:06*	WG1564405

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		0.000544	0.00117	1	10/26/2020 05:30	WG1564979
Toluene	U		0.00151	0.00583	1	10/26/2020 05:30	WG1564979
Ethylbenzene	U		0.000859	0.00291	1	10/26/2020 05:30	WG1564979
Total Xylenes	U		0.00103	0.00757	1	10/26/2020 05:30	WG1564979
(S) Toluene-d8	*114*			*75.0-131*		*10/26/2020 05:30*	WG1564979
(S) 4-Bromofluorobenzene	*91.2*			*67.0-138*		*10/26/2020 05:30*	WG1564979
(S) 1,2-Dichloroethane-d4	*82.3*			*70.0-130*		*10/26/2020 05:30*	WG1564979

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		1.74	4.33	1	10/25/2020 11:34	WG1563737
C28-C40 Oil Range	0.425	B J	0.297	4.33	1	10/25/2020 11:34	WG1563737
(S) o-Terphenyl	*69.3*			*18.0-148*		*10/25/2020 11:34*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.9		1	10/22/2020 23:34	WG1563475

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	34.8		9.69	21.1	1	10/25/2020 10:52	WG1564050

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	0.0522	B J	0.0229	0.105	1	10/24/2020 09:16	WG1564689
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*77.0-120*		*10/24/2020 09:16*	WG1564689

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000517	0.00111	1	10/26/2020 05:49	WG1564979
Toluene	U		0.00144	0.00554	1	10/26/2020 05:49	WG1564979
Ethylbenzene	U		0.000816	0.00277	1	10/26/2020 05:49	WG1564979
Total Xylenes	U		0.000974	0.00720	1	10/26/2020 05:49	WG1564979
(S) Toluene-d8	*115*			*75.0-131*		*10/26/2020 05:49*	WG1564979
(S) 4-Bromofluorobenzene	*91.5*			*67.0-138*		*10/26/2020 05:49*	WG1564979
(S) 1,2-Dichloroethane-d4	*83.0*			*70.0-130*		*10/26/2020 05:49*	WG1564979

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.70	4.21	1	10/25/2020 11:46	WG1563737
C28-C40 Oil Range	0.455	B J	0.289	4.21	1	10/25/2020 11:46	WG1563737
(S) o-Terphenyl	*67.6*			*18.0-148*		*10/25/2020 11:46*	WG1563737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.0		1	10/22/2020 23:34	WG1563475

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	252		9.58	20.8	1	10/25/2020 11:01	WG1564050

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	0.0303	B J	0.0226	0.104	1	10/24/2020 09:39	WG1564689
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*77.0-120*		*10/24/2020 09:39*	WG1564689

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		0.000506	0.00108	1	10/25/2020 04:12	WG1564981
Toluene	U		0.00141	0.00542	1	10/25/2020 04:12	WG1564981
Ethylbenzene	U		0.000798	0.00271	1	10/25/2020 04:12	WG1564981
Total Xylenes	0.00352	J	0.000953	0.00704	1	10/25/2020 04:12	WG1564981
(S) Toluene-d8	*94.1*			*75.0-131*		*10/25/2020 04:12*	WG1564981
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*10/25/2020 04:12*	WG1564981
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*10/25/2020 04:12*	WG1564981

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	2.53	J	1.68	4.17	1	10/25/2020 11:59	WG1563737
C28-C40 Oil Range	1.12	B J	0.285	4.17	1	10/25/2020 11:59	WG1563737
(S) o-Terphenyl	*71.4*			*18.0-148*		*10/25/2020 11:59*	WG1563737

Method Blank (MB)

(MB) R3584901-1 10/23/20 01:13

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

L1274821-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1274821-02 10/23/20 01:13 • (DUP) R3584901-3 10/23/20 01:13

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.9	89.6	1	0.338		10

Laboratory Control Sample (LCS)

(LCS) R3584901-2 10/23/20 01:13

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

Method Blank (MB)

(MB) R3584816-1 10/22/20 16:16

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

L1274845-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1274845-02 10/22/20 16:16 • (DUP) R3584816-3 10/22/20 16:16

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	96.4	95.4	1	1.09		10

Laboratory Control Sample (LCS)

(LCS) R3584816-2 10/22/20 16:16

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) R3584899-1 10/23/20 00:45

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

L1274845-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1274845-13 10/23/20 00:45 • (DUP) R3584899-3 10/23/20 00:45

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	79.9	77.5	1	3.11		10

Laboratory Control Sample (LCS)

(LCS) R3584899-2 10/23/20 00:45

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

Method Blank (MB)

(MB) R3584898-1 10/23/20 00:02

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

L1274845-28 Original Sample (OS) • Duplicate (DUP)

(OS) L1274845-28 10/23/20 00:02 • (DUP) R3584898-3 10/23/20 00:02

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	93.7	94.5	1	0.855		10

Laboratory Control Sample (LCS)

(LCS) R3584898-2 10/23/20 00:02

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

Method Blank (MB)

(MB) R3584890-1 10/22/20 23:34

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

L1274845-33 Original Sample (OS) • Duplicate (DUP)

(OS) L1274845-33 10/22/20 23:34 • (DUP) R3584890-3 10/22/20 23:34

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	98.1	98.1	1	0.0221		10

Laboratory Control Sample (LCS)

(LCS) R3584890-2 10/22/20 23:34

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) R3584854-1 10/23/20 00:59

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

L1274845-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1274845-01 10/23/20 01:39 • (DUP) R3584854-3 10/23/20 01:48

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	642	656	1	2.26		20

L1274845-19 Original Sample (OS) • Duplicate (DUP)

(OS) L1274845-19 10/23/20 05:41 • (DUP) R3584854-6 10/23/20 05:50

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1530	1610	5	4.80		20

Laboratory Control Sample (LCS)

(LCS) R3584854-2 10/23/20 01:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	207	103	90.0-110	

L1274845-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274845-10 10/23/20 03:33 • (MS) R3584854-4 10/23/20 03:43 • (MSD) R3584854-5 10/23/20 03:52

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	513	346	888	886	106	105	1	80.0-120			0.289	20

Method Blank (MB)

(MB) R3585380-1 10/24/20 22:41

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

L1274845-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1274845-20 10/24/20 23:00 • (DUP) R3585380-3 10/24/20 23:09

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	77.0	73.8	1	4.25		20

L1274845-38 Original Sample (OS) • Duplicate (DUP)

(OS) L1274845-38 10/25/20 11:01 • (DUP) R3585380-6 10/25/20 11:11

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	252	260	1	3.01		20

Laboratory Control Sample (LCS)

(LCS) R3585380-2 10/24/20 22:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	205	102	90.0-110	

L1274845-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274845-21 10/24/20 23:19 • (MS) R3585380-4 10/24/20 23:28 • (MSD) R3585380-5 10/24/20 23:38

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	536	15.8	554	556	100	101	1	80.0-120			0.419	20

Method Blank (MB)

(MB) R3585037-3 10/23/20 02:33

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)	*110*			*77.0-120*

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

(LCS) R3585037-1 10/23/20 01:16 • (LCSD) R3585037-2 10/23/20 01:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.62	4.96	102	90.2	72.0-127			12.5	20
(S) a,a,a-Trifluorotoluene(FID)				*96.3*	*94.3*	*77.0-120*				

L1274682-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274682-01 10/23/20 03:36 • (MS) R3585037-4 10/23/20 11:03 • (MSD) R3585037-5 10/23/20 11:24

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	230	1.22	268	228	116	98.4	33.8	10.0-151			16.5	28
(S) a,a,a-Trifluorotoluene(FID)					*107*	*104*		*77.0-120*				

Method Blank (MB)

(MB) R3585312-2 10/23/20 10:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0342	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*102*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3585312-1 10/23/20 09:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.46	99.3	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*77.0-120*	

L1274550-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274550-06 10/23/20 14:31 • (MS) R3585312-3 10/23/20 18:18 • (MSD) R3585312-4 10/23/20 18:39

Analyte	Spike Amount (dry) mg/kg	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	114	1.25	149	172	95.7	111	25	10.0-151			14.3	28
(S) a,a,a-Trifluorotoluene(FID)					*117*	*117*		*77.0-120*				

Method Blank (MB)

(MB) R3585327-2 10/23/20 22:52

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0368	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*102*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3585327-1 10/23/20 20:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.05	91.8	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*115*	*77.0-120*	

L1275000-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1275000-07 10/24/20 02:38 • (MS) R3585327-3 10/24/20 07:27 • (MSD) R3585327-4 10/24/20 07:47

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	147	3.34	176	159	118	106	25	10.0-151			10.2	28
(S) a,a,a-Trifluorotoluene(FID)					*108*	*113*		*77.0-120*				

Method Blank (MB)

(MB) R3585963-2 10/24/20 03:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0677	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*99.1*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3585963-1 10/24/20 01:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.96	108	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*108*	*77.0-120*	

Method Blank (MB)

(MB) R3586079-3 10/26/20 04:33

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	*95.4*			*75.0-131*
(S) 4-Bromofluorobenzene	*103*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*

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

(LCS) R3586079-1 10/26/20 03:18 • (LCSD) R3586079-2 10/26/20 03:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.148	0.150	118	120	70.0-123			1.34	20
Ethylbenzene	0.125	0.123	0.122	98.4	97.6	74.0-126			0.816	20
Toluene	0.125	0.125	0.127	100	102	75.0-121			1.59	20
Xylenes, Total	0.375	0.366	0.378	97.6	101	72.0-127			3.23	20
(S) Toluene-d8				*95.3*	*97.5*	*75.0-131*				
(S) 4-Bromofluorobenzene				*102*	*98.9*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*115*	*117*	*70.0-130*				

L1274845-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274845-17 10/26/20 12:33 • (MS) R3586079-4 10/26/20 12:51 • (MSD) R3586079-5 10/26/20 13:10

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.134	U	0.151	0.142	113	106	1	10.0-149			6.64	37
Ethylbenzene	0.134	U	0.133	0.122	99.2	91.1	1	10.0-160			8.47	38
Toluene	0.134	U	0.135	0.124	101	92.7	1	10.0-156			8.33	38
Xylenes, Total	0.402	U	0.413	0.390	103	97.0	1	10.0-160			5.65	38
(S) Toluene-d8					*97.5*	*96.1*		*75.0-131*				
(S) 4-Bromofluorobenzene					*101*	*104*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*115*	*118*		*70.0-130*				

Method Blank (MB)

(MB) R3586005-3 10/25/20 22:32

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	*114*			*75.0-131*
(S) 4-Bromofluorobenzene	*88.7*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*81.5*			*70.0-130*

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

(LCS) R3586005-1 10/25/20 21:16 • (LCSD) R3586005-2 10/25/20 21:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.110	0.108	88.0	86.4	70.0-123			1.83	20
Ethylbenzene	0.125	0.125	0.117	100	93.6	74.0-126			6.61	20
Toluene	0.125	0.138	0.134	110	107	75.0-121			2.94	20
Xylenes, Total	0.375	0.326	0.347	86.9	92.5	72.0-127			6.24	20
(S) Toluene-d8				*119*	*117*	*75.0-131*				
(S) 4-Bromofluorobenzene				*88.3*	*87.2*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*85.5*	*84.4*	*70.0-130*				

L1274845-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274845-18 10/25/20 23:50 • (MS) R3586005-4 10/26/20 06:08 • (MSD) R3586005-5 10/26/20 06:27

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	0.130	0.000547	0.104	0.118	79.7	89.9	1	10.0-149			12.0	37
Ethylbenzene	0.130	0.000911	0.114	0.130	86.4	99.3	1	10.0-160			13.8	38
Toluene	0.130	U	0.125	0.138	96.0	106	1	10.0-156			9.60	38
Xylenes, Total	0.391	0.00341	0.336	0.393	84.9	99.7	1	10.0-160			15.9	38
(S) Toluene-d8					*114*	*110*		*75.0-131*				
(S) 4-Bromofluorobenzene					*90.2*	*90.3*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*84.1*	*84.2*		*70.0-130*				

Method Blank (MB)

(MB) R3585468-2 10/25/20 03:19

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	*94.9*			*75.0-131*
(S) 4-Bromofluorobenzene	*103*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3585468-1 10/25/20 02:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.144	115	70.0-123	
Ethylbenzene	0.125	0.123	98.4	74.0-126	
Toluene	0.125	0.123	98.4	75.0-121	
Xylenes, Total	0.375	0.369	98.4	72.0-127	
(S) Toluene-d8			*95.0*	*75.0-131*	
(S) 4-Bromofluorobenzene			*101*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*117*	*70.0-130*	

L1274866-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274866-19 10/25/20 10:50 • (MS) R3585468-3 10/25/20 11:09 • (MSD) R3585468-4 10/25/20 11:27

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	0.131	U	0.133	0.0699	101	53.2	1	10.0-149		J3	61.8	37
Ethylbenzene	0.131	U	0.111	0.0625	84.8	47.5	1	10.0-160		J3	56.3	38
Toluene	0.131	U	0.110	0.0604	84.0	45.9	1	10.0-156		J3	58.6	38
Xylenes, Total	0.394	U	0.342	0.195	86.7	49.3	1	10.0-160		J3	54.9	38
(S) Toluene-d8					*93.1*	*93.5*		*75.0-131*				
(S) 4-Bromofluorobenzene					*104*	*106*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*118*	*114*		*70.0-130*				

Method Blank (MB)

(MB) R3585921-2 10/26/20 15:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	0.000500	J	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	*97.8*			*75.0-131*
(S) 4-Bromofluorobenzene	*104*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3585921-1 10/26/20 14:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.131	105	70.0-123	
Ethylbenzene	0.125	0.105	84.0	74.0-126	
Toluene	0.125	0.113	90.4	75.0-121	
Xylenes, Total	0.375	0.331	88.3	72.0-127	
(S) Toluene-d8			*95.6*	*75.0-131*	
(S) 4-Bromofluorobenzene			*97.6*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*114*	*70.0-130*	

Method Blank (MB)

(MB) R3585256-1 10/24/20 06:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*80.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3585256-2 10/24/20 06:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	44.9	89.8	50.0-150	
(S) o-Terphenyl			*117*	*18.0-148*	

L1274845-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274845-01 10/24/20 10:01 • (MS) R3585256-3 10/24/20 10:14 • (MSD) R3585256-4 10/24/20 10:27

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	49.1	1.89	42.0	42.9	81.7	83.4	1	50.0-150			2.19	20
(S) o-Terphenyl					*101*	*104*		*18.0-148*				

Method Blank (MB)

(MB) R3585391-1 10/25/20 09:26

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	0.494	J	0.274	4.00
(S) o-Terphenyl	*72.4*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3585391-2 10/25/20 09:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	48.6	36.0	74.1	50.0-150	
(S) o-Terphenyl			*82.9*	*18.0-148*	

L1274845-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1274845-20 10/25/20 13:28 • (MS) R3585391-3 10/25/20 13:41 • (MSD) R3585391-4 10/25/20 13:54

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	49.3	4.76	41.9	40.7	75.3	74.1	1	50.0-150			2.95	20
(S) o-Terphenyl					*80.2*	*79.2*		*18.0-148*				

Method Blank (MB)

(MB) R3585260-1 10/24/20 16:54

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	*94.7*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3585260-2 10/24/20 17:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	45.1	90.2	50.0-150	
(S) o-Terphenyl			*111*	*18.0-148*	

L1275810-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1275810-03 10/24/20 17:33 • (MS) R3585260-3 10/24/20 17:47 • (MSD) R3585260-4 10/24/20 18:00

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	59.4	U	31.3	40.7	52.7	68.9	1	50.0-150		J3	26.1	20
(S) o-Terphenyl					*51.4*	*77.9*		*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.
J3	The associated batch QC was outside the established quality control range for precision.

ACCREDITATIONS & LOCATIONS

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

State Accreditations

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

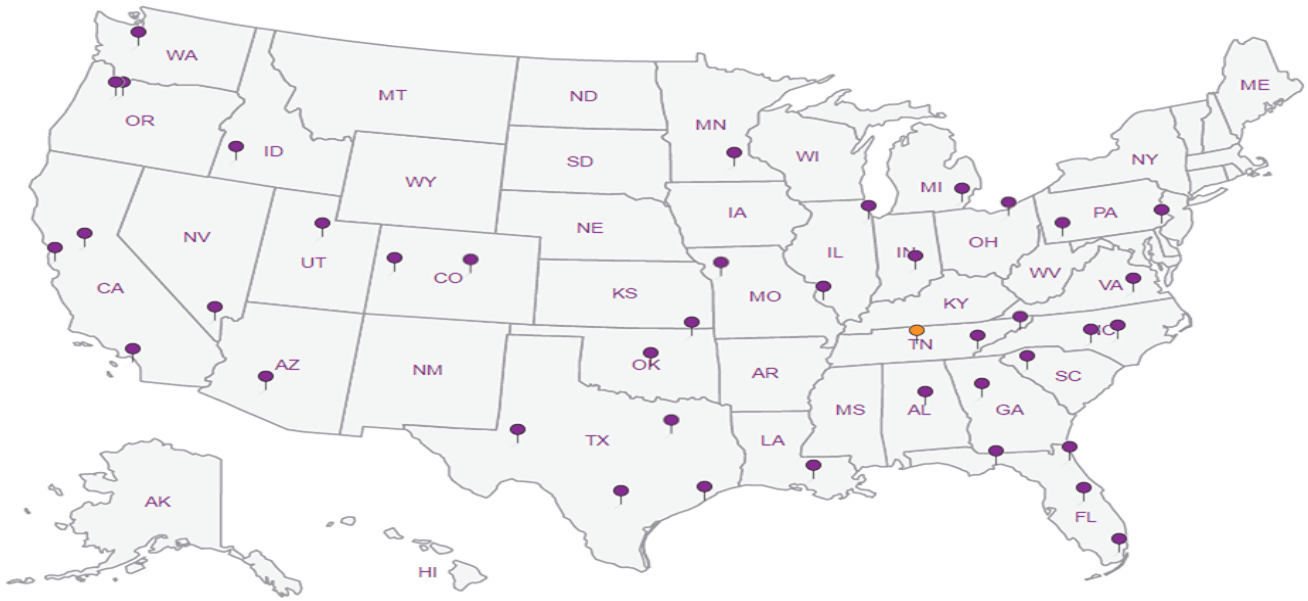
Third Party Federal Accreditations

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

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

Our Locations

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



Analysis Request of Chain of Custody Record

A048

Tetra Tech, Inc.

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

4274805

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	Vac Abo #4	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02110
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Joe Tyler
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	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	PCBs 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')	10/13/20	1000		X				X			1	N	X		X												X						- 01
	BH-1 (2'-3')	10/13/20	1010		X				X			1	N	X		X												X						- 02
	BH-1 (4'-5')	10/13/20	1020		X				X			1	N	X		X												X						- 03
	BH-1 (6'-7')	10/13/20	1030		X				X			1	N	X		X												X						- 04
	BH-1 (9'-10')	10/13/20	1040		X				X			1	N	X		X												X						- 05
	BH-1 (14'-15')	10/13/20	1100		X				X			1	N	X		X												X						- 06
	BH-1 (19'-20')	10/13/20	1120		X				X			1	N	X		X												X						- 07
	BH-2 (0'-1')	10/13/20	1200		X				X			1	N	X		X												X						- 08
	BH-2 (2'-3')	10/13/20	1210		X				X			1	N	X		X												X						- 09
	BH-2 (4'-5')	10/13/20	1220		X				X			1	N	X		X												X						- 10

Relinquished by: Joe Tyler	Date: 10-16-20	Time:	Received by: Monica Gaines
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

10/17/20 @ 0915

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

NCF

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

9050 0894 4001

1.4 + 0 = 1.4 MM

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

U274845

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	Vac Abo #4	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02110
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Joe Tyler

Comments: COPTETRA Acctnum

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	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
	BH-2 (6'-7')	10/13/20	1230		X				X			1	N	X		X												X						-11
	BH-2 (9'-10')	10/13/20	1240		X				X			1	N	X		X												X						-12
	BH-2 (14'-15')	10/13/20	1300		X				X			1	N	X		X												X						-13
	BH-2 (19'-20')	10/13/20	1320		X				X			1	N	X		X												X						-14
	BH-2 (24'-25')	10/13/20	1340		X				X			1	N	X		X												X						-15
	BH-2 (29'-30')	10/13/20	1400		X				X			1	N	X		X												X						-16
	BH-2 (34'-35')	10/13/20	1430		X				X			1	N	X		X												X						-17
	BH-3 (0'-1')	10/13/20	1530		X				X			1	N	X		X												X						-18
	BH-3 (2'-3')	10/13/20	1540		X				X			1	N	X		X												X						-19
	BH-3 (4'-5')	10/13/20	1550		X				X			1	N	X		X												X						-20

Relinquished by: Joe Tyler	Date: 10-16-20	Time:	Received by: Maurice Barrett	Date: 10/16 Time: 3:00 PM
Relinquished by:	Date:	Time:	Received by:	Date: Time:
Relinquished by:	Date:	Time:	Received by:	Date: Time: 10/17/20 845

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 #: _____

1.4 ± 0 = 1.4 MM AD

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

L1274845

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	Vac Abo #4	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02110
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Joe Tyler

Comments: COPTETRA Acctnum

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	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
	BH-3 (6'-7')	10/13/20	1600		X				X			1	N	X		X												X						-1
	BH-3 (9'-10')	10/13/20	1620		X				X			1	N	X		X												X						-2
	BH-3 (14'-15')	10/13/20	1640		X				X			1	N	X		X												X						-3
	BH-3 (19'-20')	10/13/20	1700		X				X			1	N	X		X												X						-4
	BH-7 (0'-1')	10/14/20	1000		X				X			1	N	X		X												X						-5
	BH-7 (2'-3')	10/14/20	1010		X				X			1	N	X		X												X						-6
	BH-7 (4'-5')	10/14/20	1020		X				X			1	N	X		X												X						-7
	BH-7 (6'-7')	10/14/20	1030		X				X			1	N	X		X												X						-8
	BH-7 (9'-10')	10/14/20	1040		X				X			1	N	X		X												X						-9
	BH-9 (0'-1')	10/14/20	1100		X				X			1	N	X		X												X						-10

Relinquished by: Joe Tyler	Date: 10-16-20	Time: 0-0900	Received by: Mackenzie Corbett	Date: 10/16/20	Time: 2:00
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by: Randy Mc	Date: 10/17/20	Time: 845

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 #: _____

1.4 + 0 = 1.4 MM

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

L127845

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	Vac Abo #4	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02110
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Joe Tyler
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 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
	BH-9 (2'-3')	10/14/20	1110		X			X		1	N	X		X												X					-31
	BH-9 (4'-5')	10/14/20	1120		X			X		1	N	X		X												X					-32
	BH-9 (6'-7')	10/14/20	1130		X			X		1	N	X		X												X					
	BH-9 (9'-10')	10/14/20	1140		X			X		1	N	X		X												X					
	BH-10 (0'-1')	10/14/20	1200		X			X		1	N	X		X												X					-33
	BH-10 (2'-3')	10/14/20	1210		X			X		1	N	X		X												X					-34
	BH-10 (4'-5')	10/14/20	1220		X			X		1	N	X		X												X					-35
	BH-10 (6'-7')	10/14/20	1240		X			X		1	N	X		X												X					-36
	BH-10 (9'-10')	10/14/20	1300		X			X		1	N	X		X												X					-37

Relinquished by: Joe Ty	Date: 10-16-20	Time: 2:15	Received by: Mauricio Barrett 10/16 2:15
Relinquished by:	Date:	Time:	Received by: Mauricio Barrett	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date: 10/17/20	Time: 845

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 #: _____

1.4+0=1.4 MM AT

Troy Dunlap

Pace Analytical®
National Center for Testing & Innovation

Login #: L1274845	Client: COPTETRA	Date: 10/17/20	Evaluated by: Troy Dunlap

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time	1	Login Clarification Needed		**If Broken Container:**
	Temperature not in range		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	pH not in range.		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Cour
	Insufficient sample volume.	2	Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: 1.) Did not receive BH-9 (6-7) and BH-9 (9-10).
2.) Received BH-2 (39-40) not listed on the COC.

Client informed by:		Call	x	Email		Voice Mail		Date: 10/19/20	Time: 15:45
TSR Initials: CM	Client Contact: Christian Llull								

Login Instructions:

1. Client notified.
2. Add sample for V8260BTEX, GRO, DRORLA, CHLORIDE-300, TS.

APPENDIX F
Boring Logs

212C-MD-02110 | TETRA TECH | **LOG OF BORING BH-1** | Page 1 of 1

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.798154°, -103.434782° | Surface Elevation: 3920 ft

Borehole Number: BH-1 | Borehole Diameter (in.): 5 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
												-- FILL MATERIAL; White, poorly cemented, with no odor, with no staining.	1	BH-1 (0'-1')
												-SM- SILTY SAND; White, heavily cemented, with heavy gravel, with no odor, with no staining.		
			308									With interbedded caliche and calcrete.		BH-1 (2'-3')
5														BH-1 (4'-5')
													5.5	
												-SM- SILTY SAND; White, heavily cemented, with moderate gravel, with no odor, with no staining.		BH-1 (6'-7')
												With interbedded caliche and calcrete.		
10			143											BH-1 (9'-10')
15														BH-1 (14'-15')
													17	
												-SM- SILTY SAND; White, moderately cemented, with heavy gravel, with no odor, with no staining.		
												With interbedded caliche and calcrete.		
20			204										20	BH-1 (19'-20')

Bottom of borehole at 20.0 feet.

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

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

Notes:

Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

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

212C-MD-02110	TETRA TECH	LOG OF BORING BH-2	Page 1 of 2

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.798512°, -103.434283° | Surface Elevation: 3917 ft

Borehole Number: BH-2 | Borehole Diameter (in.): 5 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
												-- FILL MATERIAL; White, poorly cemented, with no odor, with no staining.	1	BH-2 (0'-1')
												-SM- SILTY SAND; White, heavily cemented, with heavy gravel, with no odor, with no staining. With interbedded caliche and calcrete.		BH-2 (2'-3')
5														BH-2 (4'-5')
			488										5.5	BH-2 (6'-7')
												-SM- SILTY SAND; White, heavily cemented, with moderate gravel, with no odor, with no staining. With interbedded caliche and calcrete.		
10			360											BH-2 (9'-10')
15			604											BH-2 (14'-15')
													17	
												-SM- SILTY SAND; White, moderately cemented, with heavy gravel, with no odor, with no staining. With interbedded caliche and calcrete.		
20			843											BH-2 (19'-20')
													22	
												-SM- SILTY SAND; Tan, poorly cemented, with no gravel, with no odor, with no staining. With interbedded caliche and calcrete.		
25			541											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

Notes:
Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

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

212C-MD-02110	TETRA TECH	LOG OF BORING BH-2	Page 2 of 2

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.798512°, -103.434283° | Surface Elevation: 3917 ft

Borehole Number: BH-2 | Borehole Diameter (in.): 5 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
30			490											BH-2 (29'-30')
35			401										35	BH-2 (34'-35')

Bottom of borehole at 35.0 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:

Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

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

212C-MD-02110 | TETRA TECH | **LOG OF BORING BH-3** | Page 1 of 1

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.798486°, -103.434748° | Surface Elevation: 3917 ft

Borehole Number: BH-3 | Borehole Diameter (in.): 5 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
												-- FILL MATERIAL; White, poorly cemented, with no odor, with no staining.	1	BH-3 (0'-1')
			1390									**-SM-** SILTY SAND; White, heavily cemented, with heavy gravel, with no odor, with no staining. With interbedded caliche and calcrete.		BH-3 (2'-3')
5													5.5	BH-3 (4'-5')
												-SM- SILTY SAND; White, heavily cemented, with moderate gravel, with no odor, with no staining. With interbedded caliche and calcrete.		BH-3 (6'-7')
10			161											BH-3 (9'-10')
15			204											BH-3 (14'-15')
													17	
												-SM- SILTY SAND; White, moderately cemented, with heavy gravel, with no odor, with no staining. With interbedded caliche and calcrete.		
20			101										20	BH-3 (19'-20')

Bottom of borehole at 20.0 feet.

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

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

Notes:

Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

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

212C-MD-02110	TETRA TECH	LOG OF BORING BH-5	Page 1 of 1

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.798454°, -103.434928° | Surface Elevation: 3918 ft

Borehole Number: BH-5 | Borehole Diameter (in.): 2 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
			99									**-SM-** SILTY SAND; Brown, dry, with no odor, with no staining.	1	BH-5 (0'-1')

Bottom of borehole at 1.0 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:

Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

Logger: Adrian Garcia | Drilling Equipment: Hand Auger | Driller: Tetra Tech

212C-MD-02110	TETRA TECH	LOG OF BORING BH-6	Page 1 of 1

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.798108°, -103.434929° | Surface Elevation: 3920 ft

Borehole Number: BH-6 | Borehole Diameter (in.): 2 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
			130									**-SM-** SILTY SAND; Brown, dry, with no odor, with no staining.	1	BH-6 (0'-1')

Bottom of borehole at 1.0 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:

Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

Logger: Adrian Garcia | Drilling Equipment: Hand Auger | Driller: Tetra Tech

212C-MD-02110	TETRA TECH	LOG OF BORING BH-7	Page 1 of 1

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.797971°, -103.434718° | Surface Elevation: 3919 ft

Borehole Number: BH-7 | Borehole Diameter (in.): 5 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
												-- FILL MATERIAL; White, poorly cemented, with no odor, with no staining.	1	BH-7 (0'-1')
												-SM- SILTY SAND; White, heavily cemented, with heavy gravel, with no odor, with no staining. With interbedded caliche and calcrete.		BH-7 (2'-3')
5														BH-7 (4'-5')
													5.5	
												-SM- SILTY SAND; White, heavily cemented, with moderate gravel, with no odor, with no staining. With interbedded caliche and calcrete.		BH-7 (6'-7')
10														BH-7 (9'-10')
15														BH-7 (14'-15')
													17	
												-SM- SILTY SAND; White, moderately cemented, with heavy gravel, with no odor, with no staining. With interbedded caliche and calcrete.		
20													20	BH-7 (19'-20')

Bottom of borehole at 20.0 feet.

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

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

Notes:
Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

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

212C-MD-02110	TETRA TECH	**LOG OF BORING BH-9**	Page 1 of 1

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.798285°, -103.433895° | Surface Elevation: 3917 ft

Borehole Number: BH-9 | Borehole Diameter (in.): 5 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
												-- FILL MATERIAL; White, poorly cemented, with no odor, with no staining.	1	BH-9 (0'-1')
												-SM- SILTY SAND; White, heavily cemented, with heavy gravel, with no odor, with no staining. With interbedded caliche and calcrete.		BH-9 (2'-3')
5														BH-9 (4'-5')
													5.5	
												-SM- SILTY SAND; White, heavily cemented, with moderate gravel, with no odor, with no staining. With interbedded caliche and calcrete.		BH-9 (6'-7')
10														BH-9 (9'-10')
15														BH-9 (14'-15')
													17	
												-SM- SILTY SAND; White, moderately cemented, with heavy gravel, with no odor, with no staining. With interbedded caliche and calcrete.		
20													20	BH-9 (19'-20')

Bottom of borehole at 20.0 feet.

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

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

Notes:
Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

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

212C-MD-02110	TETRA TECH	**LOG OF BORING BH-10**	Page 1 of 1

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.798495°, -103.433834° | Surface Elevation: 3915 ft

Borehole Number: BH-10 | Borehole Diameter (in.): 5 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
												-- FILL MATERIAL; White, poorly cemented, with no odor, with no staining.	1	BH-10 (0'-1')
												-SM- SILTY SAND; White, heavily cemented, with heavy gravel, with no odor, with no staining. With interbedded caliche and calcrete.		BH-10 (2'-3')
5														BH-10 (4'-5')
													5.5	
												-SM- SILTY SAND; White, heavily cemented, with moderate gravel, with no odor, with no staining. With interbedded caliche and calcrete.		BH-10 (6'-7')
10														BH-10 (9'-10')
15														BH-10 (14'-15')
													17	
												-SM- SILTY SAND; White, moderately cemented, with heavy gravel, with no odor, with no staining. With interbedded caliche and calcrete.		
20													20	BH-10 (19'-20')

Bottom of borehole at 20.0 feet.

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

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

Notes:
Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

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

212C-MD-02110	TETRA TECH	LOG OF BORING BH-11	Page 1 of 1

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.798498°, -103.433410° | Surface Elevation: 3913 ft

Borehole Number: BH-11 | Borehole Diameter (in.): 2 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
			125									**-SM-** SILTY SAND; Brown, dry, with no odor, with no staining.		BH-11 (0'-1')
			225										2	BH-11 (0'-1')

Bottom of borehole at 2.0 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:

Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

Logger: Adrian Garcia | Drilling Equipment: Hand Auger | Driller: Tetra Tech

212C-MD-02110	TETRA TECH	LOG OF BORING BH-12	Page 1 of 1

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.798667°, -103.432599° | Surface Elevation: 3910 ft

Borehole Number: BH-12 | Borehole Diameter (in.): 2 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
			250									**-SM-** SILTY SAND; Brown, dry, with no odor, with no staining.		BH-12 (0'-1')
			190										2	BH-12 (0'-1')

Bottom of borehole at 2.0 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:

Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

Logger: Adrian Garcia | Drilling Equipment: Hand Auger | Driller: Tetra Tech

212C-MD-02110 | TETRA TECH | **LOG OF BORING BH-13** | Page 1 of 1

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.798504°, -103.432030° | Surface Elevation: 3910 ft

Borehole Number: BH-13 | Borehole Diameter (in.): 2 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
			260									**-SM-** SILTY SAND; Brown, dry, with no odor, with no staining.		BH-13 (0'-1')
			305										2	BH-13 (0'-1')

Bottom of borehole at 2.0 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:

Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

Logger: Adrian Garcia | Drilling Equipment: Hand Auger | Driller: Tetra Tech

212C-MD-02110	TETRA TECH	**LOG OF BORING BH-14**	Page 1 of 1

Project Name: Vacuum Abo Battery #4 Trunkline Release

Borehole Location: GPS Coordinates: 32.798707°, -103.431531° | Surface Elevation: 3910 ft

Borehole Number: BH-14 | Borehole Diameter (in.): 2 | Date Started: 10/13/2020 | Date Finished: 10/13/2020

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
			420									**-SM-** SILTY SAND; Brown, dry, with no odor, with no staining.		BH-14 (0'-1')
			450										2	BH-14 (0'-1')

Bottom of borehole at 2.0 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:

Surface elevation is an estimated value based on Google Earth. Laboratory analytical sample IDs and intervals are shown in the "Remarks" column.

Logger: Adrian Garcia | Drilling Equipment: Hand Auger | Driller: Tetra Tech

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

CONDITIONS

Action 17984

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 17984
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Deferral approved. Site will remain in "Closure not approved" status until closure report received after remediation is completed during equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.	1/4/2023
bhall	1RP-3714 closed. Refer to incident #nTO1518757703 in all future communication.	1/4/2023