



Sam Widmer
ConocoPhillips
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September 1, 2021

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Subject: **EVGSAU 2717-006 Wellhead Release**
Unit Letter P, Section 27, Township 17 South, Range 35 East
Lea County, New Mexico
1RP-1694
Incident ID nPAC0801030962

Sir or Madam:

ConocoPhillips Company entered into an Agreed Compliance Order (ACO) with the NMOCD on May 9, 2019 related to unresolved releases pursuant to 19.15.29.16(9) NMAC. The ACO required COPC to submit characterization and/or remediation plans with proposed timeframes for the ongoing corrective actions or remediations identified to the NMOCD no later than September 1, 2021.

As of April 19, 2021, COPC has submitted characterization and remediation plans for all of the properties identified and owned; for sites not owned, Asset Sold Letters have been submitted. These documents have been submitted to the NMOCD via CentreStack, a Secure Access & File Sharing platform, at the direction of Mr. Bradford Billings, Hydrologist, NMOCD.

Enclosed is a copy of the Release Characterization and Remediation Work Plan for the subject line incident. This Work Plan has been previously submitted in its entirety via the CentreStack platform. It is now duly submitted separately via the NMOCD Fee Application portal.

If you have any questions, please contact me at 281-206-5298.

Sincerely,

A handwritten signature in blue ink that reads "Sam Widmer".

Sam A. Widmer
Program Manager – RMR

cc: Site Files

Attachments: Release Characterization and Remediation Work Plan, EVGSAU 2717-006
Wellhead Release, Incident ID nPAC0801030962



March 9, 2021

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

**Re: Release Characterization and Remediation Work Plan
ConocoPhillips
EVGSAU 2717-006 Wellhead Release
Unit Letter P, Section 27, Township 17 South, Range 35 East
Lea County, New Mexico
1RP-1694
Incident ID nPAC0801030962**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a release that occurred from the East Vacuum Grayburg-San Andres Unit (EVGSAU) 2717-006 wellhead stuffing box (API No. 30-025-20835). The release footprint is located in Public Land Survey System (PLSS) Unit Letter P, Section 27, Township 17 South, Range 35 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.801293°, -103.439733°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report (Appendix A), a release occurred on December 23, 2007 due to a stuffing box leak. The release consisted of 5 barrels (bbls) of oil and 21 bbls of produced water and reportedly affected a 110-foot (ft) by 250-ft area of pad and pasture. During immediate response actions a vacuum truck recovered 1 bbl of oil and 21 bbls of produced water. The New Mexico Oil Conservation District (NMOCD) received the C-141 report form for the release on January 3, 2008. The release was subsequently assigned Remediation Permit (RP) number 1RP-1694 and the Incident ID nPAC0801030962. The 1RP-1694 release is included in an Agreed Compliance Order-Releases (ACO-R) between COP and the NMOCD signed on May 7 and 9, 2019, respectively.

SITE CHARACTERIZATION

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

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are seven (7) water wells within an 800-meters radius (approximately ½ mile) of the Site. The average depth to groundwater is 70 ft below ground surface (bgs). The site characterization data is included in Appendix B.

REGULATORY FRAMEWORK

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

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

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

Constituent	Remediation RRAL
Chloride	10,000 mg/kg
TPH	2,500 mg/kg
BTEX	50 mg/kg

Additionally, in accordance with the NMOCD guidance *Procedures for Implementation of the Spill Rule (19.15.29 NMAC)* (September 6, 2019), the following reclamation RRALs for surface soils (0-4 ft bgs) outside of active oil and gas operations are as follows:

Constituent	Reclamation RRAL
Chloride	600 mg/kg
TPH	100 mg/kg
BTEX	50 mg/kg

INITIAL ASSESSMENT ACTIVITIES

Given the age of the release, COP requested that eTech Environmental & Safety Solutions (eTech) conduct soil screening associated with the release area on September 9, 2019 to attempt the initial delineation. A Site Diagram prepared by eTech presents their screening locations and associated soil screening results (Appendix C). The soil screening results revealed high salinity concentrations (interpreted to reflect chloride impact) in six locations (SP-2 through SP-5 and SP-8 through SP-9), all located within impacted areas on the caliche well pad and unvegetated areas due south of the well pad.

A cursory review of aerial imagery revealed that the area south of the well pad currently exhibits a relative lack of vegetation typical of produced water impacts. The area south of the caliche well pad shows evidence of soil disturbance in the relative footprint of the release area (2011 imagery), however, the entire vicinity has appeared unvegetated in aerial imagery dating back to earlier than the release date (as early as 1996). To date, no records of remediation have been found for the release footprint. According to the NMOCD Oil and Gas Map web application, the COP Vacuum Abo Unit #005 well (API No. 30-025-30759) was located just east of the footprint before it was plugged in 2009. A substantially large area immediately west of the release area is presumed to be an inactive caliche pit, however that presumption has not been verified. Photographic documentation of Site conditions taken during a June 2020 Site visit conducted by Tetra Tech is presented in Appendix D.

ADDITIONAL SITE ASSESSMENT

Tetra Tech personnel were on site on behalf of ConocoPhillips in November 2020 and January 2021 to conduct soil sampling to achieve vertical and horizontal delineation of the release extent. Three (3) borings (BH-1 through BH-3) were installed inside the release extent using an air rotary drilling to depths of 20 ft bgs to achieve vertical delineation. Four (4) borings (BH-4 through BH-7) were installed using an air rotary drilling rig to depths of 4 ft bgs along the perimeter of the release to horizontally delineate the release extent to the south, east and north, respectively. Two (2) additional borings (BH-8 and BH-9) were installed further outside the perimeter to depths of 1 ft bgs to complete horizontal delineation to the north and east, respectively. Soils at the Site consist of approximately 1.5 ft of brown silty clay underlain by a caliche cap rock. Figure 3 depicts the release extent and the November 2020 and January 2021 soil boring locations, and GPS coordinates for the boring locations are presented in Table 1.

A total of thirty-one (31) samples were collected from the nine (9) borings (BH-1 through BH-9) and submitted to Pace Analytical National Center for Testing & Innovation (Pace) in Nashville, Tennessee to be analyzed for chlorides via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method

8021B. A copy of the laboratory analytical reports and chain-of-custody documentation are included in Appendix E.

SUMMARY OF SAMPLING RESULTS

Results from the November 2020 and January 2021 soil sampling events are summarized in Table 2. The analytical results associated with the interior boring locations BH-2 and BH-3 exceeded the off-pad Site reclamation RRAL for chloride (600 mg/kg) in sample intervals from the ground surface to 4 ft bgs. The analytical results for sample intervals below 4 ft bgs at these boring locations were below the applicable off-pad Site remediation RRAL for chloride (10,000 mg/kg). Interior boring location BH-1 is located on a caliche well pad in an active production area, and thus is not currently subject to the Site reclamation RRALs. Although the analytical results associated with boring location BH-1 exceeded the Site reclamation RRAL for chloride (600 mg/kg) in the sample intervals from the ground surface to 3 ft bgs, they were below the applicable remediation RRAL for chloride (10,000 mg/kg). There were no other analytical results which exceeded the applicable Site reclamation or remediation RRALs for chloride during the additional assessment.

The analytical results associated with the interior boring location BH-3 exceeded the Site reclamation RRAL for TPH (100 mg/kg) in the sample intervals from the ground surface down to 3 ft bgs. In addition, the analytical results associated with the perimeter boring locations BH-5 and BH-7 exceeded the Site reclamation RRAL for TPH (100 mg/kg) in the 0-1 ft bgs sample intervals. Following the receipt of these analytical results, the perimeter boring locations BH-8 and BH-9 were installed to complete horizontal delineation of the release extent. Although the analytical results associated with the 0-1 ft bgs sample interval at boring location BH-8 (124 mg/kg) slightly exceeded the Site reclamation RRAL for TPH (100 mg/kg), this boring is located approximately 200 ft away from and uphill from the release point and therefore is not presumed to be associated with the 1RP-1694 release event. The remainder of the analyzed samples were below the applicable Site reclamation and remediation RRALs for TPH. The analytical results associated with all samples analyzed were below the Site RRAL for BTEX.

REMEDIATION WORK PLAN

Based on the analytical results, ConocoPhillips proposes to remove the remaining impacted material as shown in Figure 4. Impacted soils will be excavated using heavy equipment (backhoes, hoe rams, and track hoes) to a maximum depth of 4 ft below the surrounding surface or until a representative sample from the walls and bottom of the excavation is below the RRALs.

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Confirmation bottom and sidewall samples will be collected for verification of remedial activities, and analyzed for TPH, BTEX, and chlorides. Once results are received, NMOCD will be notified and the excavation will then be backfilled with clean material to surface grade. The estimated volume of material to be remediated is approximately 4,970 cubic yards.

ALTERNATIVE CONFIRMATION SAMPLING PLAN

In accordance with 19.15.29.12(D)(1)(b) NMAC, ConocoPhillips proposes the following alternative confirmation sampling plan to adhere with NMOCD requirements. The proposed confirmation sample locations are depicted in Figure 5. Sixty-eight (68) confirmation floor samples and thirty-five (35) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses a surface area of approximately 33,550 square ft.

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

SITE RECLAMATION AND RESTORATION PLAN

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

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

CONCLUSION

ConocoPhillips proposes to begin remediation activities at the Site within 1 year of NMOCD plan approval. The EVGSAU 2717-006 Wellhead Release (1RP-1694) is included in an Agreed Compliance Order-Releases (ACO-R) between COP and the NMOCD signed on May 7 and 9, 2019, respectively. COP is dedicated to addressing and closing all historical releases included in the ACO-R, and given the number of releases to be addressed, 1 year is anticipated to be a practicable timeline. On-site reclamation and restoration will occur once the well is plugged and operations have ceased at this active well pad. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results of the confirmation sampling will be submitted to NMOCD.

If you have any questions concerning the soil assessment or the proposed remediation activities for the Site, please call me at (512) 739-7874 or Christian at (512) 338-2861.

Sincerely,
Tetra Tech, Inc.



Samantha K. Abbott, P.G.
Senior Staff Geologist



Christian M, Llull, P.G.
Project Manager

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

LIST OF ATTACHMENTS

Figures:

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

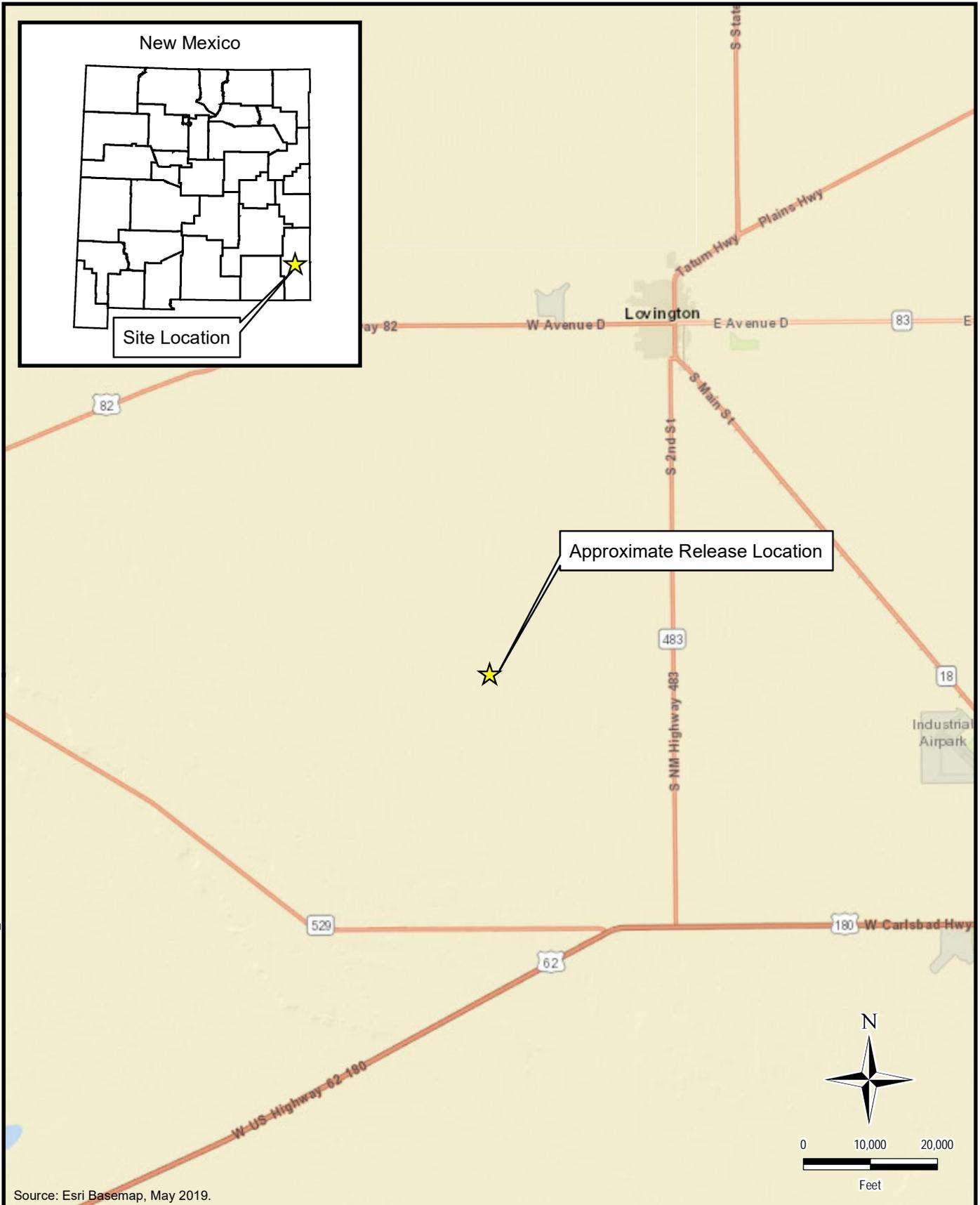
Tables:

- Table 1 – Boring Location Coordinates
- Table 2 – Summary of Analytical Results – Soil Assessment

Appendices:

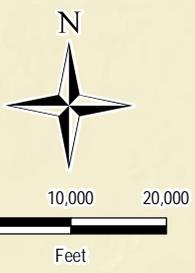
- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – eTech Soil Screening Map (September 9, 2019)
- Appendix D – Photographic Documentation
- Appendix E – Laboratory Analytical Data
- Appendix F – NMSLO Seed Mixture Details

FIGURES

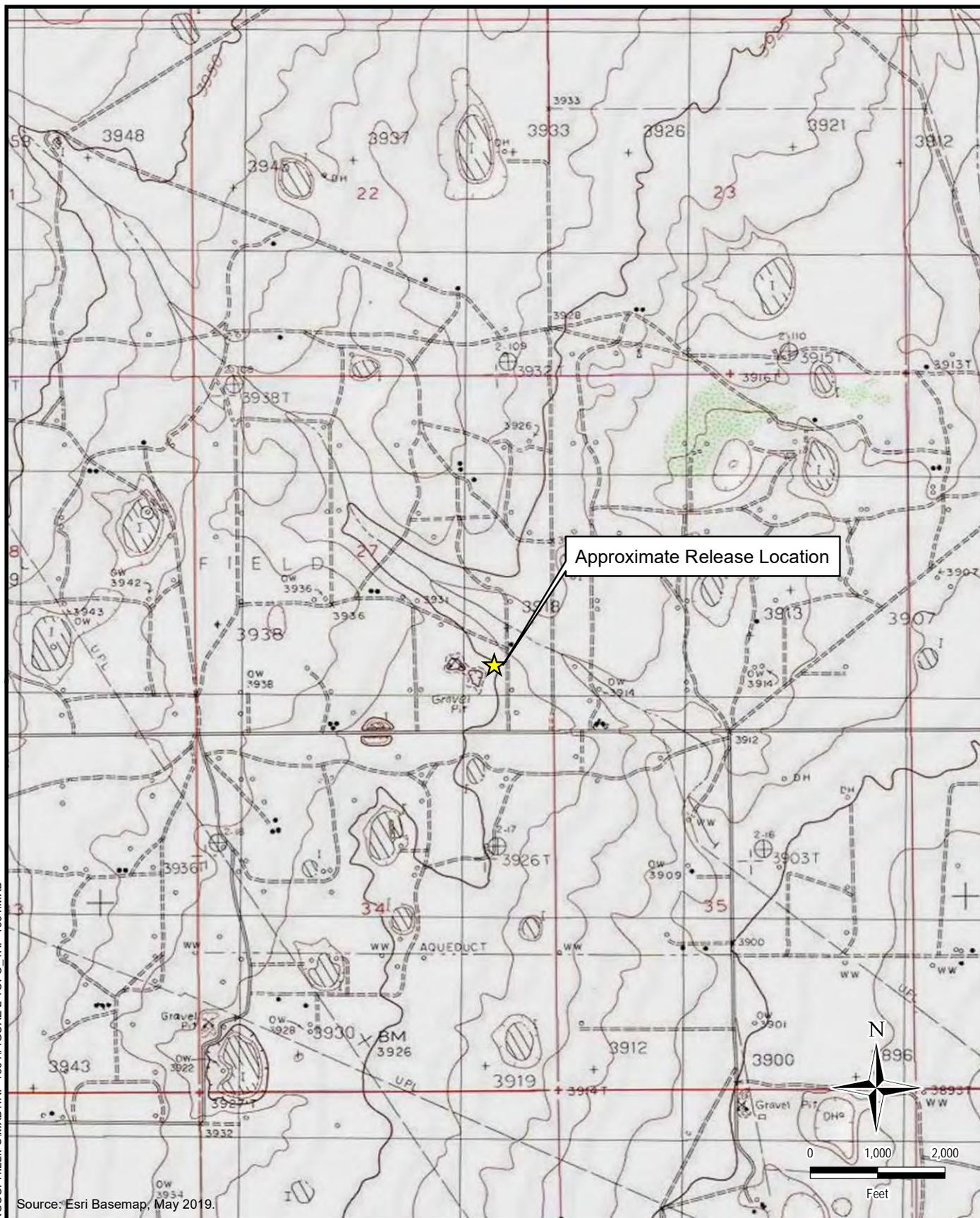


DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\1RP-1694\FIGURE 1 OVERVIEW_1RP-1694.MXD

Source: Esri Basemap, May 2019.



 <p>www.tetratech.com 901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946</p>	<p>CONOCOPHILLIPS</p> <p>1RP-1694 (32.801293°, -103.439733°) LEA COUNTY, NEW MEXICO</p>	<p>PROJECT NO.: 212C-MD-02334</p>
	<p>EVGSAU 2717-006 WELLHEAD RELEASE SITE LOCATION MAP</p>	<p>DATE: FEBRUARY 16, 2021</p> <p>DESIGNED BY: AAM</p>
	<p>Figure No. 1</p>	



Source: Esri Basemap, May 2019.

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CONOCOPHILLIPS

1RP-1694
 (32.801293°, -103.439733°)
 LEA COUNTY, NEW MEXICO

EVGSAU 2717-006 WELLHEAD RELEASE
 TOPOGRAPHIC MAP

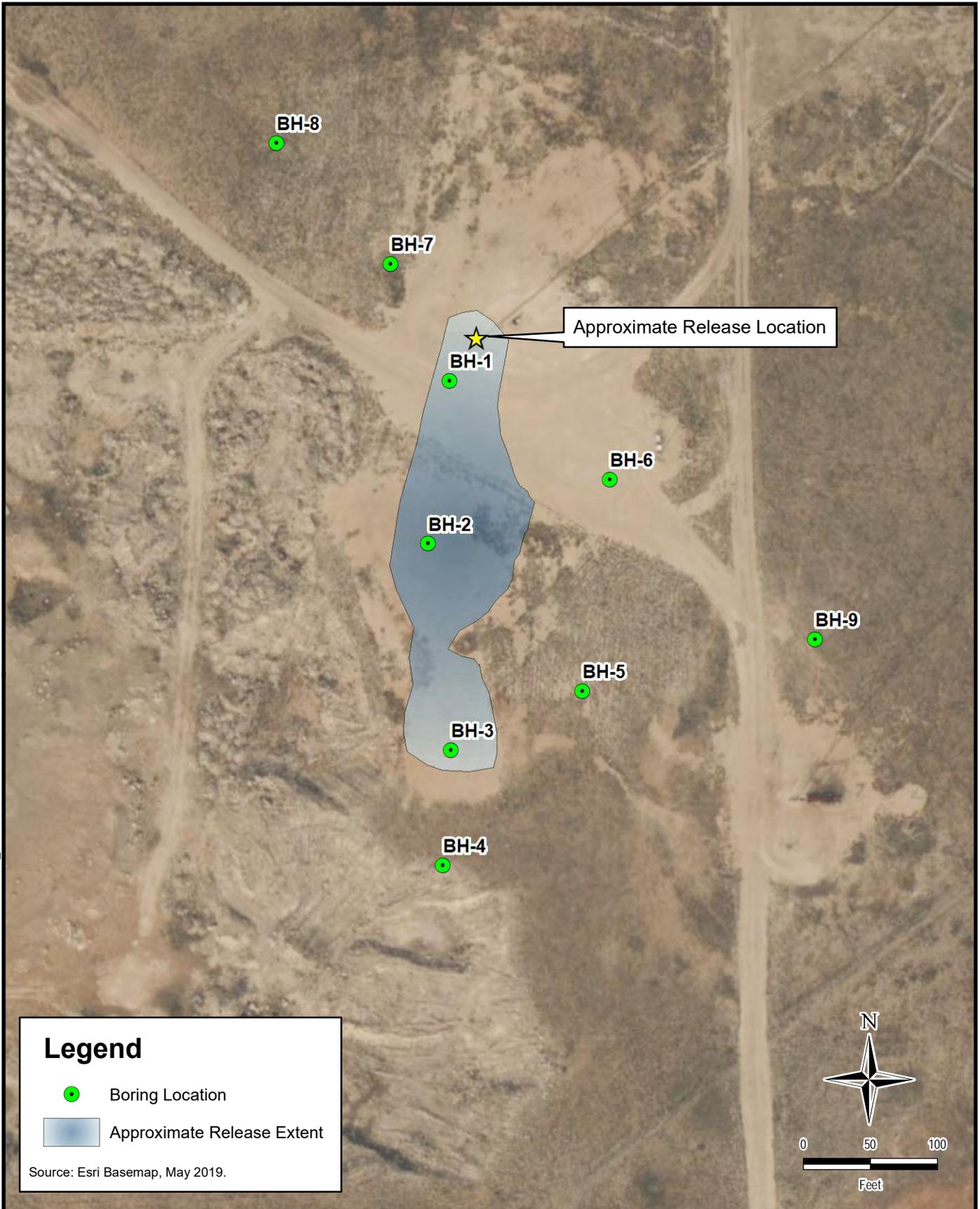
PROJECT NO.: 212C-MD-02334

DATE: FEBRUARY 16, 2021

DESIGNED BY: AAM

Figure No.

2



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Legend

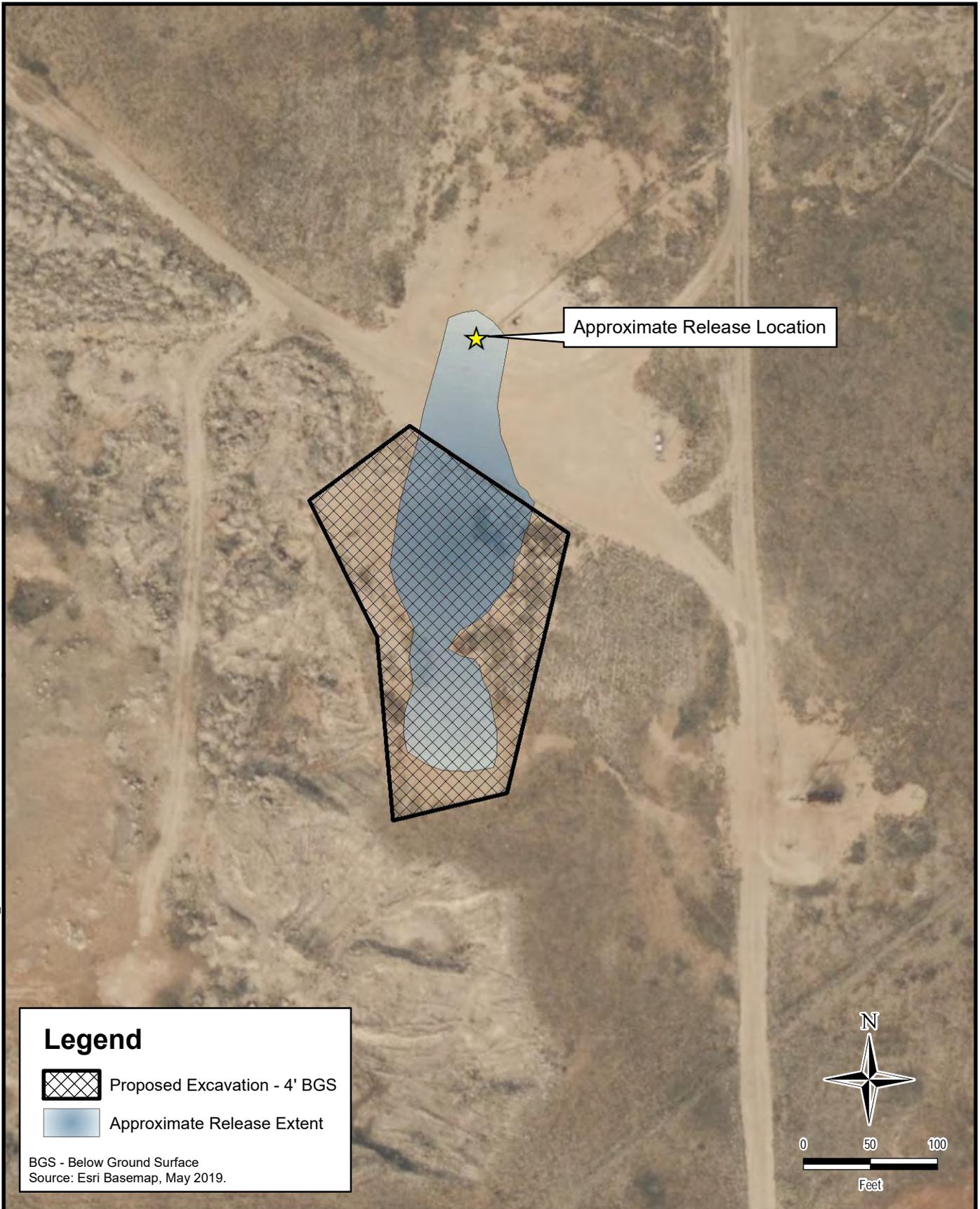
-  Boring Location
-  Approximate Release Extent

Source: Esri Basemap, May 2019.



A north arrow pointing upwards, labeled 'N'. Below it is a scale bar with markings at 0, 50, and 100 feet.

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	<p>EVGSAU 2717-006 WELLHEAD RELEASE RELEASE EXTENT AND ASSESSMENT MAP</p>	<p>DATE: FEBRUARY 25, 2021</p> <p>DESIGNED BY: AAM</p>
		<p>Figure No. 3</p>



Legend

-  Proposed Excavation - 4' BGS
-  Approximate Release Extent

BGS - Below Ground Surface
Source: Esri Basemap, May 2019.

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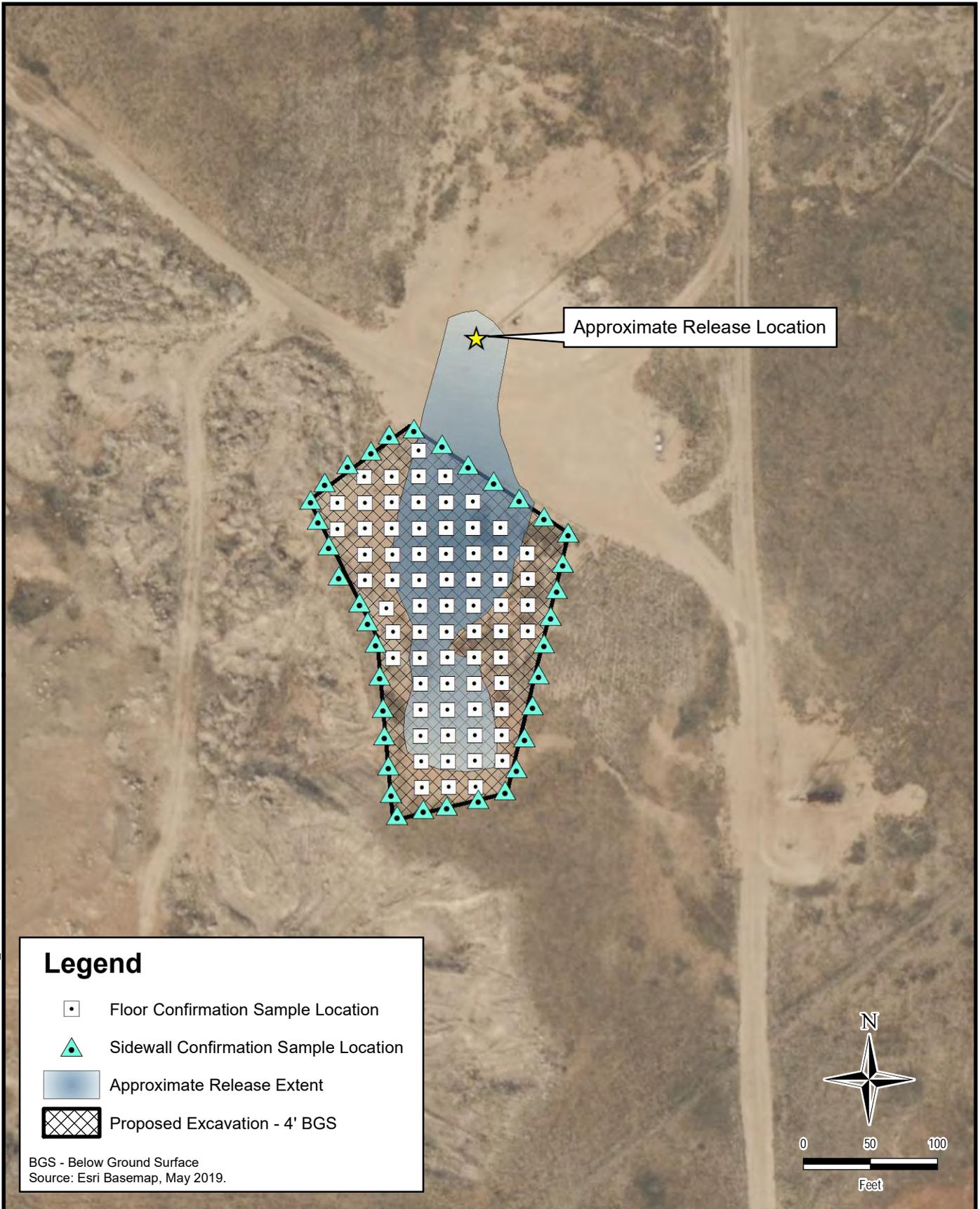
CONOCOPHILLIPS

1RP-1694
(32.801293°, -103.439733°)
LEA COUNTY, NEW MEXICO

**EVGSAU 2717-006 WELLHEAD RELEASE
PROPOSED REMEDIATION EXTENT**

PROJECT NO.: 212C-MD-02334
DATE: FEBRUARY 25, 2021
DESIGNED BY: AAM

Figure No.
4



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\1RP-1694\FIGURE 5 ACSP - 1RP-1694.MXD

Legend

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

BGS - Below Ground Surface
Source: Esri Basemap, May 2019.



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	<p>EVGSAU 2717-006 WELLHEAD RELEASE ALTERNATIVE CONFIRMATION SAMPLING PLAN</p>	<p>DATE: FEBRUARY 25, 2021</p> <p>DESIGNED BY: AAM</p>
		<p>Figure No. 5</p>

TABLES

TABLE 1
BORING LOCATION COORDINATES
SOIL ASSESSMENT - 1RP-1694
CONOCOPHILLIPS
EVGSAU 2717-006 WELLHEAD RELEASE
LEA COUNTY, NM

Boring ID	Latitude	Longitude
BH-1	32.801205	-103.439799
BH-2	32.800872	-103.439855
BH-3	32.800450	-103.439803
BH-4	32.800213	-103.439825
BH-5	32.800568	-103.439484
BH-6	32.801000	-103.439412
BH-7	32.801445	-103.439940
BH-8	32.801670	-103.440157
BH-9	32.800674	-103.438957

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT - 1RP-1694
CONOCOPHILLIPS
EVGSAU 2717-006 WELLHEAD RELEASE
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		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
BH-1	11/9/2020	0-1	-	-	1510		< 0.00105		< 0.00527		< 0.00263		0.00100	J	0.00100	< 0.103		< 4.11		0.357	J	0.357
		2-3	-	-	1210		< 0.00108		< 0.00540		< 0.00270		< 0.00703		-	< 0.104		< 4.16		0.404	J	0.404
		4-5	-	-	94.8		< 0.00104		< 0.00522		< 0.00261		< 0.00679		-	< 0.102		< 4.09		< 4.09		-
		6-7	-	-	23.3		< 0.00106		< 0.00528		< 0.00264		< 0.00686		-	< 0.103		< 4.11		1.11	B J	1.11
		9-10	-	-	22.7		< 0.00108		< 0.00541		< 0.00271		< 0.00704		-	< 0.104		< 4.17		1.62	B J	1.62
		14-15	-	-	13.5	J	< 0.00106		< 0.00532		< 0.00266		< 0.00692		-	< 0.103		< 4.13		1.02	B J	1.02
		19-20	102	0.4	29.2		< 0.00107		< 0.00533		< 0.00266		0.00591	J	0.00591	0.0333	B J	< 4.13		1.35	B J	1.38
BH-2	11/9/2020	0-1	-	-	4260		< 0.00110		< 0.00550		< 0.00275		0.00102	J	0.00102	0.0287	B J	30.9		40.6		71.5
		2-3	-	-	2590		< 0.00114		< 0.00568		< 0.00284		< 0.00738		-	0.0282	B J	4.75		13.5		18.3
		4-5	-	-	1210		< 0.00110		< 0.00548		< 0.00274		< 0.00713		-	0.0245	B J	< 4.19		1.61	B J	1.63
		6-7	-	-	535	J6	< 0.00104		< 0.00518		< 0.00259		< 0.00674		-	0.0328	B J	2.42	J	9.15	B	11.6
		9-10	-	-	133		< 0.00102		< 0.00508		< 0.00254		< 0.00660		-	0.0276	B J	< 4.03		1.90	B J	1.93
		14-15	-	-	55.8		< 0.00103		< 0.00513		< 0.00257		< 0.00667		-	0.0322	B J	< 4.05		1.03	B J	1.06
		19-20	97.2	0.1	48.5		< 0.00106		< 0.00529		< 0.00265		< 0.00688		-	0.0286	B J	< 4.12		0.853	B J	0.882
BH-3	11/9/2020	0-1	-	-	2540		< 0.00117		< 0.00584		< 0.00292		< 0.00759		-	0.0331	B J	164		390		554
		2-3	-	-	1660		< 0.00112		< 0.00560		< 0.00280		< 0.00727		-	0.0462	B J	157		310		467
		4-5	-	-	966		< 0.00105		< 0.00527		< 0.00263		< 0.00685		-	0.0268	B J	47.3		109		156
		6-7	-	-	3770		< 0.00115		< 0.00577		< 0.00288		< 0.00750		-	0.0253	B J	2.68	J	4.91	B	7.62
		9-10	-	-	3550		< 0.00116		< 0.00581		< 0.00291		< 0.00756		-	0.0240	B J	2.94	J J3 J6	5.63	B	8.59
		14-15	-	-	350		< 0.00110		< 0.00548		< 0.00274		< 0.00712		-	0.0239	B J	11.4		26.4		37.8
		19-20	64.2	0.2	130		< 0.00107		< 0.00537		< 0.00268		< 0.00698		-	0.0257	B J	< 4.15		1.74	B J	1.77
BH-4	11/9/2020	0-1	121	1.2	90.6		< 0.00104		< 0.00518		< 0.00259		< 0.00673		-	0.0278	B J	5.09		22.1		27.2
		3-4	98.2	0.5	64.7		< 0.00105		< 0.00523		< 0.00261		< 0.00679		-	0.0247	B J	< 4.09		3.42	B J	3.44
BH-5	11/9/2020	0-1	134	0.6	107		< 0.00105		< 0.00523		< 0.00262		< 0.00680		-	0.0260	B J	631		389		1020
		3-4	109	0.1	117		< 0.00107		< 0.00537		< 0.00269		< 0.00699		-	0.0258	B J	2.45	J	8.42	B	10.9
BH-6	11/9/2020	0-1	88.1	0.2	107		< 0.00104		< 0.00518		< 0.00259		< 0.00674		-	0.0338	B J	23.2		53.6		76.8
		3-4	64.1	0.4	387		< 0.00109		< 0.00547		< 0.00274		< 0.00711		-	< 0.105		< 4.19		3.56	B J	3.56
BH-7	11/9/2020	0-1	110	0.1	47.5		< 0.00104		< 0.00518		< 0.00259		< 0.00673		-	< 0.102		46.5		168		215
		3-4	98.1	0.1	95.5		< 0.00105		< 0.00527		< 0.00263		< 0.00685		-	< 0.103		13.0		51.3		64.3
BH-8	1/14/2021	0-1	-	-	< 25.1		< 0.00151		< 0.00754		< 0.00377		< 0.00980		-	0.0868	J	40.1		84.2		124
BH-9	1/14/2021	0-1	-	-	49.7		< 0.00110		< 0.00549		< 0.00275		< 0.00714		-	< 0.105		9.05		22.7		31.8

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 is found in the associated blank.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- J3 The associated batch QC was outside the established quality control range for precision.
- J6 The sample matrix interfered with the ability to make any accurate determination; spike value is low.

APPENDIX A C-141 Forms

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003
Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company ConocoPhillips Company	Contact Mickey Garner
Address 3300 North A St. Bldg 6, Midland, TX 79705-5406	Telephone No. 505.391.3158
Facility Name EVGSAU 2717-006	Facility Type Oil and Gas

Surface Owner State of New Mexico	Mineral Owner State of New Mexico	Lease No 30-025-20835-00-00
--	--	------------------------------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	27	17S	35E					Lea

Latitude N **32 48.070** Longitude W **103 26.389**

NATURE OF RELEASE

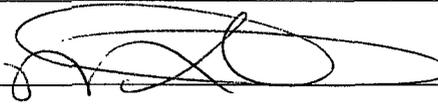
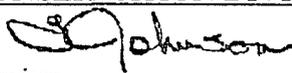
Type of Release Crude Oil and Produced Water	Volume of Release 26bbl (5oil, 21water)	Volume Recovered (1oil, 9water)
Source of Release Stuffing Box	Date and Hour of Occurrence 12-23-2007 1030	Date and Hour of Discovery 12-23-2007 1300
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Pat Richards	
By Whom? Mickey Garner	Date and Hour 12-24-2007 0925	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
On Sunday December 23, 2007 at 1300 hrs, a leak was discovered coming from the stuffing box of EVGSAU 2717-006, which is located 1 mile east of the Buckeye Production Office. Amount spilled was 5 bbls of oil and 21 bbls of produced water. The spill was not contained and affected 110' X 250' of pad and pasture. No cattle were in the area at the time of the release. The site will be remediated in accordance with NMOCD guidelines.

Describe Area Affected and Cleanup Action Taken.*
A vacuum truck was called to pick up the free liquids. Amount recovered was 1 bbls of oil and 9 bbls of produced water. The chloride concentration for this area is 47,000.

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: 	OIL CONSERVATION DIVISION	
Printed Name: Mickey Garner	 Approved by District Supervisor ENVIRONMENTAL ENGINEER	
Title: HSER Lead	Approval Date: 1-3-08	Expiration Date: 3-3-08
E-mail Address: Mickey.D.Garner@conocophillips.com	Conditions of Approval: SUBMIT FINAL C.141 w/ DATA BY	Attached <input type="checkbox"/>
Date: 12-26-2007 Phone: 575.391.3158		

- Attach Additional Sheets If Necessary

RP #1694

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: Charles R. Beauvais 99 Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: _____ Title: _____

Signature: Charles R. Beauvais 99 Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

- Approved Approved with Attached Conditions of Approval Denied Deferral Approved

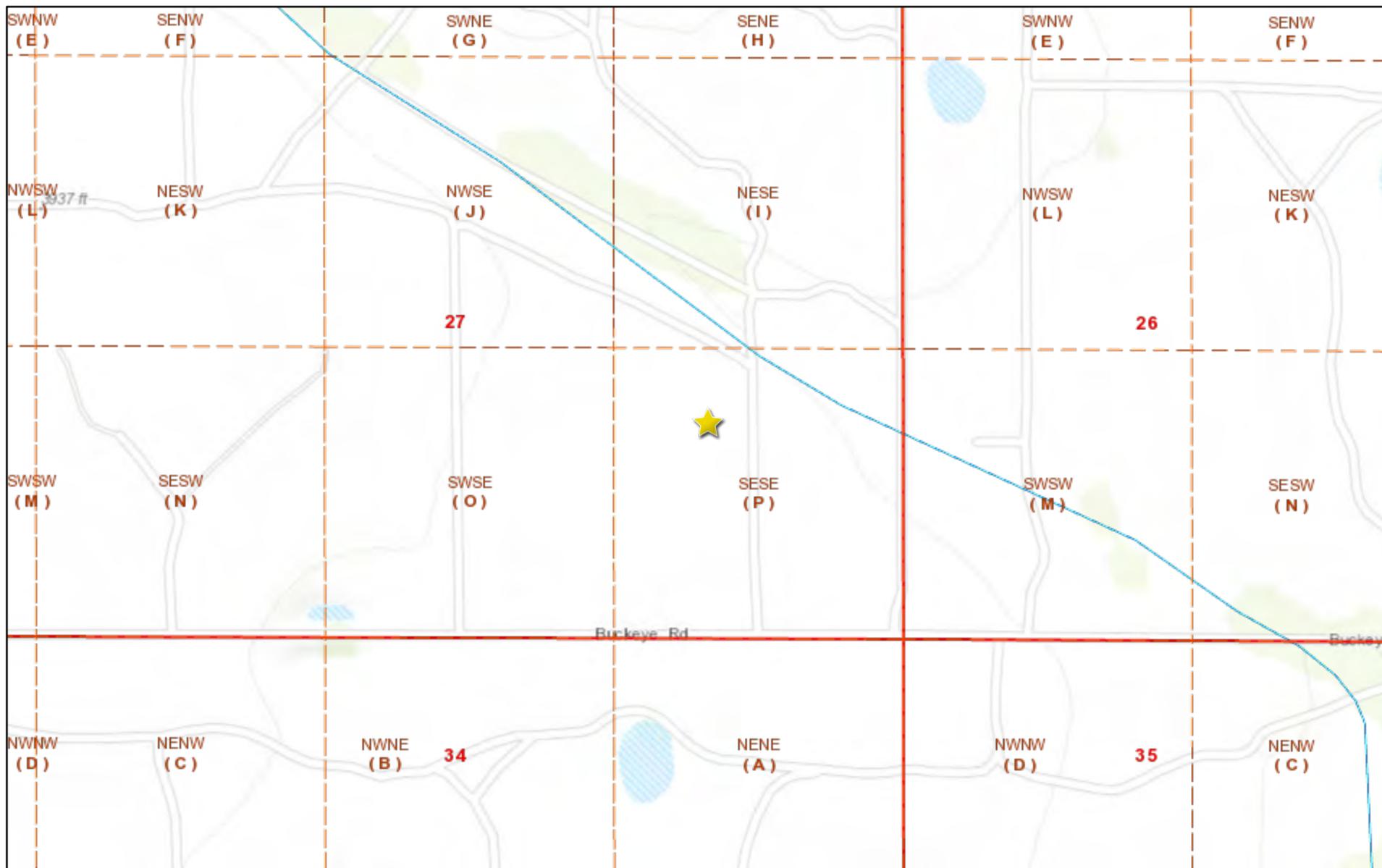
Signature: Ashley Maxwell Date: _____

Variance approved for sidewalls and base excavations samples to be collected every 500 square feet.

APPENDIX B

Site Characterization Data

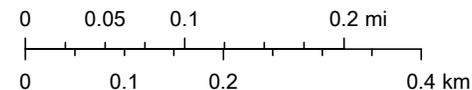
1RP-1694



2/9/2021, 2:54:04 PM

1:9,028

-  Override 1
-  PLSS First Division
-  PLJV Probable Playas
-  PLSS Second Division
-  OSE Streams
-  OCD District Offices
-  OSE Water-bodies



Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin,

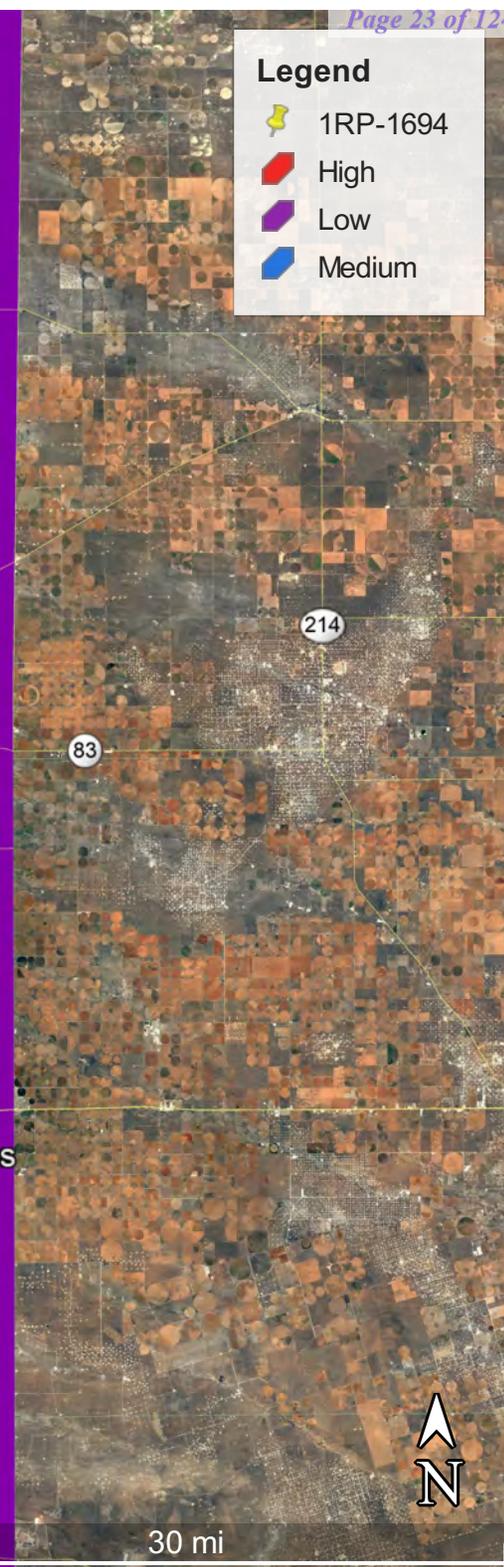
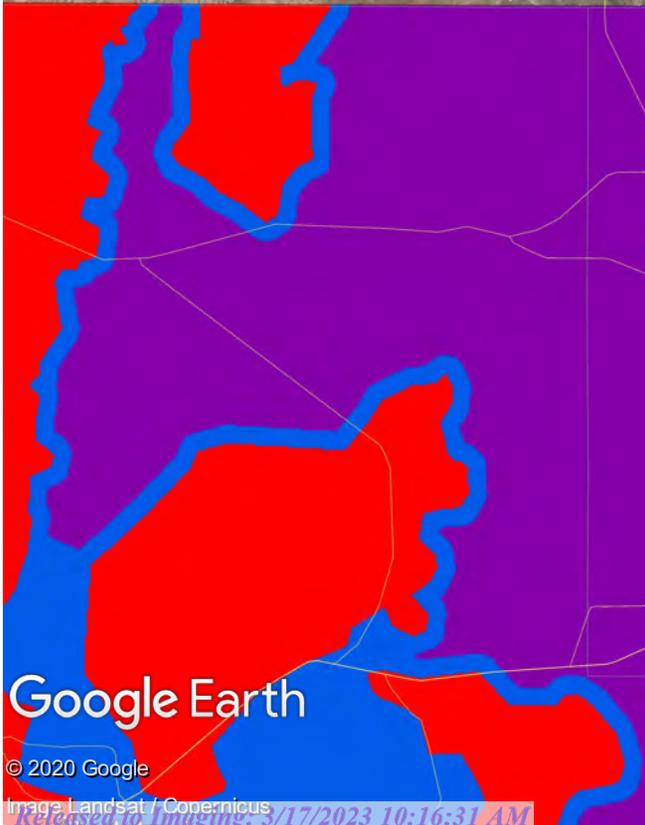
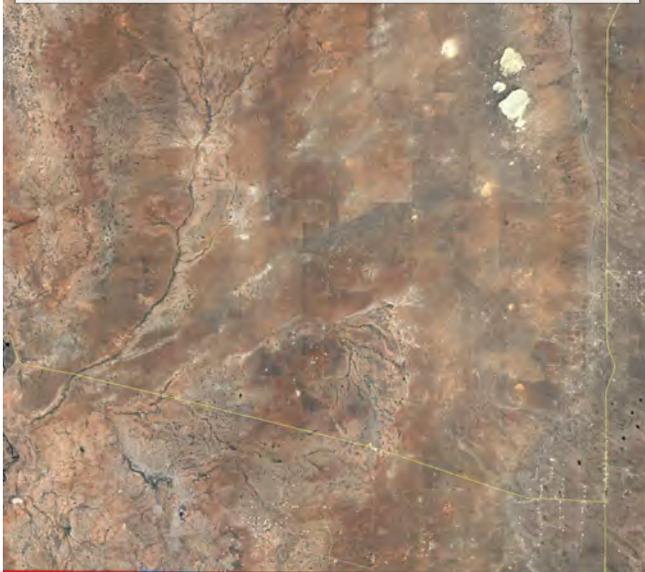
New Mexico Oil Conservation Division

KARST POTENTIAL MAP

1RP-1694

Legend

-  1RP-1694
-  High
-  Low
-  Medium



1RP-1694

Hobbs

Google Earth

© 2020 Google

Image Landsat / Copernicus

Released to Imaging: 3/17/2023 10:16:31 AM

30 mi





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

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

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

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

(NAD83 UTM in meters) (In feet)

POD Number	POD Code	Sub-basin	County	Q 4	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Well Depth	Water Column
L_04859	L	LE		4	4	4	27	17S	35E	646258	3630135*	257	145	85 60
L_04881	L	LE		1	3	26	17S	35E	646556	3630644*	574	137	50	87
L_13479 POD1	L	LE		2	2	1	34	17S	35E	645495	3630015	659	80	70 10
L_13479 POD3	L	LE		4	4	3	27	17S	35E	645448	3630066	682	76	70 6
L_13479 POD2	L	LE		2	2	1	34	17S	35E	645480	3629941	710	80	70 10
L_05207	L	LE					27	17S	35E	645552	3630825*	729	140	60 80
L_04829 S2	L	LE		4	3	27	17S	35E	645352	3630227*	734	220	90	130

Average Depth to Water: **70 feet**
 Minimum Depth: **50 feet**
 Maximum Depth: **90 feet**

Record Count: 7

UTM NAD83 Radius Search (in meters):

Easting (X): 646080.2 Northing (Y): 3630321.65 Radius: 800

*UTM location was derived from PLSS - see Help

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

10/26/20 9:09 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

**APPENDIX C
eTech Soil Screening Map
(September 9, 2019)**



Legend:

- Pipeline
- Sample Points

Figure 1

Site Diagram
 EVGSAU Unit 2717-006
 ConocoPhillips Company
 GPS: 32.8013, -103.4398



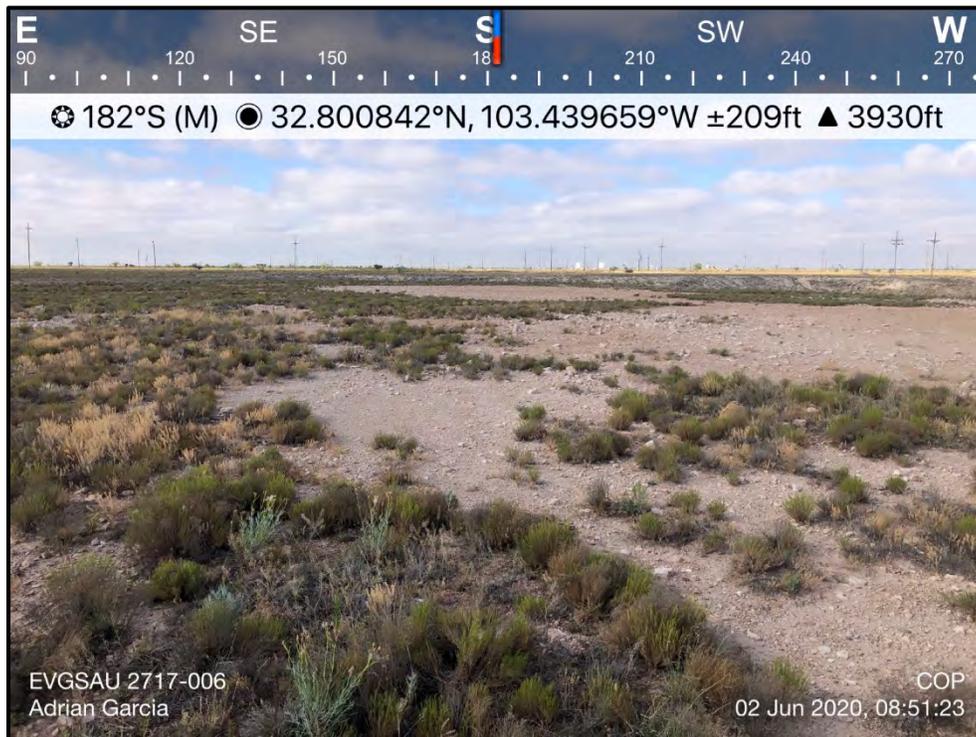
Drafted: lc Checked: jwl Date: 9/9/19

APPENDIX D

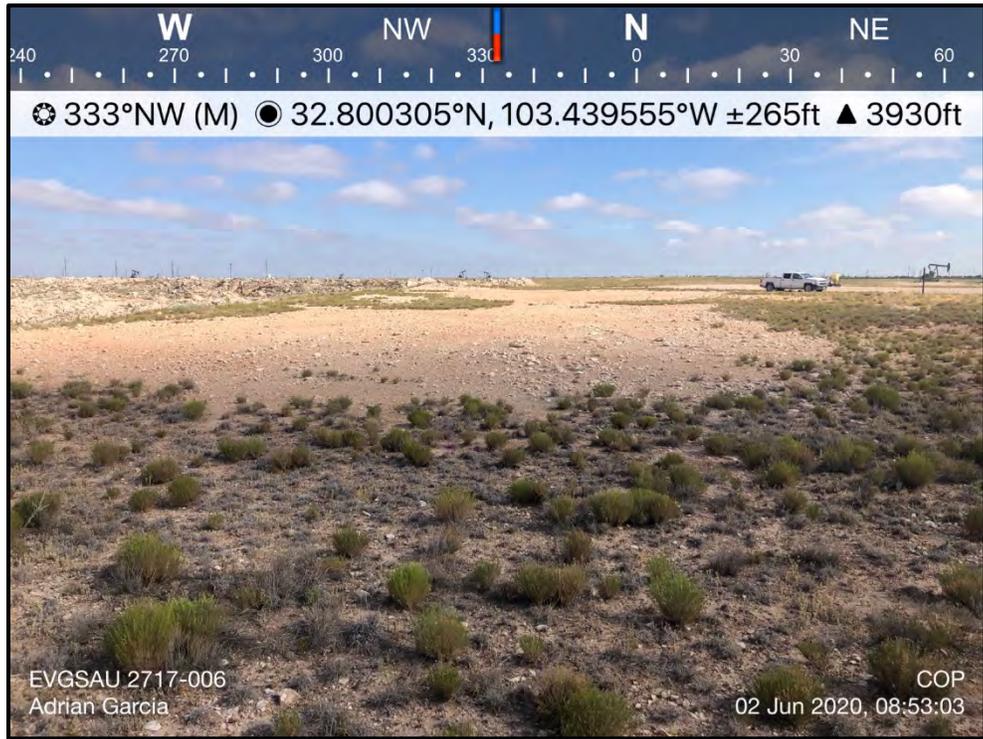
Photographic Documentation



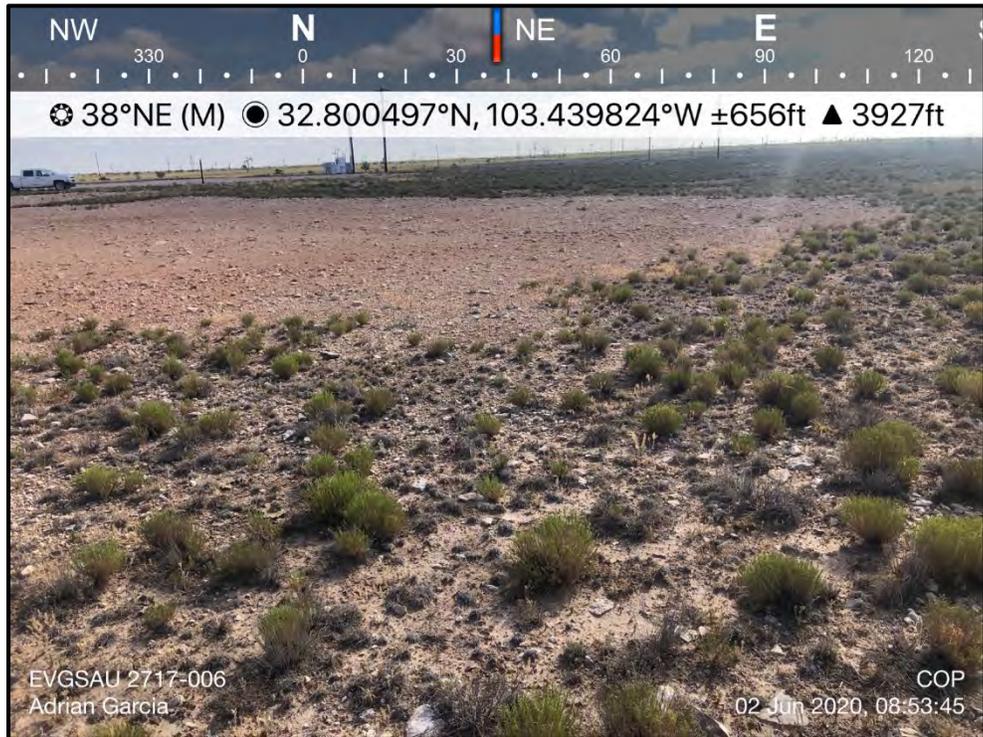
TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west of wellhead release area.	1
	SITE NAME	EVGSAU 2717-006 Wellhead Release	6/2/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing south of well pad area.	2
	SITE NAME	EVGSAU 2717-006 Wellhead Release	6/2/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northwest of well pad area.	3
	SITE NAME	EVGSAU 2717-006 Wellhead Release	6/2/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northeast of well pad area.	4
	SITE NAME	EVGSAU 2717-006 Wellhead Release	6/2/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing north of well pad area.	5
	SITE NAME	EVGSAU 2717-006 Wellhead Release	6/2/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing north of well pad area.	6
	SITE NAME	EVGSAU 2717-006 Wellhead Release	6/2/2020

APPENDIX E

Laboratory Analytical Data



ANALYTICAL REPORT

November 25, 2020

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

ConocoPhillips - Tetra Tech

Sample Delivery Group: L1285974
 Samples Received: 11/14/2020
 Project Number: 212C-MD-02334 TASK18
 Description: EVGSAU 2717-006 Wellhead Release (IRP-1694)

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

Entire Report Reviewed By:

Erica McNeese
Project Manager

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



Cp: Cover Page	1	
Tc: Table of Contents	2	
Ss: Sample Summary	4	
Cn: Case Narrative	10	
Sr: Sample Results	11	
BH-1 (0-1') L1285974-01	11	
BH-1 (2-3') L1285974-02	12	
BH-1 (4-5') L1285974-03	13	
BH-1 (6-7') L1285974-04	14	
BH-1 (9-10') L1285974-05	15	
BH-1 (14-15') L1285974-06	16	
BH-1 (19-20') L1285974-07	17	
BH-2 (0-1') L1285974-08	18	
BH-2 (2-3') L1285974-09	19	
BH-2 (4-5') L1285974-10	20	
BH-2 (6-7') L1285974-11	21	
BH-2 (9-10') L1285974-12	22	
BH-2 (14-15') L1285974-13	23	
BH-2 (19-20') L1285974-14	24	
BH-3 (0-1') L1285974-15	25	
BH-3 (2-3') L1285974-16	26	
BH-3 (4-5') L1285974-17	27	
BH-3 (6-7') L1285974-18	28	
BH-3 (9-10') L1285974-19	29	
BH-3 (14-15') L1285974-20	30	
BH-3 (19-20') L1285974-21	31	
BH-4 (0-1') L1285974-22	32	
BH-4 (3-4') L1285974-23	33	
BH-5 (0-1') L1285974-24	34	
BH-5 (3-4') L1285974-25	35	
BH-6 (0-1') L1285974-26	36	
BH-6 (3-4') L1285974-27	37	
BH-7 (0-1') L1285974-28	38	
BH-7 (3-4') L1285974-29	39	
Qc: Quality Control Summary	40	
Total Solids by Method 2540 G-2011	40	
Wet Chemistry by Method 300.0	44	
Volatile Organic Compounds (GC) by Method 8015D/GRO	46	
Volatile Organic Compounds (GC/MS) by Method 8260B	49	
Semi-Volatile Organic Compounds (GC) by Method 8015	52	

Gl: Glossary of Terms

55

Al: Accreditations & Locations

56

Sc: Sample Chain of Custody

57

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

BH-1 (0-1') L1285974-01 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 12:00
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580208	1	11/22/20 05:48	11/22/20 05:57	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580278	5	11/22/20 22:04	11/23/20 02:18	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580117	1	11/19/20 10:56	11/21/20 10:58	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580336	1	11/19/20 10:56	11/21/20 12:54	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580417	1	11/21/20 18:05	11/22/20 12:38	JN	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

BH-1 (2-3') L1285974-02 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 12:10
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580208	1	11/22/20 05:48	11/22/20 05:57	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580278	5	11/22/20 22:04	11/23/20 02:27	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580117	1	11/19/20 10:56	11/21/20 11:21	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580336	1	11/19/20 10:56	11/21/20 13:13	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580417	1	11/21/20 18:05	11/22/20 11:58	JN	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

BH-1 (4-5') L1285974-03 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 12:20
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580208	1	11/22/20 05:48	11/22/20 05:57	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580278	1	11/22/20 22:04	11/23/20 02:56	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580117	1	11/19/20 10:56	11/21/20 11:44	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580336	1	11/19/20 10:56	11/21/20 13:32	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580417	1	11/21/20 18:05	11/22/20 12:11	JN	Mt. Juliet, TN

9 Sc

BH-1 (6-7') L1285974-04 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 12:30
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580208	1	11/22/20 05:48	11/22/20 05:57	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580278	1	11/22/20 22:04	11/23/20 03:15	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580117	1	11/19/20 10:56	11/21/20 12:06	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580336	1	11/19/20 10:56	11/21/20 13:51	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/23/20 14:45	JN	Mt. Juliet, TN

BH-1 (9-10') L1285974-05 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 12:40
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580209	1	11/22/20 05:26	11/22/20 05:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580278	1	11/22/20 22:04	11/23/20 03:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580117	1	11/19/20 10:56	11/21/20 12:28	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580336	1	11/19/20 10:56	11/21/20 14:10	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/23/20 14:58	JN	Mt. Juliet, TN

BH-1 (14-15') L1285974-06 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 12:50
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580209	1	11/22/20 05:26	11/22/20 05:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580278	1	11/22/20 22:04	11/23/20 03:53	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580117	1	11/19/20 10:56	11/21/20 12:50	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580336	1	11/19/20 10:56	11/21/20 14:29	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/23/20 15:11	JN	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

BH-1 (19-20') L1285974-07 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 13:00
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580209	1	11/22/20 05:26	11/22/20 05:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580278	1	11/22/20 22:04	11/23/20 04:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 10:56	11/21/20 11:44	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 10:56	11/21/20 20:39	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 01:12	JN	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

BH-2 (0-1') L1285974-08 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 13:30
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580209	1	11/22/20 05:26	11/22/20 05:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580278	10	11/22/20 22:04	11/23/20 04:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 10:56	11/21/20 12:33	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 10:56	11/21/20 20:58	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 13:52	TJD	Mt. Juliet, TN

9 Sc

BH-2 (2-3') L1285974-09 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 13:40
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580209	1	11/22/20 05:26	11/22/20 05:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580278	10	11/22/20 22:04	11/23/20 04:21	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 10:56	11/21/20 13:10	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 10:56	11/21/20 21:17	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 13:40	TJD	Mt. Juliet, TN

BH-2 (4-5') L1285974-10 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 13:50
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580209	1	11/22/20 05:26	11/22/20 05:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580278	5	11/22/20 22:04	11/23/20 04:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 10:56	11/21/20 13:34	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 10:56	11/21/20 21:36	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 01:24	JN	Mt. Juliet, TN

BH-2 (6-7') L1285974-11 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 14:00
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580209	1	11/22/20 05:26	11/22/20 05:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 17:51	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 10:56	11/21/20 13:56	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 10:56	11/21/20 21:55	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 03:43	JN	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

BH-2 (9-10') L1285974-12 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 14:10
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580209	1	11/22/20 05:26	11/22/20 05:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 18:19	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 10:56	11/21/20 14:16	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 10:56	11/21/20 22:14	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 01:37	JN	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

BH-2 (14-15') L1285974-13 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 14:20
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580209	1	11/22/20 05:26	11/22/20 05:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 18:38	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 10:56	11/21/20 14:38	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 10:56	11/21/20 22:33	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 01:49	JN	Mt. Juliet, TN

9 Sc

BH-2 (19-20') L1285974-14 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 14:30
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580209	1	11/22/20 05:26	11/22/20 05:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 18:48	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 10:56	11/21/20 14:59	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 10:56	11/21/20 22:52	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 02:02	JN	Mt. Juliet, TN

BH-3 (0-1') L1285974-15 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 15:00
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580210	1	11/22/20 04:45	11/22/20 04:56	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	10	11/21/20 12:04	11/21/20 18:57	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 10:56	11/21/20 15:20	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 10:56	11/21/20 23:11	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	10	11/22/20 07:51	11/24/20 04:46	JN	Mt. Juliet, TN

BH-3 (2-3') L1285974-16 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 15:10
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580210	1	11/22/20 04:45	11/22/20 04:56	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	10	11/21/20 12:04	11/21/20 19:26	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 14:38	11/21/20 15:40	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 14:38	11/21/20 23:30	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	10	11/22/20 07:51	11/24/20 04:59	JN	Mt. Juliet, TN

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

BH-3 (4-5') L1285974-17 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 15:20
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580210	1	11/22/20 04:45	11/22/20 04:56	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 19:35	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 14:38	11/21/20 16:01	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 14:38	11/21/20 23:49	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	10	11/22/20 07:51	11/24/20 04:21	JN	Mt. Juliet, TN

BH-3 (6-7') L1285974-18 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 15:30
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580210	1	11/22/20 04:45	11/22/20 04:56	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	10	11/21/20 12:04	11/21/20 19:45	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 14:38	11/21/20 16:28	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 14:38	11/22/20 00:08	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 02:40	JN	Mt. Juliet, TN

BH-3 (9-10') L1285974-19 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 15:40
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580210	1	11/22/20 04:45	11/22/20 04:56	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	10	11/21/20 12:04	11/21/20 19:54	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 14:38	11/21/20 16:52	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 14:38	11/22/20 00:27	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 02:53	JN	Mt. Juliet, TN

BH-3 (14-15') L1285974-20 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 15:50
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580210	1	11/22/20 04:45	11/22/20 04:56	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 20:04	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 14:38	11/21/20 17:13	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 14:38	11/22/20 00:46	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 03:56	JN	Mt. Juliet, TN

BH-3 (19-20') L1285974-21 Solid

Collected by Joe Tyler
 Collected date/time 11/09/20 16:00
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580210	1	11/22/20 04:45	11/22/20 04:56	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 20:13	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 14:38	11/21/20 17:34	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 14:38	11/22/20 01:05	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 02:15	JN	Mt. Juliet, TN

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

BH-4 (0-1') L1285974-22 Solid

Collected by Joe Tyler
 Collected date/time 11/10/20 10:00
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580210	1	11/22/20 04:45	11/22/20 04:56	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 20:23	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 14:38	11/21/20 18:15	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 14:38	11/22/20 01:24	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 03:31	JN	Mt. Juliet, TN

BH-4 (3-4') L1285974-23 Solid

Collected by Joe Tyler
 Collected date/time 11/10/20 10:10
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580210	1	11/22/20 04:45	11/22/20 04:56	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 20:32	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 14:38	11/21/20 18:36	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 14:38	11/22/20 01:43	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580607	1	11/22/20 07:51	11/24/20 02:27	JN	Mt. Juliet, TN

BH-5 (0-1') L1285974-24 Solid

Collected by Joe Tyler
 Collected date/time 11/10/20 10:30
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580210	1	11/22/20 04:45	11/22/20 04:56	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 20:42	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 14:38	11/21/20 18:55	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 14:38	11/22/20 02:03	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580611	20	11/22/20 07:43	11/23/20 12:16	JN	Mt. Juliet, TN

BH-5 (3-4') L1285974-25 Solid

Collected by Joe Tyler
 Collected date/time 11/10/20 10:40
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580211	1	11/22/20 04:35	11/22/20 04:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 20:51	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 14:38	11/21/20 19:26	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 14:38	11/22/20 02:22	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580611	1	11/22/20 07:43	11/23/20 07:36	JN	Mt. Juliet, TN

BH-6 (0-1') L1285974-26 Solid

Collected by Joe Tyler
 Collected date/time 11/10/20 11:00
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580211	1	11/22/20 04:35	11/22/20 04:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 21:20	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580201	1	11/19/20 14:38	11/21/20 19:55	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580337	1	11/19/20 14:38	11/22/20 02:41	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580611	1	11/22/20 07:43	11/24/20 06:21	JN	Mt. Juliet, TN

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

BH-6 (3-4') L1285974-27 Solid

Collected by Joe Tyler
 Collected date/time 11/10/20 11:10
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580211	1	11/22/20 04:35	11/22/20 04:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 21:30	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580519	1	11/19/20 14:38	11/22/20 04:52	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580340	1	11/19/20 14:38	11/22/20 05:43	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580611	1	11/22/20 07:43	11/23/20 07:49	JN	Mt. Juliet, TN

BH-7 (0-1') L1285974-28 Solid

Collected by Joe Tyler
 Collected date/time 11/10/20 11:30
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580211	1	11/22/20 04:35	11/22/20 04:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 21:39	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580519	1	11/19/20 14:38	11/22/20 05:12	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580340	1	11/19/20 14:38	11/22/20 06:02	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580611	5	11/22/20 07:43	11/24/20 11:45	TJD	Mt. Juliet, TN

BH-7 (3-4') L1285974-29 Solid

Collected by Joe Tyler
 Collected date/time 11/10/20 11:40
 Received date/time 11/14/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1580211	1	11/22/20 04:35	11/22/20 04:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580287	1	11/21/20 12:04	11/21/20 21:49	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1580519	1	11/19/20 14:38	11/22/20 05:33	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1580340	1	11/19/20 14:38	11/22/20 06:21	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1580611	1	11/22/20 07:43	11/24/20 06:34	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.

Erica McNeese
Project Manager

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

Collected date/time: 11/09/20 12:00

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.4		1	11/22/2020 05:57	WG1580208

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	1510		47.2	103	5	11/23/2020 02:18	WG1580278

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	11/21/2020 10:58	WG1580117
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		11/21/2020 10:58	WG1580117

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000492	0.00105	1	11/21/2020 12:54	WG1580336
Toluene	U		0.00137	0.00527	1	11/21/2020 12:54	WG1580336
Ethylbenzene	U		0.000777	0.00263	1	11/21/2020 12:54	WG1580336
Total Xylenes	0.00100	J	0.000927	0.00685	1	11/21/2020 12:54	WG1580336
(S) Toluene-d8	112			75.0-131		11/21/2020 12:54	WG1580336
(S) 4-Bromofluorobenzene	89.7			67.0-138		11/21/2020 12:54	WG1580336
(S) 1,2-Dichloroethane-d4	97.8			70.0-130		11/21/2020 12:54	WG1580336

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.65	4.11	1	11/22/2020 12:38	WG1580417
C28-C40 Oil Range	0.357	J	0.281	4.11	1	11/22/2020 12:38	WG1580417
(S) o-Terphenyl	70.2			18.0-148		11/22/2020 12:38	WG1580417

Collected date/time: 11/09/20 12:10

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	96.1		1	11/22/2020 05:57	WG1580208

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	1210		47.9	104	5	11/23/2020 02:27	WG1580278

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0226	0.104	1	11/21/2020 11:21	WG1580117
(S) a,a,a-Trifluorotoluene(FID)	99.3			77.0-120		11/21/2020 11:21	WG1580117

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000505	0.00108	1	11/21/2020 13:13	WG1580336
Toluene	U		0.00141	0.00540	1	11/21/2020 13:13	WG1580336
Ethylbenzene	U		0.000797	0.00270	1	11/21/2020 13:13	WG1580336
Total Xylenes	U		0.000951	0.00703	1	11/21/2020 13:13	WG1580336
(S) Toluene-d8	115			75.0-131		11/21/2020 13:13	WG1580336
(S) 4-Bromofluorobenzene	89.3			67.0-138		11/21/2020 13:13	WG1580336
(S) 1,2-Dichloroethane-d4	103			70.0-130		11/21/2020 13:13	WG1580336

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.68	4.16	1	11/22/2020 11:58	WG1580417
C28-C40 Oil Range	0.404	J	0.285	4.16	1	11/22/2020 11:58	WG1580417
(S) o-Terphenyl	85.6			18.0-148		11/22/2020 11:58	WG1580417

Collected date/time: 11/09/20 12:20

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	97.8		1	11/22/2020 05:57	WG1580208

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	94.8		9.40	20.4	1	11/23/2020 02:56	WG1580278

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	11/21/2020 11:44	WG1580117
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	99.2			77.0-120		11/21/2020 11:44	WG1580117

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000488	0.00104	1	11/21/2020 13:32	WG1580336
Toluene	U		0.00136	0.00522	1	11/21/2020 13:32	WG1580336
Ethylbenzene	U		0.000770	0.00261	1	11/21/2020 13:32	WG1580336
Total Xylenes	U		0.000919	0.00679	1	11/21/2020 13:32	WG1580336
(S) <i>Toluene-d8</i>	114			75.0-131		11/21/2020 13:32	WG1580336
(S) <i>4-Bromofluorobenzene</i>	91.9			67.0-138		11/21/2020 13:32	WG1580336
(S) <i>1,2-Dichloroethane-d4</i>	97.4			70.0-130		11/21/2020 13:32	WG1580336

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.65	4.09	1	11/22/2020 12:11	WG1580417
C28-C40 Oil Range	U		0.280	4.09	1	11/22/2020 12:11	WG1580417
(S) <i>o</i> -Terphenyl	84.8			18.0-148		11/22/2020 12:11	WG1580417

Collected date/time: 11/09/20 12:30

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.3		1	11/22/2020 05:57	WG1580208

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	23.3		9.46	20.6	1	11/23/2020 03:15	WG1580278

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	11/21/2020 12:06	WG1580117
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		11/21/2020 12:06	WG1580117

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000493	0.00106	1	11/21/2020 13:51	WG1580336
Toluene	U		0.00137	0.00528	1	11/21/2020 13:51	WG1580336
Ethylbenzene	U		0.000778	0.00264	1	11/21/2020 13:51	WG1580336
Total Xylenes	U		0.000929	0.00686	1	11/21/2020 13:51	WG1580336
(S) Toluene-d8	111			75.0-131		11/21/2020 13:51	WG1580336
(S) 4-Bromofluorobenzene	90.1			67.0-138		11/21/2020 13:51	WG1580336
(S) 1,2-Dichloroethane-d4	104			70.0-130		11/21/2020 13:51	WG1580336

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.66	4.11	1	11/23/2020 14:45	WG1580607
C28-C40 Oil Range	1.11	<u>BJ</u>	0.282	4.11	1	11/23/2020 14:45	WG1580607
(S) o-Terphenyl	86.9			18.0-148		11/23/2020 14:45	WG1580607

Collected date/time: 11/09/20 12:40

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.0		1	11/22/2020 05:43	WG1580209

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	22.7		9.58	20.8	1	11/23/2020 03:24	WG1580278

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0226	0.104	1	11/21/2020 12:28	WG1580117
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		11/21/2020 12:28	WG1580117

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000506	0.00108	1	11/21/2020 14:10	WG1580336
Toluene	U		0.00141	0.00541	1	11/21/2020 14:10	WG1580336
Ethylbenzene	U		0.000798	0.00271	1	11/21/2020 14:10	WG1580336
Total Xylenes	U		0.000953	0.00704	1	11/21/2020 14:10	WG1580336
(S) Toluene-d8	115			75.0-131		11/21/2020 14:10	WG1580336
(S) 4-Bromofluorobenzene	91.2			67.0-138		11/21/2020 14:10	WG1580336
(S) 1,2-Dichloroethane-d4	102			70.0-130		11/21/2020 14:10	WG1580336

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.68	4.17	1	11/23/2020 14:58	WG1580607
C28-C40 Oil Range	1.62	<u>B J</u>	0.285	4.17	1	11/23/2020 14:58	WG1580607
(S) o-Terphenyl	90.5			18.0-148		11/23/2020 14:58	WG1580607

Collected date/time: 11/09/20 12:50

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.9		1	11/22/2020 05:43	WG1580209

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	13.5	J	9.50	20.6	1	11/23/2020 03:53	WG1580278

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	11/21/2020 12:50	WG1580117
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		11/21/2020 12:50	WG1580117

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000497	0.00106	1	11/21/2020 14:29	WG1580336
Toluene	U		0.00138	0.00532	1	11/21/2020 14:29	WG1580336
Ethylbenzene	U		0.000784	0.00266	1	11/21/2020 14:29	WG1580336
Total Xylenes	U		0.000936	0.00692	1	11/21/2020 14:29	WG1580336
(S) Toluene-d8	114			75.0-131		11/21/2020 14:29	WG1580336
(S) 4-Bromofluorobenzene	90.8			67.0-138		11/21/2020 14:29	WG1580336
(S) 1,2-Dichloroethane-d4	101			70.0-130		11/21/2020 14:29	WG1580336

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.66	4.13	1	11/23/2020 15:11	WG1580607
C28-C40 Oil Range	1.02	B J	0.283	4.13	1	11/23/2020 15:11	WG1580607
(S) o-Terphenyl	80.5			18.0-148		11/23/2020 15:11	WG1580607

Collected date/time: 11/09/20 13:00

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.8		1	11/22/2020 05:43	WG1580209

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	29.2		9.50	20.7	1	11/23/2020 04:02	WG1580278

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0333	B J	0.0224	0.103	1	11/21/2020 11:44	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	93.3			77.0-120		11/21/2020 11:44	WG1580201

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000498	0.00107	1	11/21/2020 20:39	WG1580337
Toluene	U		0.00139	0.00533	1	11/21/2020 20:39	WG1580337
Ethylbenzene	U		0.000785	0.00266	1	11/21/2020 20:39	WG1580337
Total Xylenes	0.00591	J	0.000938	0.00693	1	11/21/2020 20:39	WG1580337
(S) Toluene-d8	111			75.0-131		11/21/2020 20:39	WG1580337
(S) 4-Bromofluorobenzene	94.7			67.0-138		11/21/2020 20:39	WG1580337
(S) 1,2-Dichloroethane-d4	106			70.0-130		11/21/2020 20:39	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.66	4.13	1	11/24/2020 01:12	WG1580607
C28-C40 Oil Range	1.35	B J	0.283	4.13	1	11/24/2020 01:12	WG1580607
(S) o-Terphenyl	81.9			18.0-148		11/24/2020 01:12	WG1580607

Collected date/time: 11/09/20 13:30

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.2		1	11/22/2020 05:43	WG1580209

1 Cp

2 Tc

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	4260		96.6	210	10	11/23/2020 04:12	WG1580278

3 Ss

4 Cn

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	0.0287	B J	0.0228	0.105	1	11/21/2020 12:33	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	92.8			77.0-120		11/21/2020 12:33	WG1580201

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000514	0.00110	1	11/21/2020 20:58	WG1580337
Toluene	U		0.00143	0.00550	1	11/21/2020 20:58	WG1580337
Ethylbenzene	U		0.000811	0.00275	1	11/21/2020 20:58	WG1580337
Total Xylenes	0.00102	J	0.000968	0.00715	1	11/21/2020 20:58	WG1580337
(S) Toluene-d8	112			75.0-131		11/21/2020 20:58	WG1580337
(S) 4-Bromofluorobenzene	92.1			67.0-138		11/21/2020 20:58	WG1580337
(S) 1,2-Dichloroethane-d4	102			70.0-130		11/21/2020 20:58	WG1580337

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	30.9		1.69	4.20	1	11/24/2020 13:52	WG1580607
C28-C40 Oil Range	40.6		0.288	4.20	1	11/24/2020 13:52	WG1580607
(S) o-Terphenyl	58.3			18.0-148		11/24/2020 13:52	WG1580607

Collected date/time: 11/09/20 13:40

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.7		1	11/22/2020 05:43	WG1580209

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	2590		98.2	214	10	11/23/2020 04:21	WG1580278

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0282	B J	0.0232	0.107	1	11/21/2020 13:10	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	92.1			77.0-120		11/21/2020 13:10	WG1580201

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000530	0.00114	1	11/21/2020 21:17	WG1580337
Toluene	U		0.00148	0.00568	1	11/21/2020 21:17	WG1580337
Ethylbenzene	U		0.000837	0.00284	1	11/21/2020 21:17	WG1580337
Total Xylenes	U		0.000999	0.00738	1	11/21/2020 21:17	WG1580337
(S) Toluene-d8	112			75.0-131		11/21/2020 21:17	WG1580337
(S) 4-Bromofluorobenzene	92.8			67.0-138		11/21/2020 21:17	WG1580337
(S) 1,2-Dichloroethane-d4	105			70.0-130		11/21/2020 21:17	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.75		1.72	4.27	1	11/24/2020 13:40	WG1580607
C28-C40 Oil Range	13.5		0.292	4.27	1	11/24/2020 13:40	WG1580607
(S) o-Terphenyl	63.1			18.0-148		11/24/2020 13:40	WG1580607

Collected date/time: 11/09/20 13:50

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.4		1	11/22/2020 05:43	WG1580209

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	1210		48.2	105	5	11/23/2020 04:50	WG1580278

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0245	<u>B J</u>	0.0227	0.105	1	11/21/2020 13:34	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	91.7			77.0-120		11/21/2020 13:34	WG1580201

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		0.000512	0.00110	1	11/21/2020 21:36	WG1580337
Toluene	U		0.00143	0.00548	1	11/21/2020 21:36	WG1580337
Ethylbenzene	U		0.000808	0.00274	1	11/21/2020 21:36	WG1580337
Total Xylenes	U		0.000965	0.00713	1	11/21/2020 21:36	WG1580337
(S) Toluene-d8	117			75.0-131		11/21/2020 21:36	WG1580337
(S) 4-Bromofluorobenzene	91.2			67.0-138		11/21/2020 21:36	WG1580337
(S) 1,2-Dichloroethane-d4	104			70.0-130		11/21/2020 21:36	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.69	4.19	1	11/24/2020 01:24	WG1580607
C28-C40 Oil Range	1.61	<u>B J</u>	0.287	4.19	1	11/24/2020 01:24	WG1580607
(S) o-Terphenyl	82.4			18.0-148		11/24/2020 01:24	WG1580607

Collected date/time: 11/09/20 14:00

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.2		1	11/22/2020 05:43	WG1580209

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	535	<u>J6</u>	9.37	20.4	1	11/21/2020 17:51	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0328	<u>B J</u>	0.0221	0.102	1	11/21/2020 13:56	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	92.1			77.0-120		11/21/2020 13:56	WG1580201

- 8 Al
- 9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000484	0.00104	1	11/21/2020 21:55	WG1580337
Toluene	U		0.00135	0.00518	1	11/21/2020 21:55	WG1580337
Ethylbenzene	U		0.000764	0.00259	1	11/21/2020 21:55	WG1580337
Total Xylenes	U		0.000912	0.00674	1	11/21/2020 21:55	WG1580337
(S) Toluene-d8	111			75.0-131		11/21/2020 21:55	WG1580337
(S) 4-Bromofluorobenzene	92.0			67.0-138		11/21/2020 21:55	WG1580337
(S) 1,2-Dichloroethane-d4	102			70.0-130		11/21/2020 21:55	WG1580337

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.42	<u>J</u>	1.64	4.07	1	11/24/2020 03:43	WG1580607
C28-C40 Oil Range	9.15	<u>B</u>	0.279	4.07	1	11/24/2020 03:43	WG1580607
(S) o-Terphenyl	75.2			18.0-148		11/24/2020 03:43	WG1580607

Collected date/time: 11/09/20 14:10

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.2		1	11/22/2020 05:43	WG1580209

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	133		9.27	20.2	1	11/21/2020 18:19	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0276	BJ	0.0219	0.101	1	11/21/2020 14:16	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	93.1			77.0-120		11/21/2020 14:16	WG1580201

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000474	0.00102	1	11/21/2020 22:14	WG1580337
Toluene	U		0.00132	0.00508	1	11/21/2020 22:14	WG1580337
Ethylbenzene	U		0.000749	0.00254	1	11/21/2020 22:14	WG1580337
Total Xylenes	U		0.000894	0.00660	1	11/21/2020 22:14	WG1580337
(S) Toluene-d8	113			75.0-131		11/21/2020 22:14	WG1580337
(S) 4-Bromofluorobenzene	92.2			67.0-138		11/21/2020 22:14	WG1580337
(S) 1,2-Dichloroethane-d4	102			70.0-130		11/21/2020 22:14	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.62	4.03	1	11/24/2020 01:37	WG1580607
C28-C40 Oil Range	1.90	BJ	0.276	4.03	1	11/24/2020 01:37	WG1580607
(S) o-Terphenyl	89.8			18.0-148		11/24/2020 01:37	WG1580607

Collected date/time: 11/09/20 14:20

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	98.7		1	11/22/2020 05:43	WG1580209

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	55.8		9.32	20.3	1	11/21/2020 18:38	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0322	B J	0.0220	0.101	1	11/21/2020 14:38	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	90.6			77.0-120		11/21/2020 14:38	WG1580201

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000480	0.00103	1	11/21/2020 22:33	WG1580337
Toluene	U		0.00133	0.00513	1	11/21/2020 22:33	WG1580337
Ethylbenzene	U		0.000757	0.00257	1	11/21/2020 22:33	WG1580337
Total Xylenes	U		0.000904	0.00667	1	11/21/2020 22:33	WG1580337
(S) Toluene-d8	114			75.0-131		11/21/2020 22:33	WG1580337
(S) 4-Bromofluorobenzene	93.3			67.0-138		11/21/2020 22:33	WG1580337
(S) 1,2-Dichloroethane-d4	104			70.0-130		11/21/2020 22:33	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.63	4.05	1	11/24/2020 01:49	WG1580607
C28-C40 Oil Range	1.03	B J	0.278	4.05	1	11/24/2020 01:49	WG1580607
(S) o-Terphenyl	90.5			18.0-148		11/24/2020 01:49	WG1580607

Collected date/time: 11/09/20 14:30

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.2		1	11/22/2020 05:43	WG1580209

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	48.5		9.47	20.6	1	11/21/2020 18:48	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0286	BJ	0.0223	0.103	1	11/21/2020 14:59	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	92.8			77.0-120		11/21/2020 14:59	WG1580201

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000494	0.00106	1	11/21/2020 22:52	WG1580337
Toluene	U		0.00138	0.00529	1	11/21/2020 22:52	WG1580337
Ethylbenzene	U		0.000780	0.00265	1	11/21/2020 22:52	WG1580337
Total Xylenes	U		0.000931	0.00688	1	11/21/2020 22:52	WG1580337
(S) Toluene-d8	116			75.0-131		11/21/2020 22:52	WG1580337
(S) 4-Bromofluorobenzene	91.4			67.0-138		11/21/2020 22:52	WG1580337
(S) 1,2-Dichloroethane-d4	104			70.0-130		11/21/2020 22:52	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.66	4.12	1	11/24/2020 02:02	WG1580607
C28-C40 Oil Range	0.853	BJ	0.282	4.12	1	11/24/2020 02:02	WG1580607
(S) o-Terphenyl	85.8			18.0-148		11/24/2020 02:02	WG1580607

Collected date/time: 11/09/20 15:00

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.3		1	11/22/2020 04:56	WG1580210

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	2540		99.7	217	10	11/21/2020 18:57	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0331	B J	0.0235	0.108	1	11/21/2020 15:20	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	91.3			77.0-120		11/21/2020 15:20	WG1580201

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		0.000546	0.00117	1	11/21/2020 23:11	WG1580337
Toluene	U		0.00152	0.00584	1	11/21/2020 23:11	WG1580337
Ethylbenzene	U		0.000861	0.00292	1	11/21/2020 23:11	WG1580337
Total Xylenes	U		0.00103	0.00759	1	11/21/2020 23:11	WG1580337
(S) Toluene-d8	112			75.0-131		11/21/2020 23:11	WG1580337
(S) 4-Bromofluorobenzene	90.5			67.0-138		11/21/2020 23:11	WG1580337
(S) 1,2-Dichloroethane-d4	104			70.0-130		11/21/2020 23:11	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	164		17.5	43.4	10	11/24/2020 04:46	WG1580607
C28-C40 Oil Range	390		2.97	43.4	10	11/24/2020 04:46	WG1580607
(S) o-Terphenyl	41.3			18.0-148		11/24/2020 04:46	WG1580607

Collected date/time: 11/09/20 15:10

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.4		1	11/22/2020 04:56	WG1580210

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	1660		97.5	212	10	11/21/2020 19:26	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0462	B J	0.0230	0.106	1	11/21/2020 15:40	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	91.8			77.0-120		11/21/2020 15:40	WG1580201

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000523	0.00112	1	11/21/2020 23:30	WG1580337
Toluene	U		0.00145	0.00560	1	11/21/2020 23:30	WG1580337
Ethylbenzene	U		0.000825	0.00280	1	11/21/2020 23:30	WG1580337
Total Xylenes	U		0.000985	0.00727	1	11/21/2020 23:30	WG1580337
(S) Toluene-d8	111			75.0-131		11/21/2020 23:30	WG1580337
(S) 4-Bromofluorobenzene	93.1			67.0-138		11/21/2020 23:30	WG1580337
(S) 1,2-Dichloroethane-d4	106			70.0-130		11/21/2020 23:30	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	157		17.1	42.4	10	11/24/2020 04:59	WG1580607
C28-C40 Oil Range	310		2.90	42.4	10	11/24/2020 04:59	WG1580607
(S) o-Terphenyl	42.3			18.0-148		11/24/2020 04:59	WG1580607

Collected date/time: 11/09/20 15:20

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	11/22/2020 04:56	WG1580210

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	966		9.44	20.5	1	11/21/2020 19:35	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0268	B J	0.0223	0.103	1	11/21/2020 16:01	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	93.0			77.0-120		11/21/2020 16:01	WG1580201

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	11/21/2020 23:49	WG1580337
Toluene	U		0.00137	0.00527	1	11/21/2020 23:49	WG1580337
Ethylbenzene	U		0.000776	0.00263	1	11/21/2020 23:49	WG1580337
Total Xylenes	U		0.000927	0.00685	1	11/21/2020 23:49	WG1580337
(S) Toluene-d8	112			75.0-131		11/21/2020 23:49	WG1580337
(S) 4-Bromofluorobenzene	91.2			67.0-138		11/21/2020 23:49	WG1580337
(S) 1,2-Dichloroethane-d4	104			70.0-130		11/21/2020 23:49	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	47.3		16.5	41.1	10	11/24/2020 04:21	WG1580607
C28-C40 Oil Range	109		2.81	41.1	10	11/24/2020 04:21	WG1580607
(S) o-Terphenyl	73.3			18.0-148		11/24/2020 04:21	WG1580607

Collected date/time: 11/09/20 15:30

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.9		1	11/22/2020 04:56	WG1580210

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	3770		99.0	215	10	11/21/2020 19:45	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0253	<u>B</u> <u>J</u>	0.0234	0.108	1	11/21/2020 16:28	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	91.8			77.0-120		11/21/2020 16:28	WG1580201

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		0.000538	0.00115	1	11/22/2020 00:08	WG1580337
Toluene	U		0.00150	0.00577	1	11/22/2020 00:08	WG1580337
Ethylbenzene	U		0.000850	0.00288	1	11/22/2020 00:08	WG1580337
Total Xylenes	U		0.00101	0.00750	1	11/22/2020 00:08	WG1580337
(S) Toluene-d8	113			75.0-131		11/22/2020 00:08	WG1580337
(S) 4-Bromofluorobenzene	92.0			67.0-138		11/22/2020 00:08	WG1580337
(S) 1,2-Dichloroethane-d4	103			70.0-130		11/22/2020 00:08	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.68	<u>J</u>	1.73	4.31	1	11/24/2020 02:40	WG1580607
C28-C40 Oil Range	4.91	<u>B</u>	0.295	4.31	1	11/24/2020 02:40	WG1580607
(S) o-Terphenyl	68.3			18.0-148		11/24/2020 02:40	WG1580607

Collected date/time: 11/09/20 15:40

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.5		1	11/22/2020 04:56	WG1580210

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	3550		99.5	216	10	11/21/2020 19:54	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0240	B J	0.0235	0.108	1	11/21/2020 16:52	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	92.5			77.0-120		11/21/2020 16:52	WG1580201

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000543	0.00116	1	11/22/2020 00:27	WG1580337
Toluene	U		0.00151	0.00581	1	11/22/2020 00:27	WG1580337
Ethylbenzene	U		0.000857	0.00291	1	11/22/2020 00:27	WG1580337
Total Xylenes	U		0.00102	0.00756	1	11/22/2020 00:27	WG1580337
(S) Toluene-d8	114			75.0-131		11/22/2020 00:27	WG1580337
(S) 4-Bromofluorobenzene	92.0			67.0-138		11/22/2020 00:27	WG1580337
(S) 1,2-Dichloroethane-d4	105			70.0-130		11/22/2020 00:27	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.94	J J3 J6	1.74	4.32	1	11/24/2020 02:53	WG1580607
C28-C40 Oil Range	5.63	B	0.296	4.32	1	11/24/2020 02:53	WG1580607
(S) o-Terphenyl	70.0			18.0-148		11/24/2020 02:53	WG1580607

Collected date/time: 11/09/20 15:50

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.4		1	11/22/2020 04:56	WG1580210

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	350		9.64	21.0	1	11/21/2020 20:04	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0239	B J	0.0227	0.105	1	11/21/2020 17:13	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	93.3			77.0-120		11/21/2020 17:13	WG1580201

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000512	0.00110	1	11/22/2020 00:46	WG1580337
Toluene	U		0.00142	0.00548	1	11/22/2020 00:46	WG1580337
Ethylbenzene	U		0.000808	0.00274	1	11/22/2020 00:46	WG1580337
Total Xylenes	U		0.000964	0.00712	1	11/22/2020 00:46	WG1580337
(S) Toluene-d8	112			75.0-131		11/22/2020 00:46	WG1580337
(S) 4-Bromofluorobenzene	93.1			67.0-138		11/22/2020 00:46	WG1580337
(S) 1,2-Dichloroethane-d4	103			70.0-130		11/22/2020 00:46	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	11.4		1.69	4.19	1	11/24/2020 03:56	WG1580607
C28-C40 Oil Range	26.4		0.287	4.19	1	11/24/2020 03:56	WG1580607
(S) o-Terphenyl	59.4			18.0-148		11/24/2020 03:56	WG1580607

Collected date/time: 11/09/20 16:00

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.5		1	11/22/2020 04:56	WG1580210

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	130		9.54	20.7	1	11/21/2020 20:13	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0257	BJ	0.0225	0.104	1	11/21/2020 17:34	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	93.5			77.0-120		11/21/2020 17:34	WG1580201

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000501	0.00107	1	11/22/2020 01:05	WG1580337
Toluene	U		0.00140	0.00537	1	11/22/2020 01:05	WG1580337
Ethylbenzene	U		0.000791	0.00268	1	11/22/2020 01:05	WG1580337
Total Xylenes	U		0.000944	0.00698	1	11/22/2020 01:05	WG1580337
(S) Toluene-d8	113			75.0-131		11/22/2020 01:05	WG1580337
(S) 4-Bromofluorobenzene	92.0			67.0-138		11/22/2020 01:05	WG1580337
(S) 1,2-Dichloroethane-d4	106			70.0-130		11/22/2020 01:05	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.67	4.15	1	11/24/2020 02:15	WG1580607
C28-C40 Oil Range	1.74	BJ	0.284	4.15	1	11/24/2020 02:15	WG1580607
(S) o-Terphenyl	84.4			18.0-148		11/24/2020 02:15	WG1580607

Collected date/time: 11/10/20 10:00

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.2		1	11/22/2020 04:56	WG1580210

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	90.6		9.36	20.4	1	11/21/2020 20:23	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0278	B J	0.0221	0.102	1	11/21/2020 18:15	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	93.4			77.0-120		11/21/2020 18:15	WG1580201

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000484	0.00104	1	11/22/2020 01:24	WG1580337
Toluene	U		0.00135	0.00518	1	11/22/2020 01:24	WG1580337
Ethylbenzene	U		0.000763	0.00259	1	11/22/2020 01:24	WG1580337
Total Xylenes	U		0.000912	0.00673	1	11/22/2020 01:24	WG1580337
(S) Toluene-d8	110			75.0-131		11/22/2020 01:24	WG1580337
(S) 4-Bromofluorobenzene	92.8			67.0-138		11/22/2020 01:24	WG1580337
(S) 1,2-Dichloroethane-d4	105			70.0-130		11/22/2020 01:24	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	5.09		1.64	4.07	1	11/24/2020 03:31	WG1580607
C28-C40 Oil Range	22.1		0.279	4.07	1	11/24/2020 03:31	WG1580607
(S) o-Terphenyl	57.7			18.0-148		11/24/2020 03:31	WG1580607

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

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.8		1	11/22/2020 04:56	WG1580210

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	64.7		9.41	20.5	1	11/21/2020 20:32	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0247	BJ	0.0222	0.102	1	11/21/2020 18:36	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	93.2			77.0-120		11/21/2020 18:36	WG1580201

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000488	0.00105	1	11/22/2020 01:43	WG1580337
Toluene	U		0.00136	0.00523	1	11/22/2020 01:43	WG1580337
Ethylbenzene	U		0.000770	0.00261	1	11/22/2020 01:43	WG1580337
Total Xylenes	U		0.000920	0.00679	1	11/22/2020 01:43	WG1580337
(S) Toluene-d8	109			75.0-131		11/22/2020 01:43	WG1580337
(S) 4-Bromofluorobenzene	92.0			67.0-138		11/22/2020 01:43	WG1580337
(S) 1,2-Dichloroethane-d4	106			70.0-130		11/22/2020 01:43	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.65	4.09	1	11/24/2020 02:27	WG1580607
C28-C40 Oil Range	3.42	BJ	0.280	4.09	1	11/24/2020 02:27	WG1580607
(S) o-Terphenyl	86.5			18.0-148		11/24/2020 02:27	WG1580607

Collected date/time: 11/10/20 10:30

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	97.7		1	11/22/2020 04:56	WG1580210

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	107		9.41	20.5	1	11/21/2020 20:42	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0260	B J	0.0222	0.102	1	11/21/2020 18:55	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	84.5			77.0-120		11/21/2020 18:55	WG1580201

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000489	0.00105	1	11/22/2020 02:03	WG1580337
Toluene	U		0.00136	0.00523	1	11/22/2020 02:03	WG1580337
Ethylbenzene	U		0.000771	0.00262	1	11/22/2020 02:03	WG1580337
Total Xylenes	U		0.000921	0.00680	1	11/22/2020 02:03	WG1580337
(S) Toluene-d8	110			75.0-131		11/22/2020 02:03	WG1580337
(S) 4-Bromofluorobenzene	91.4			67.0-138		11/22/2020 02:03	WG1580337
(S) 1,2-Dichloroethane-d4	103			70.0-130		11/22/2020 02:03	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	631		32.9	81.9	20	11/23/2020 12:16	WG1580611
C28-C40 Oil Range	389		5.61	81.9	20	11/23/2020 12:16	WG1580611
(S) o-Terphenyl	240	J7		18.0-148		11/23/2020 12:16	WG1580611

Collected date/time: 11/10/20 10:40

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.4		1	11/22/2020 04:42	WG1580211

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	117		9.54	20.7	1	11/21/2020 20:51	WG1580287

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0258	B J	0.0225	0.104	1	11/21/2020 19:26	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	93.5			77.0-120		11/21/2020 19:26	WG1580201

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000502	0.00107	1	11/22/2020 02:22	WG1580337
Toluene	U		0.00140	0.00537	1	11/22/2020 02:22	WG1580337
Ethylbenzene	U		0.000792	0.00269	1	11/22/2020 02:22	WG1580337
Total Xylenes	U		0.000946	0.00699	1	11/22/2020 02:22	WG1580337
(S) Toluene-d8	112			75.0-131		11/22/2020 02:22	WG1580337
(S) 4-Bromofluorobenzene	89.9			67.0-138		11/22/2020 02:22	WG1580337
(S) 1,2-Dichloroethane-d4	105			70.0-130		11/22/2020 02:22	WG1580337

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.45	J	1.67	4.15	1	11/23/2020 07:36	WG1580611
C28-C40 Oil Range	8.42	B	0.284	4.15	1	11/23/2020 07:36	WG1580611
(S) o-Terphenyl	79.2			18.0-148		11/23/2020 07:36	WG1580611

Collected date/time: 11/10/20 11:00

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	98.2		1	11/22/2020 04:42	WG1580211

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	107		9.37	20.4	1	11/21/2020 21:20	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0338	B J	0.0221	0.102	1	11/21/2020 19:55	WG1580201
(S) a,a,a-Trifluorotoluene(FID)	93.0			77.0-120		11/21/2020 19:55	WG1580201

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000484	0.00104	1	11/22/2020 02:41	WG1580337
Toluene	U		0.00135	0.00518	1	11/22/2020 02:41	WG1580337
Ethylbenzene	U		0.000764	0.00259	1	11/22/2020 02:41	WG1580337
Total Xylenes	U		0.000912	0.00674	1	11/22/2020 02:41	WG1580337
(S) Toluene-d8	113			75.0-131		11/22/2020 02:41	WG1580337
(S) 4-Bromofluorobenzene	90.6			67.0-138		11/22/2020 02:41	WG1580337
(S) 1,2-Dichloroethane-d4	104			70.0-130		11/22/2020 02:41	WG1580337

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	23.2		1.64	4.07	1	11/24/2020 06:21	WG1580611
C28-C40 Oil Range	53.6		0.279	4.07	1	11/24/2020 06:21	WG1580611
(S) o-Terphenyl	49.1			18.0-148		11/24/2020 06:21	WG1580611

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

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.5		1	11/22/2020 04:42	WG1580211

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	387		9.63	20.9	1	11/21/2020 21:30	WG1580287

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	11/22/2020 04:52	WG1580519
(S) a,a,a-Trifluorotoluene(FID)	107			77.0-120		11/22/2020 04:52	WG1580519

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000511	0.00109	1	11/22/2020 05:43	WG1580340
Toluene	U		0.00142	0.00547	1	11/22/2020 05:43	WG1580340
Ethylbenzene	U		0.000807	0.00274	1	11/22/2020 05:43	WG1580340
Total Xylenes	U		0.000963	0.00711	1	11/22/2020 05:43	WG1580340
(S) Toluene-d8	113			75.0-131		11/22/2020 05:43	WG1580340
(S) 4-Bromofluorobenzene	93.1			67.0-138		11/22/2020 05:43	WG1580340
(S) 1,2-Dichloroethane-d4	106			70.0-130		11/22/2020 05:43	WG1580340

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.69	4.19	1	11/23/2020 07:49	WG1580611
C28-C40 Oil Range	3.56	BJ	0.287	4.19	1	11/23/2020 07:49	WG1580611
(S) o-Terphenyl	86.4			18.0-148		11/23/2020 07:49	WG1580611

Collected date/time: 11/10/20 11:30

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	98.3		1	11/22/2020 04:42	WG1580211

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	47.5		9.36	20.4	1	11/21/2020 21:39	WG1580287

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0221	0.102	1	11/22/2020 05:12	WG1580519
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-120		11/22/2020 05:12	WG1580519

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000484	0.00104	1	11/22/2020 06:02	WG1580340
Toluene	U		0.00135	0.00518	1	11/22/2020 06:02	WG1580340
Ethylbenzene	U		0.000763	0.00259	1	11/22/2020 06:02	WG1580340
Total Xylenes	U		0.000911	0.00673	1	11/22/2020 06:02	WG1580340
(S) Toluene-d8	112			75.0-131		11/22/2020 06:02	WG1580340
(S) 4-Bromofluorobenzene	90.1			67.0-138		11/22/2020 06:02	WG1580340
(S) 1,2-Dichloroethane-d4	104			70.0-130		11/22/2020 06:02	WG1580340

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	46.5		8.19	20.4	5	11/24/2020 11:45	WG1580611
C28-C40 Oil Range	168		1.39	20.4	5	11/24/2020 11:45	WG1580611
(S) o-Terphenyl	64.0			18.0-148		11/24/2020 11:45	WG1580611

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

Collected date/time: 11/10/20 11:40

L1285974

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	97.4		1	11/22/2020 04:42	WG1580211

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	95.5		9.44	20.5	1	11/21/2020 21:49	WG1580287

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	11/22/2020 05:33	WG1580519
(S) a,a,a-Trifluorotoluene(FID)	107			77.0-120		11/22/2020 05:33	WG1580519

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000492	0.00105	1	11/22/2020 06:21	WG1580340
Toluene	U		0.00137	0.00527	1	11/22/2020 06:21	WG1580340
Ethylbenzene	U		0.000776	0.00263	1	11/22/2020 06:21	WG1580340
Total Xylenes	U		0.000927	0.00685	1	11/22/2020 06:21	WG1580340
(S) Toluene-d8	112			75.0-131		11/22/2020 06:21	WG1580340
(S) 4-Bromofluorobenzene	90.8			67.0-138		11/22/2020 06:21	WG1580340
(S) 1,2-Dichloroethane-d4	104			70.0-130		11/22/2020 06:21	WG1580340

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	13.0		1.65	4.11	1	11/24/2020 06:34	WG1580611
C28-C40 Oil Range	51.3		0.281	4.11	1	11/24/2020 06:34	WG1580611
(S) o-Terphenyl	68.9			18.0-148		11/24/2020 06:34	WG1580611

- 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

[L1285974-01,02,03,04](#)

Method Blank (MB)

(MB) R3596256-1 11/22/20 05:57

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1285974-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1285974-01 11/22/20 05:57 • (DUP) R3596256-3 11/22/20 05:57

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	97.4	96.7	1	0.696		10

Laboratory Control Sample (LCS)

(LCS) R3596256-2 11/22/20 05:57

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

Total Solids by Method 2540 G-2011

[L1285974-05,06,07,08,09,10,11,12,13,14](#)

Method Blank (MB)

(MB) R3596245-1 11/22/20 05:43

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1285974-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1285974-12 11/22/20 05:43 • (DUP) R3596245-3 11/22/20 05:43

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	99.2	99.1	1	0.0711		10

Laboratory Control Sample (LCS)

(LCS) R3596245-2 11/22/20 05:43

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

Total Solids by Method 2540 G-2011

[L1285974-15,16,17,18,19,20,21,22,23,24](#)

Method Blank (MB)

(MB) R3596244-1 11/22/20 04:56

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1285974-23 Original Sample (OS) • Duplicate (DUP)

(OS) L1285974-23 11/22/20 04:56 • (DUP) R3596244-3 11/22/20 04:56

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	97.8	97.5	1	0.329		10

Laboratory Control Sample (LCS)

(LCS) R3596244-2 11/22/20 04:56

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

Total Solids by Method 2540 G-2011

[L1285974-25,26,27,28,29](#)

Method Blank (MB)

(MB) R3596243-1 11/22/20 04:42

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1286030-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1286030-01 11/22/20 04:42 • (DUP) R3596243-3 11/22/20 04:42

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	97.2	96.8	1	0.466		10

Laboratory Control Sample (LCS)

(LCS) R3596243-2 11/22/20 04:42

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

Wet Chemistry by Method 300.0

[L1285974-01,02,03,04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R3596338-1 11/22/20 23:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		9.20	20.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1285974-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1285974-03 11/23/20 02:56 • (DUP) R3596338-3 11/23/20 03:05

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	94.8	94.5	1	0.375		20

L1285974-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1285974-10 11/23/20 04:50 • (DUP) R3596338-6 11/23/20 05:00

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	1210	1250	5	3.10		20

Laboratory Control Sample (LCS)

(LCS) R3596338-2 11/22/20 23:42

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	218	109	90.0-110	

L1285974-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1285974-05 11/23/20 03:24 • (MS) R3596338-4 11/23/20 03:34 • (MSD) R3596338-5 11/23/20 03:43

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	521	22.7	572	576	106	106	1	80.0-120			0.736	20

Wet Chemistry by Method 300.0

[L1285974-11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29](#)

Method Blank (MB)

(MB) R3595974-1 11/21/20 13:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		9.20	20.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1285974-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1285974-12 11/21/20 18:19 • (DUP) R3595974-5 11/21/20 18:29

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	133	139	1	4.77		20

L1288220-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1288220-01 11/21/20 21:58 • (DUP) R3595974-6 11/21/20 22:08

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	66.8	29.6	1	77.2	P1	20

Laboratory Control Sample (LCS)

(LCS) R3595974-2 11/21/20 14:06

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	200	100	90.0-110	

L1285974-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1285974-11 11/21/20 17:51 • (MS) R3595974-3 11/21/20 18:00 • (MSD) R3595974-4 11/21/20 18:10

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	509	535	972	938	85.8	79.0	1	80.0-120		J6	3.64	20

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

[L1285974-01,02,03,04,05,06](#)

Method Blank (MB)

(MB) R3596011-2 11/21/20 03:38

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

Laboratory Control Sample (LCS)

(LCS) R3596011-1 11/21/20 02:54

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.78	123	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			103	77.0-120	

5 Sr

6 Qc

7 Gl

L1287311-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1287311-14 11/21/20 04:24 • (MS) R3596011-3 11/21/20 13:13 • (MSD) R3596011-4 11/21/20 13:35

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TPH (GC/FID) Low Fraction	175	U	101	106	57.5	60.8	25	10.0-151			5.44	28
(S) a,a,a-Trifluorotoluene(FID)					102	99.4		77.0-120				

8 Al

9 Sc

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

[L1285974-07,08,09,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26](#)

Method Blank (MB)

(MB) R3596242-2 11/21/20 11:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0299	↓	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	93.2			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3596242-1 11/21/20 10:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.18	94.2	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			108	77.0-120	

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

[L1285974-27,28,29](#)

Method Blank (MB)

(MB) R3595987-1 11/21/20 23:58

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	109			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3595987-2 11/22/20 00:40

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
TPH (GC/FID) Low Fraction	5.50	4.95	90.0	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			102	77.0-120	

L1288220-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1288220-01 11/22/20 07:59 • (MS) R3595987-4 11/22/20 09:02 • (MSD) R3595987-5 11/22/20 09:22

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
TPH (GC/FID) Low Fraction	124	U	69.3	72.3	55.8	58.2	25	10.0-151			4.19	28
(S) a,a,a-Trifluorotoluene(FID)					104	103		77.0-120				

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

[L1285974-01,02,03,04,05,06](#)

Method Blank (MB)

(MB) R3595957-2 11/21/20 06:22

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	112			75.0-131
(S) 4-Bromofluorobenzene	91.4			67.0-138
(S) 1,2-Dichloroethane-d4	105			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3595957-1 11/21/20 05:25

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.124	99.2	70.0-123	
Ethylbenzene	0.125	0.124	99.2	74.0-126	
Toluene	0.125	0.123	98.4	75.0-121	
Xylenes, Total	0.375	0.367	97.9	72.0-127	
(S) Toluene-d8			104	75.0-131	
(S) 4-Bromofluorobenzene			94.5	67.0-138	
(S) 1,2-Dichloroethane-d4			112	70.0-130	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1285974-07,08,09,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26](#)

Method Blank (MB)

(MB) R3595958-2 11/21/20 19:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	113			75.0-131
(S) 4-Bromofluorobenzene	92.9			67.0-138
(S) 1,2-Dichloroethane-d4	101			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3595958-1 11/21/20 18:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.136	109	70.0-123	
Ethylbenzene	0.125	0.135	108	74.0-126	
Toluene	0.125	0.135	108	75.0-121	
Xylenes, Total	0.375	0.393	105	72.0-127	
(S) Toluene-d8			104	75.0-131	
(S) 4-Bromofluorobenzene			95.2	67.0-138	
(S) 1,2-Dichloroethane-d4			110	70.0-130	

L1285974-26 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1285974-26 11/22/20 02:41 • (MS) R3595958-3 11/22/20 03:00 • (MSD) R3595958-4 11/22/20 03:19

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.130	U	0.144	0.146	111	113	1	10.0-149			1.43	37
Ethylbenzene	0.130	U	0.150	0.144	116	111	1	10.0-160			4.23	38
Toluene	0.130	U	0.152	0.151	118	117	1	10.0-156			0.683	38
Xylenes, Total	0.389	U	0.409	0.419	105	108	1	10.0-160			2.25	38
(S) Toluene-d8					112	110		75.0-131				
(S) 4-Bromofluorobenzene					91.8	90.4		67.0-138				
(S) 1,2-Dichloroethane-d4					107	107		70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1285974-27,28,29](#)

Method Blank (MB)

(MB) R3596184-2 11/22/20 05:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	110			75.0-131
(S) 4-Bromofluorobenzene	91.9			67.0-138
(S) 1,2-Dichloroethane-d4	104			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3596184-1 11/22/20 04:16

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.133	106	70.0-123	
Ethylbenzene	0.125	0.135	108	74.0-126	
Toluene	0.125	0.140	112	75.0-121	
Xylenes, Total	0.375	0.401	107	72.0-127	
(S) Toluene-d8			109	75.0-131	
(S) 4-Bromofluorobenzene			91.6	67.0-138	
(S) 1,2-Dichloroethane-d4			110	70.0-130	

L1286045-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1286045-04 11/22/20 11:45 • (MS) R3596184-3 11/22/20 12:04 • (MSD) R3596184-4 11/22/20 12:23

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.125	U	0.123	0.136	98.4	109	1	10.0-149			10.0	37
Ethylbenzene	0.125	U	0.125	0.136	100	109	1	10.0-160			8.43	38
Toluene	0.125	U	0.126	0.141	101	113	1	10.0-156			11.2	38
Xylenes, Total	0.375	U	0.367	0.383	97.9	102	1	10.0-160			4.27	38
(S) Toluene-d8					109	115		75.0-131				
(S) 4-Bromofluorobenzene					91.7	89.0		67.0-138				
(S) 1,2-Dichloroethane-d4					109	105		70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1285974-01,02,03](#)

Method Blank (MB)

(MB) R3596062-1 11/22/20 10:36

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	96.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3596062-2 11/22/20 10:51

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	52.0	104	50.0-150	
(S) o-Terphenyl			132	18.0-148	

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3596062-3 11/22/20 11:18 • (MSD) R3596062-4 11/22/20 11:31

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg		mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	114		43.5	46.2	84.9	90.4	1	50.0-150			6.02	20
(S) o-Terphenyl					78.7	91.7		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1285974-04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21,22,23](#)

Method Blank (MB)

(MB) R3596260-1 11/23/20 07:11

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	1.05	J	0.274	4.00
(S) o-Terphenyl	92.0			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3596260-2 11/23/20 07:23

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	40.1	80.2	50.0-150	
(S) o-Terphenyl			83.3	18.0-148	

L1285974-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1285974-19 11/24/20 02:53 • (MS) R3596722-1 11/24/20 03:05 • (MSD) R3596722-2 11/24/20 03:18

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	52.5	2.94	28.9	41.3	49.3	73.2	1	50.0-150	J6	J3	35.4	20
(S) o-Terphenyl					57.4	74.0		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1285974-24,25,26,27,28,29](#)

Method Blank (MB)

(MB) R3596261-1 11/23/20 06:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	0.999	J	0.274	4.00
(S) o-Terphenyl	88.7			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3596261-2 11/23/20 06:58

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	45.1	90.2	50.0-150	
(S) o-Terphenyl			90.5	18.0-148	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

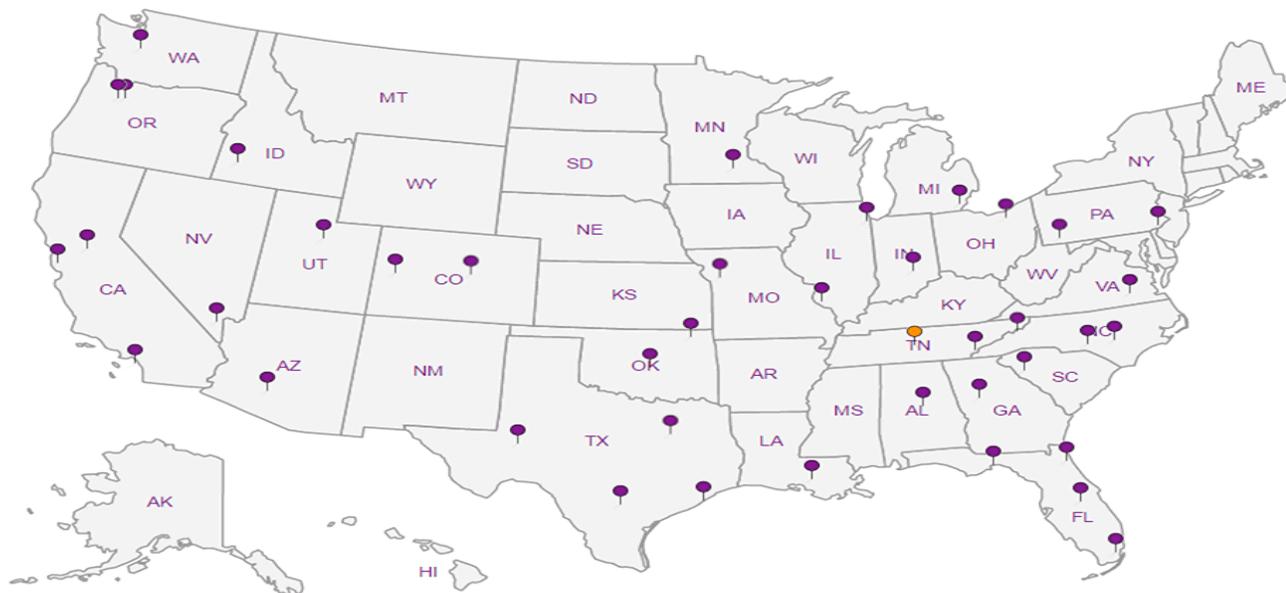
Third Party Federal Accreditations

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

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

Our Locations

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



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Pace Analytical National Center for Testing & Innovation Cooler Receipt Form			
Client: <i>COPTETRA</i>	<i>L1285974</i>		
Cooler Received/Opened On: <i>11 / 14 / 20</i>	Temperature:	<i>.2</i>	
Received By: <i>Billy Barras</i>			
Signature: <i>B. Barras</i>			
Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	<input checked="" type="checkbox"/>		
COC Signed / Accurate?		<input checked="" type="checkbox"/>	
Bottles arrive intact?		<input checked="" type="checkbox"/>	
Correct bottles used?		<input checked="" type="checkbox"/>	
Sufficient volume sent?		<input checked="" type="checkbox"/>	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			



ANALYTICAL REPORT

January 25, 2021

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

ConocoPhillips - Tetra Tech

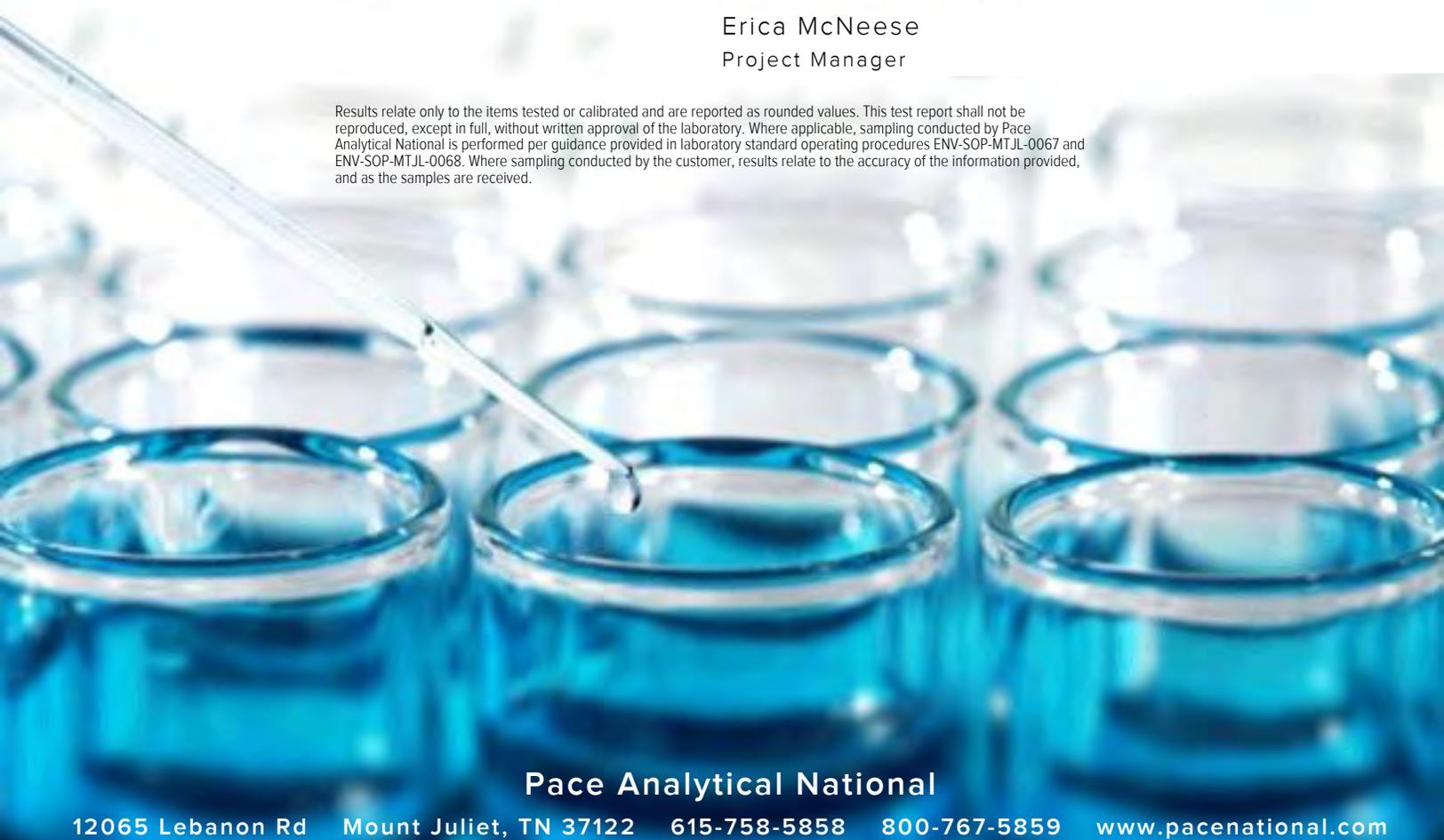
Sample Delivery Group: L1307333
 Samples Received: 01/16/2021
 Project Number: 212C-MD-02334 TASK18
 Description: 1RP-1694

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

Entire Report Reviewed By:

Erica McNeese
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.



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	
Tc: Table of Contents	2	
Ss: Sample Summary	3	
Cn: Case Narrative	4	
Sr: Sample Results	5	
BH 8 (0-1') L1307333-01	5	
BH 9 (0-1') L1307333-02	6	
Qc: Quality Control Summary	7	
Total Solids by Method 2540 G-2011	7	
Wet Chemistry by Method 300.0	8	
Volatile Organic Compounds (GC) by Method 8015D/GRO	9	
Volatile Organic Compounds (GC/MS) by Method 8260B	10	
Semi-Volatile Organic Compounds (GC) by Method 8015	11	
Gl: Glossary of Terms	12	
Al: Accreditations & Locations	13	
Sc: Sample Chain of Custody	14	

BH 8 (0-1') L1307333-01 Solid

Collected by: Adrian Garcia
 Collected date/time: 01/14/21 11:00
 Received date/time: 01/16/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607928	1	01/22/21 09:30	01/22/21 09:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1606938	1	01/20/21 17:15	01/20/21 18:55	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1609773	1	01/20/21 11:05	01/21/21 23:13	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1609427	1	01/20/21 11:05	01/21/21 18:13	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1609433	1	01/21/21 22:54	01/22/21 15:36	WCR	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

BH 9 (0-1') L1307333-02 Solid

Collected by: Adrian Garcia
 Collected date/time: 01/14/21 11:10
 Received date/time: 01/16/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607928	1	01/22/21 09:30	01/22/21 09:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1606938	1	01/20/21 17:15	01/20/21 19:05	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1609773	1	01/20/21 11:05	01/21/21 23:35	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1609427	1	01/20/21 11:05	01/21/21 18:32	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1609433	1	01/21/21 22:54	01/22/21 14:50	WCR	Mt. Juliet, TN

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Erica McNeese
Project Manager

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

Collected date/time: 01/14/21 11:00

L1307333

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.8		1	01/22/2021 09:42	WG1607928

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		11.5	25.1	1	01/20/2021 18:55	WG1606938

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0868	J	0.0272	0.125	1	01/21/2021 23:13	WG1609773
(S) a,a,a-Trifluorotoluene(FID)	88.7			77.0-120		01/21/2021 23:13	WG1609773

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		0.000704	0.00151	1	01/21/2021 18:13	WG1609427
Toluene	U		0.00196	0.00754	1	01/21/2021 18:13	WG1609427
Ethylbenzene	U		0.00111	0.00377	1	01/21/2021 18:13	WG1609427
Total Xylenes	U		0.00133	0.00980	1	01/21/2021 18:13	WG1609427
(S) Toluene-d8	120			75.0-131		01/21/2021 18:13	WG1609427
(S) 4-Bromofluorobenzene	101			67.0-138		01/21/2021 18:13	WG1609427
(S) 1,2-Dichloroethane-d4	105			70.0-130		01/21/2021 18:13	WG1609427

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	40.1		2.02	5.01	1	01/22/2021 15:36	WG1609433
C28-C40 Oil Range	84.2		0.343	5.01	1	01/22/2021 15:36	WG1609433
(S) o-Terphenyl	78.3			18.0-148		01/22/2021 15:36	WG1609433

Collected date/time: 01/14/21 11:10

L1307333

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.3		1	01/22/2021 09:42	WG1607928

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	49.7		9.65	21.0	1	01/20/2021 19:05	WG1606938

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0228	0.105	1	01/21/2021 23:35	WG1609773
(S) a,a,a-Trifluorotoluene(FID)	88.4			77.0-120		01/21/2021 23:35	WG1609773

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	01/21/2021 18:32	WG1609427
Toluene	U		0.00143	0.00549	1	01/21/2021 18:32	WG1609427
Ethylbenzene	U		0.000810	0.00275	1	01/21/2021 18:32	WG1609427
Total Xylenes	U		0.000967	0.00714	1	01/21/2021 18:32	WG1609427
(S) Toluene-d8	123			75.0-131		01/21/2021 18:32	WG1609427
(S) 4-Bromofluorobenzene	98.1			67.0-138		01/21/2021 18:32	WG1609427
(S) 1,2-Dichloroethane-d4	102			70.0-130		01/21/2021 18:32	WG1609427

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	9.05		1.69	4.20	1	01/22/2021 14:50	WG1609433
C28-C40 Oil Range	22.7		0.287	4.20	1	01/22/2021 14:50	WG1609433
(S) o-Terphenyl	61.7			18.0-148		01/22/2021 14:50	WG1609433

Total Solids by Method 2540 G-2011

[L1307333-01,02](#)

Method Blank (MB)

(MB) R3615478-1 01/22/21 09:42

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00100			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

L1307337-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1307337-01 01/22/21 09:42 • (DUP) R3615478-3 01/22/21 09:42

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits
Total Solids	94.8	93.4	1	1.46		10

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3615478-2 01/22/21 09:42

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

Wet Chemistry by Method 300.0

[L1307333-01,02](#)

Method Blank (MB)

(MB) R3614945-1 01/20/21 18:13

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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1307330-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1307330-01 01/20/21 18:37 • (DUP) R3614945-3 01/20/21 18:46

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) R3614945-2 01/20/21 18:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	203	101	90.0-110	

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

[L1307333-01,02](#)

Method Blank (MB)

(MB) R3615563-2 01/21/21 21:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.4			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3615563-1 01/21/21 20:38

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.91	107	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			110	77.0-120	

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

[L1307333-01,02](#)

Method Blank (MB)

(MB) R3615080-2 01/21/21 13:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	123			75.0-131
(S) 4-Bromofluorobenzene	97.4			67.0-138
(S) 1,2-Dichloroethane-d4	103			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3615080-1 01/21/21 12:19

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.123	98.4	70.0-123	
Ethylbenzene	0.125	0.149	119	74.0-126	
Toluene	0.125	0.143	114	75.0-121	
Xylenes, Total	0.375	0.434	116	72.0-127	
(S) Toluene-d8			120	75.0-131	
(S) 4-Bromofluorobenzene			95.4	67.0-138	
(S) 1,2-Dichloroethane-d4			110	70.0-130	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1307333-01,02](#)

Method Blank (MB)

(MB) R3615428-1 01/22/21 08:39

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	64.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3615428-2 01/22/21 08:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	34.4	68.8	50.0-150	
(S) o-Terphenyl			74.3	18.0-148	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier Description

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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* 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.

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California	2932	New Mexico ¹	TN00003
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}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
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Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	AZLA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
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¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable



Analysis Request of Chain of Custody Record

 <h1 style="margin: 0;">Tetra Tech, Inc.</h1>	901 West Wall Street, Suite 100 Midland, Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946
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Client Name: Conoco Phillips	Site Manager: Christian Llull
Project Name: 1RP-1694	Contact Info: Email: christian.llull@tetrattech.com Phone: (512) 338-1667
Project Location: Lea County, New Mexico	Project #: 212C-MD-02334 Task 18
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.)														
BTEX 8021B BTEX 8260B TPH TX1005 (Ext to C35) TPH 8015M (GRO - DFO - 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														
-01	BH 8 (0'-1')	01/14/21	1100	X			X			1	N	X	X	
002	BH 9 (0'-1')	01/14/21	1110	X		X				1	N	X	X	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DFO - 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
		YEAR: 2020		WATER	SOIL	HCL	HNO ₃	ICE	NONE																							
		DATE	TIME																													

Relinquished by: <i>Adrian Garcia</i>	Date: 1/15/21	Time: 13:00	Received by: <i>[Signature]</i>	Date: 1-15-21	Time: 13:00
Relinquished by: <i>[Signature]</i>	Date: 1-15-21	Time: 16:00	Received by: <i>[Signature]</i>	Date: 1-15-21	Time: 16:00
Relinquished by: <i>[Signature]</i>	Date: 1/16/21	Time: 9:45	Received by: <i>[Signature]</i>	Date: 1/16/21	Time: 9:45

LAB USE ONLY Sample Temperature	REMARKS: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr. <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report
---	--

Sample Receipt Checklist

COC Seal Present/Intact: Y N IF Applicable

COC Signed/Accurate: Y N VOA Zero Headspace: Y N

Bottles arrive intact: Y N Pres. Correct/Check: Y N

Correct bottles used: Y N

RAI Screen <0.5 mR/hr: Y N

ORIGINAL COPY

C093

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

2.710 = 2.747 ^u _{A7} COCSI

APPENDIX F NMSLO Seed Mixture Details



A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Lea County, New Mexico

1RP-1694



December 31, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Lea County, New Mexico.....	13
KO—Kimbrough gravelly loam, dry, 0 to 3 percent slopes.....	13
References	15

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

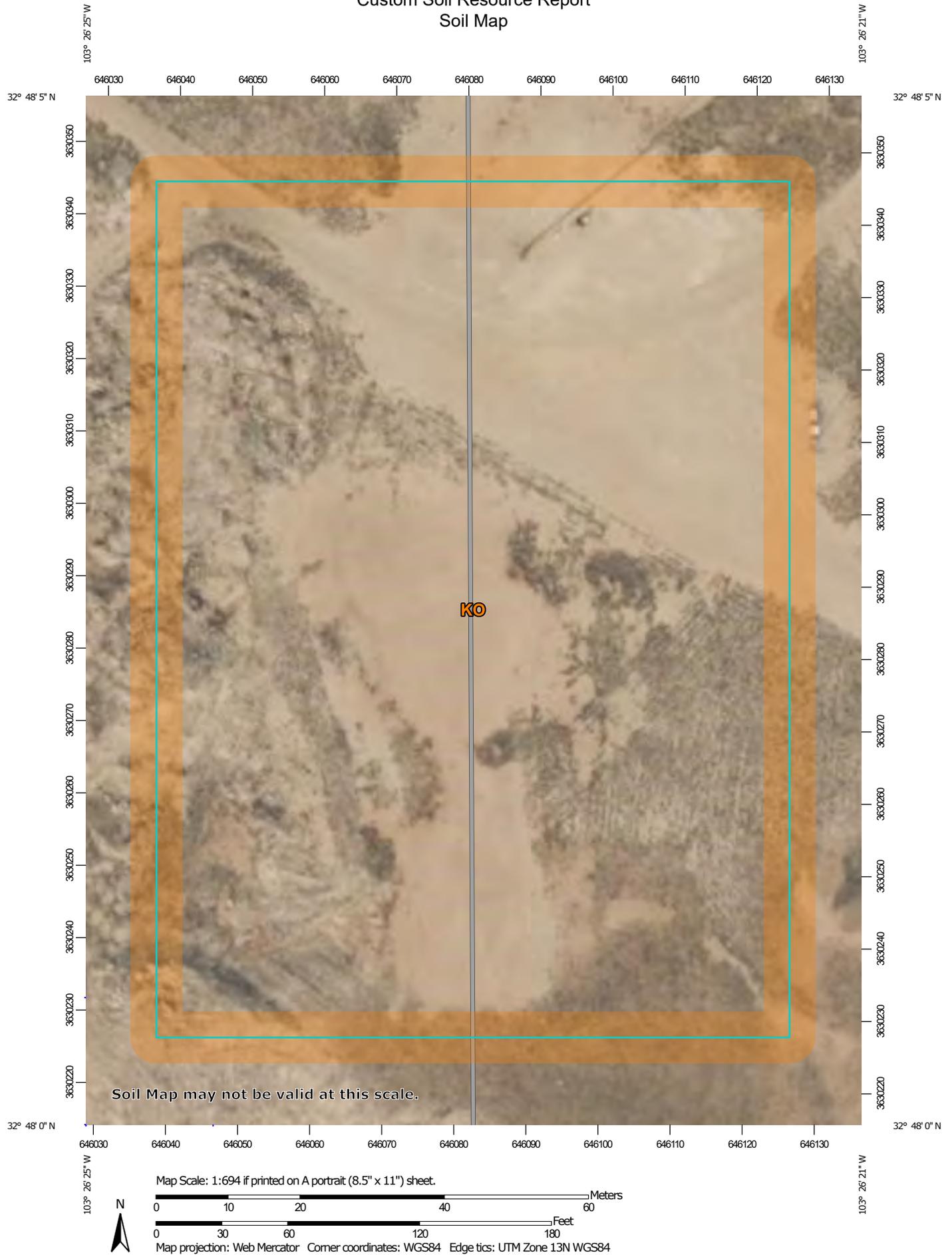
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lea County, New Mexico
 Survey Area Data: Version 17, Jun 8, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KO	Kimbrough gravelly loam, dry, 0 to 3 percent slopes	2.6	100.0%
Totals for Area of Interest		2.6	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Custom Soil Resource Report

Lea County, New Mexico**KO—Kimbrough gravelly loam, dry, 0 to 3 percent slopes****Map Unit Setting**

National map unit symbol: 2tw43
Elevation: 2,500 to 4,800 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Kimbrough, dry, and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimbrough, Dry**Setting**

Landform: Plains, playa rims
Down-slope shape: Linear, convex
Across-slope shape: Linear, concave
Parent material: Loamy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 3 inches: gravelly loam
Bw - 3 to 10 inches: loam
Bkkm1 - 10 to 16 inches: cemented material
Bkkm2 - 16 to 80 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 4 to 18 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 95 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Custom Soil Resource Report

Minor Components

Eunice

Percent of map unit: 10 percent

Landform: Plains

Down-slope shape: Linear

Across-slope shape: Convex

Ecological site: R077DY049TX - Very Shallow 12-17" PZ

Hydric soil rating: No

Spraberry

Percent of map unit: 6 percent

Landform: Plains, playa rims

Down-slope shape: Linear, convex

Across-slope shape: Linear

Ecological site: R077DY049TX - Very Shallow 12-17" PZ

Hydric soil rating: No

Kenhill

Percent of map unit: 4 percent

Landform: Plains

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: R077DY038TX - Clay Loam 12-17" PZ

Hydric soil rating: No

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NMSLO Seed Mix**Loamy (L)****LOAMY (L) SITES SEED MIXTURE:**

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Black grama	VNS, Southern	1.0	D
Blue grama	Lovington	1.0	D
Sideoats grama	Vaughn, El Reno	4.0	F
Sand dropseed	VNS, Southern	2.0	S
Alkali sacaton	VNS, Southern	1.0	
Little bluestem	Cimarron, Pastura	1.5	F
Forbs:			
Firewheel (<i>Gaillardia</i>)	VNS, Southern	1.0	D
Shrubs:			
Fourwing saltbush	Marana, Santa Rita	1.0	D
Common winterfat	VNS, Southern	0.5	F
		Total PLS/acre	18.0

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box
VNS = Variety Not Stated, PLS = Pure Live Seed

- Seed mixes should be provided in bags separating seed types into the three categories: small (S), standard (D) and fluffy (F).
- VNS, Southern – Seed should be from a southern latitude collection of this species.
- Double seed application rate for broadcast or hydroseeding.
- If one species is not available, contact the SLO for an approved substitute; alternatively the SLO may require other species proportionately increased.
- Additional information on these seed species can be found on the USDA Plants Database website at <http://plants.usda.gov>.



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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 45925

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 45925
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Work plan approved. Variance request granted for sidewall and base excavation samples to be collected every 500 square feet.	3/17/2023
amaxwell	Submit closure report via the OCD permitting portal by 6/23/2023.	3/17/2023