



July 7, 2021

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

**Re: REVISED Release Characterization and Remediation Work Plan  
Maverick Natural Resources  
EVGSAU Satellite #6 Gas Vent Line Release  
Unit Letter H/I, Section 33, Township 17 South, Range 35 East  
Lea County, New Mexico  
Incident ID nPAC0715048707**

Dear Sir or Madam,

Tetra Tech, Inc. (Tetra Tech) was initially contracted by ConocoPhillips (COP) to assess a historical crude oil release that occurred at the Satellite #6 flare pit. The Satellite #6 flare pit is located approximately 0.4 miles northeast of the Satellite #6 facility and approximately 75 feet (ft) east of the EVGSAU 3333-007 well (API No. 30-025-26682). The release footprint is located in Public Land Survey System (PLSS) Unit Letter H/I, Section 32, Township 17 South, Range 35 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.79137°, -103.45428°, as shown in **Figures 1 and 2**. On June 1, 2022, Maverick Natural Resources (Maverick) acquired this site from ConocoPhillips. Tetra Tech has been retained by Maverick to continue the remediation of this site.

## BACKGROUND

According to the State of New Mexico C-141 Initial Report (**Appendix A**), the release was discovered on November 29, 2006. The unplanned oil release originated from a controller associated with the East Vacuum Grayburg-San Andres Unit (EVGSAU) Central Tank Battery (CTB) free water knockout (FWKO) valve. The EVGSAU CTB FWKO gas vent valve controller malfunctioned, which caused the FWKO valve to open, causing a pressure loss that allowed crude oil to release into the EVLRP/CO2 Plant and eventually discharge to the Satellite #6 flare pit. The release consisted of 74 barrels (bbls) of oil into the 20-ft by 35-ft dry caliche flare pit. During immediate response actions, a vacuum truck recovered 70 bbls of free liquid. The initial C-141 report form was submitted to the New Mexico Oil Conservation District (NMOCD) on December 1, 2006. The release was subsequently assigned Incident ID nPAC0715048707.

## SITE CHARACTERIZATION

Tetra tech performed a site characterization and no watercourses, sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.29 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 800 meters (approximately ½ mile) of the Site. The average depth to groundwater is 60 ft below ground surface (bgs), however, the depth to water reported in these wells is greater than 25 years old. On February 11, 2016, Basin Environmental Service Technologies (Basin) oversaw the advancement of a depth to water boring (SB-2) by White Drilling at 32.787554°, -103.449746°, approximately 0.37 miles

Tetra Tech

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## REVISED Release Characterization and Remediation Work Plan

July 7, 20023

Maverick Natural Resources

southeast of the incident release location. The boring was advanced to 55 ft bgs, no groundwater was observed, and groundwater was verified to be at depths greater than 50 ft bgs in the vicinity of the Site. 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 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

**SITE ASSESSMENT**

During a visual Site inspection conducted by Tetra Tech in July 2020, heavy surficial hydrocarbon staining was noted on the interior floor inside of the earthen containment berm located at the GPS coordinates found in the C-141. The containment was identified as the Satellite #6 flare pit. It was unclear whether the observed staining inside the pit is directly attributable to the 2006 release. No evidence of remediation or reclamation activities was observed at the Site. Photographic documentation of the visual Site inspection is included in **Appendix C**.

Tetra Tech personnel were on site on behalf of COP in January and February 2021 to conduct soil sampling to achieve vertical and horizontal delineation of the release. One (1) boring (BH-1) was installed on the caliche well pad immediately outside of the pit berm using an air rotary drilling rig to a depth of 20 ft bgs. The interior of the pit was inaccessible with the drilling rig given the exterior berm and a perimeter fence. One (1) hand auger boring (AH-1) was advanced in the interior of the release extent within the pit berm to a depth of 1.5 ft bgs. Auger refusal was encountered at 1.5' bgs. Four (4) hand auger borings (AH-2 through AH-5) were advanced along the perimeter of the release to various depths to horizontally delineate the release extent. 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 January and February 2021 soil boring locations, and GPS coordinates for the boring locations are presented in **Table 1**.

Soils were field screened for salinity using an ExTech EC400 ExStik and for volatile organics using a photoionization detector (PID) to determine sampling intervals. A total of fourteen (14) samples were collected from the six (6) borings (BH-1 and AH-1 through AH-5) and submitted to Pace Analytical National Center for Testing & Innovation (Pace) in Nashville, Tennessee to be analyzed for chlorides via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in **Appendix D**.

## REVISED Release Characterization and Remediation Work Plan

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Maverick Natural Resources

**SUMMARY OF SAMPLING RESULTS**

Results from the January and February 2021 soil sampling event are summarized in **Table 2**. The analytical results associated with the boring locations BH-1 and AH-2 exceeded the chloride delineation limit of 600 mg/kg in sampling intervals taken from the top 4 ft. Additionally, analytical results associated with interior boring location AH-1 greatly exceeded the Site remediation RRAL for TPH (2,500 mg/kg) in the 0-1.5 ft bgs sample interval (25,109 mg/kg). The analytical results associated with the remainder of the samples analyzed were below the applicable Site reclamation and remediation RRALs for all Table I constituents.

Horizontal delineation was achieved during the Site assessment. Vertical delineation was achieved at boring location BH-1 on the caliche well pad adjacent to the flare pit, not at boring location AH-1 within the flare pit. As mentioned, the interior of the pit was not accessible to the drilling rig due to the presence of an earthen berm and outer fence, but based on the high concentration of TPH in the 0-1.5 ft sample interval (25,109 mg/kg) and the analytical results in boring BH-1, soils in the flare pit are interpreted as impacted with TPH down to 2 - 4 ft bgs.

**REMEDIATION WORK PLAN**

Based on the analytical results, Maverick proposes to remove the impacted material in the areas around boring locations AH-1 in the flare pit and BH- 1 on the caliche well pad adjacent to the flare pit, and the area surrounding AH-2 on the caliche well pad, to a depth of 4 ft bgs as shown in **Figure 4**. Excavation in the area will be performed using heavy equipment (backhoes, hoe rams, and track hoes) within the release area footprint.

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 390 cubic yards.

**VARIANCE REQUEST**

After characterization of this release, Maverick proposes to leave impacted soils in the release area footprint (with concentrations greater than those specified in Table I) located below 4 ft bgs in place. Groundwater in this area is below 55 ft bgs, and the release footprint is located at an active well pad in areas immediately under or around oil and gas production equipment where any further excavation past 4 ft bgs could cause a major facility deconstruction, and/or additional unwanted impact to the environment.

Thus, in accordance with 19.15.29.14(A) NMAC, Maverick Natural Resources requests a variance for the placement of a liner within the excavated area should contaminant concentrations exceed the proposed RRALs for the Site at depths exceeding 4 feet bgs. A 20-mil reinforced poly liner will be installed and properly seated throughout the base of the excavation (at 4 feet below the surrounding grade). The liner will provide an engineering control that will serve as a barrier and inhibit the downward migration of any residual constituents.

**ALTERNATIVE CONFIRMATION SAMPLING PLAN**

In accordance with 19.15.29.12(D)(1)(b) NMAC, Maverick proposes the following alternative confirmation sampling plan to adhere to NMOCD requirements. The proposed confirmation sample locations are depicted in Figure 5. Six (6) confirmation floor samples and Thirteen (13) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation areas encompass a total surface area of approximately 2,650 square feet.

These confirmation sidewall and floor samples will be representative of no more than approximately 500 square feet of excavated area. Confirmation samples will be submitted to Cardinal Laboratories for analysis of TPH (Method 8015 modified), BTEX (Method 8021B), and chloride (USEPA Method SM4500Cl-B). If the analytical results associated with these sample locations exceed the respective RRAL, additional

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Maverick Natural Resources

excavation will be conducted at those locations until closure criteria are attained, or the excavation floor reaches 4 ft bgs.

**SITE RECLAMATION AND RESTORATION PLAN**

The area proposed for remediation at the Site is restricted to an active production area on the caliche well pad, and therefore no Site reclamation is warranted at this time. At the time of facility abandonment or well plugging and abandonment, final reclamation shall take place in accordance with 19.15.29.13 NMAC.

**CONCLUSION**

Maverick proposes to begin remediation activities at the Site within 90 days of NMOCD plan approval. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results of the confirmation sampling will be submitted to NMOCD.

If you have any questions concerning the soil assessment or the proposed remediation activities for the Site, please call me at (832) 251-2093 or Steve at (713) 806-8871.

Sincerely,

**Tetra Tech, Inc.**



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



Stephen Jester  
Program Manager  
Tetra Tech, Inc.

cc:

Mr. Bryce Wagoner, Maverick Natural Resources



**REVISED Release Characterization and Remediation Work Plan**  
July 7, 20023

Maverick Natural Resources

**LIST OF ATTACHMENTS**

**Figures:**

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

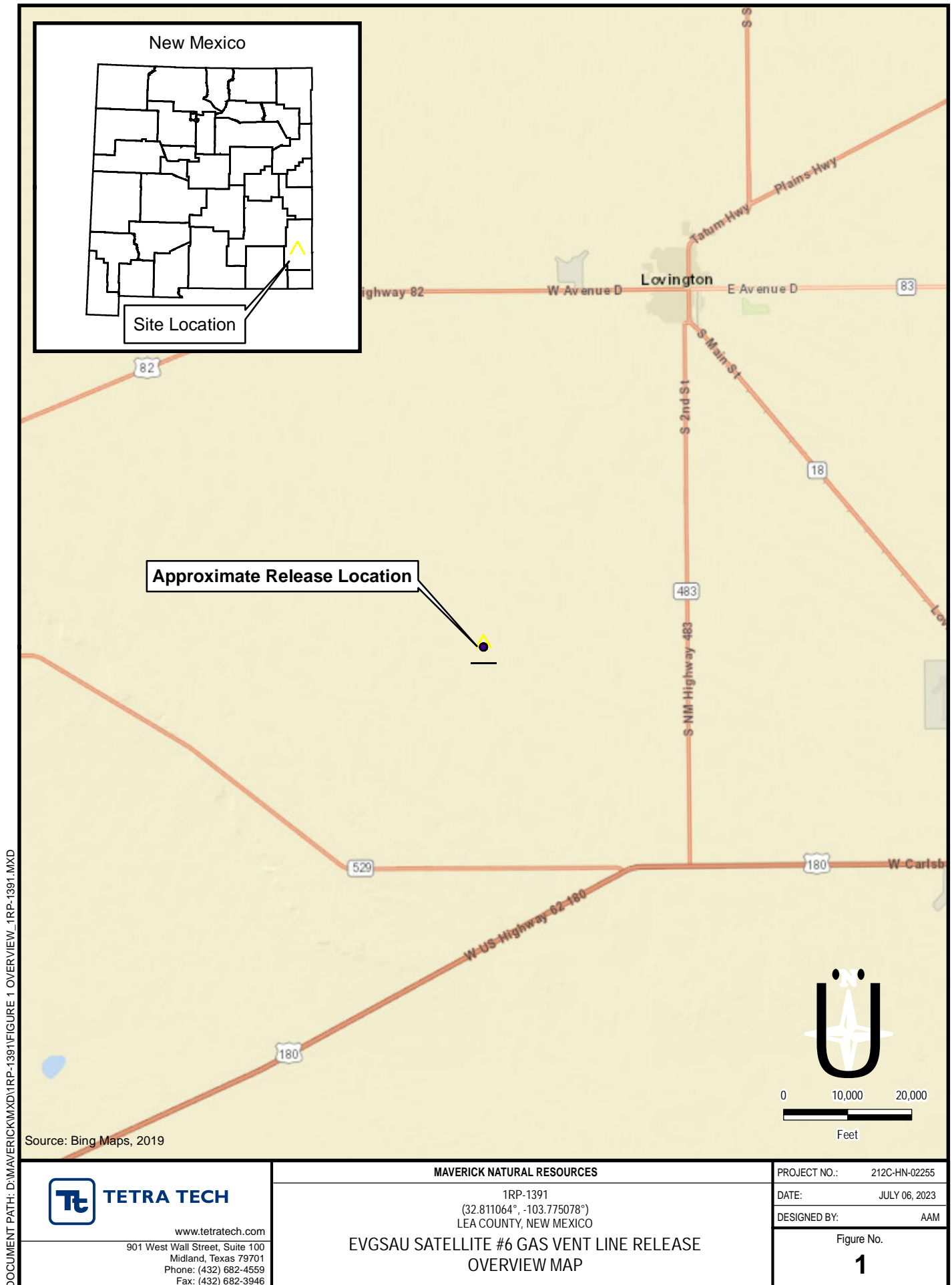
**Tables:**

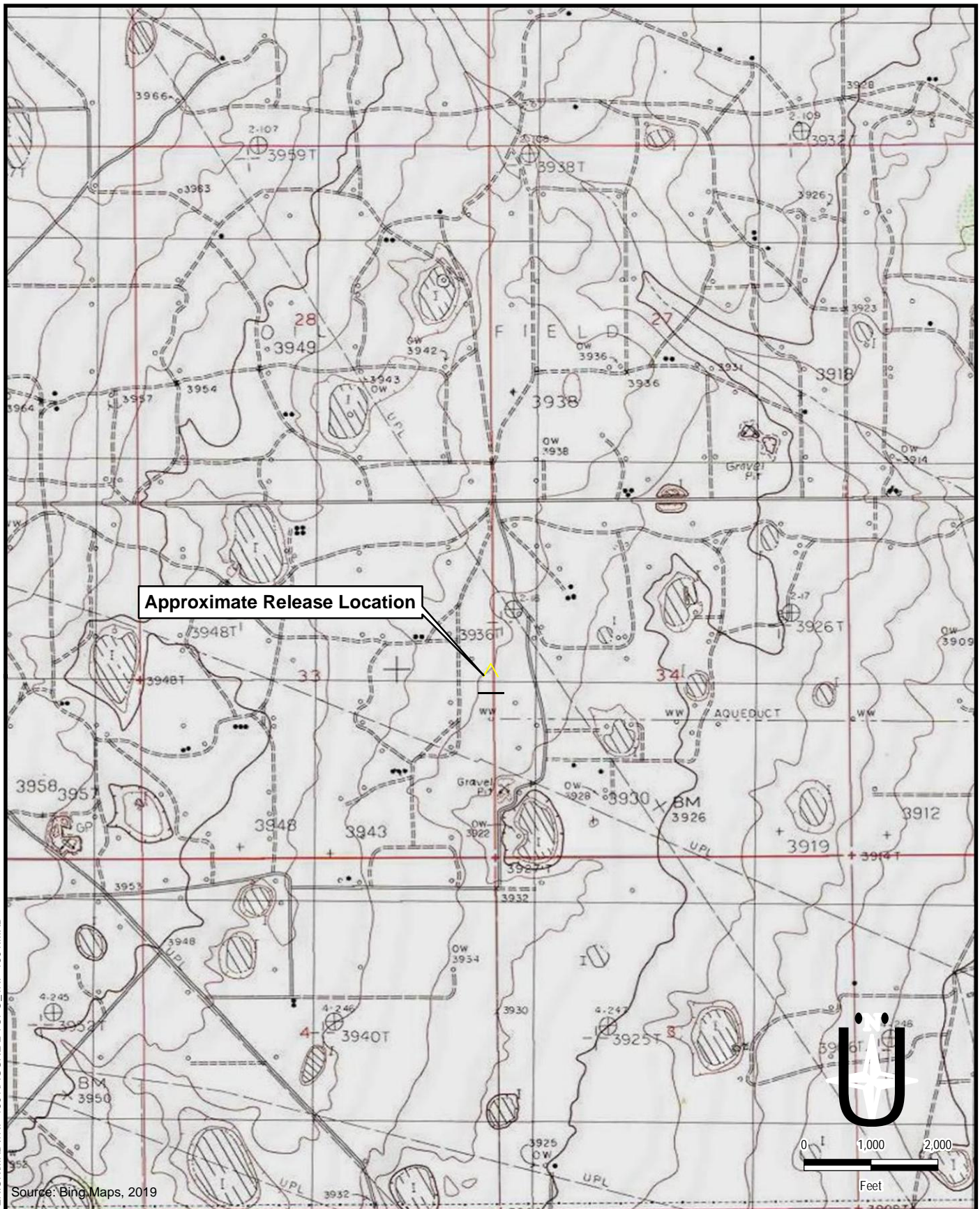
- Table 1 – Boring Location Coordinates
- Table 2 – Summary of Analytical Results – Soil Assessment

**Appendices:**

- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – Photographic Documentation
- Appendix D – Laboratory Analytical Data

## **FIGURES**





DOCUMENT PATH: D:\MAVERICK\WDX\1RP-1391\FIGURE 2 TOPO\_1RP-1391.MXD


**TETRA TECH**
[www.tetrattech.com](http://www.tetrattech.com)

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

**MAVERICK NATURAL RESOURCES**

1RP-1391

(32.811064°, -103.775078°)

LEA COUNTY, NEW MEXICO

**EVGSAU SATELLITE #6 GAS VENT LINE RELEASE  
 TOPOGRAPHIC MAP**

PROJECT NO.: 212C-HN-02255

DATE: JULY 06, 2023

DESIGNED BY: AAM

Figure No.

**2**









DOCUMENT PATH: D:\MAVERICK\MXD\1RP-1391\FIGURE 4 REMEDIATION\_1RP-1391\_V2.MXD

### Legend

- Boring Location
- Boring Location - Hand Auger
- Proposed Excavation - 4' BGS
- Approximate Release Extent

BGS - Below Ground Surface  
Source: Bing Maps, 2019



**TETRA TECH**

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MAVERICK NATURAL RESOURCES

1RP-1391  
(32.791377°, -103.454283°)  
LEA COUNTY, NEW MEXICO

**EVGSAU SATELLITE #6 GAS VENT LINE RELEASE  
PROPOSED REMEDIATION EXTENT**

PROJECT NO.: 212C-HN-02255

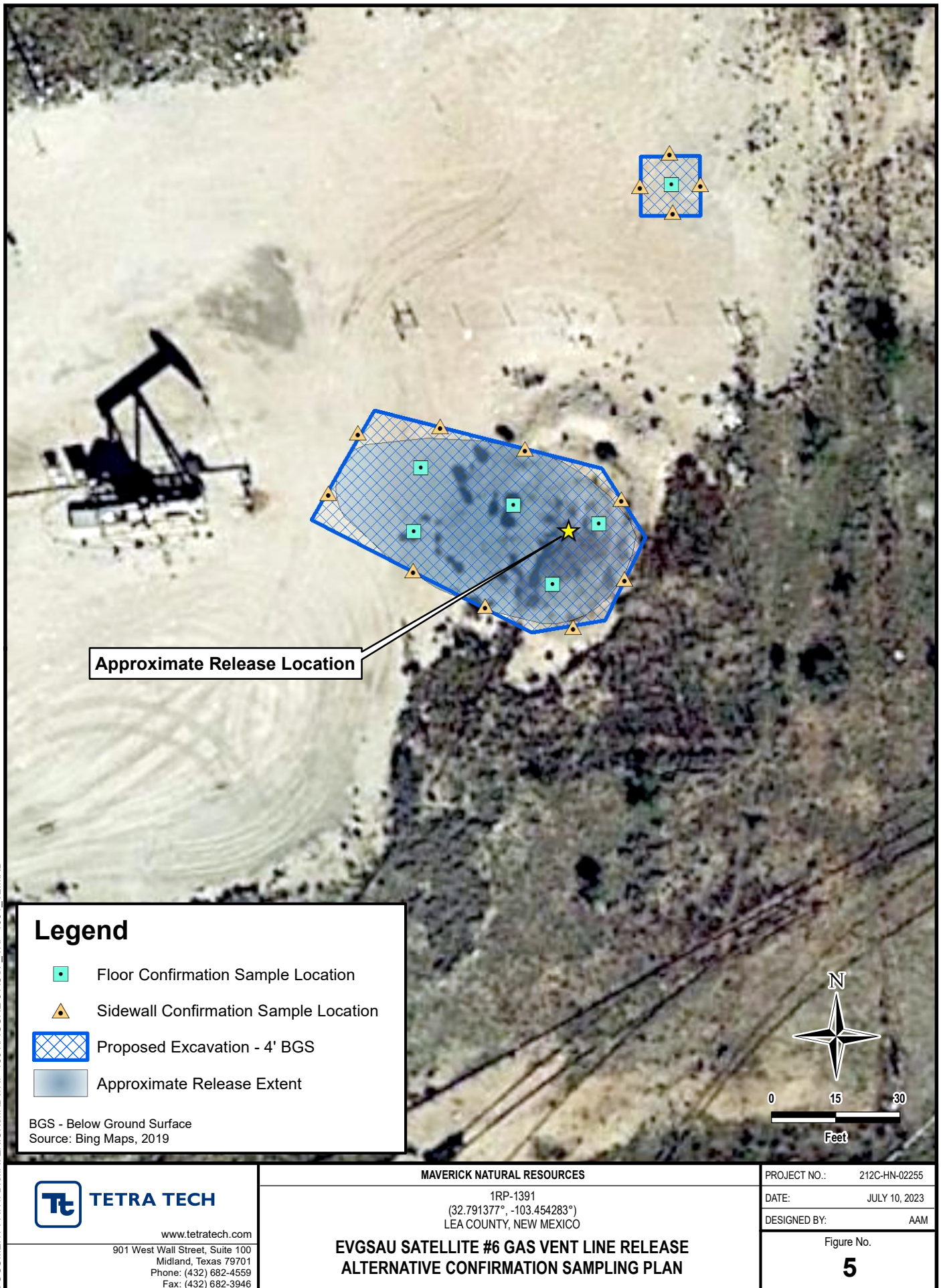
DATE: JULY 10, 2023

DESIGNED BY: AAM

Figure No.

**4**





## **TABLES**

TABLE 1  
BORING LOCATION COORDINATES  
SOIL ASSESSMENT - 1RP-1391  
CONOCOPHILLIPS  
EVGSAU SATELLITE #6 GAS VENT LINE RELEASE  
LEA COUNTY, NM

Boring ID	Latitude	Longitude
AH-1	32.791366	-103.454283
AH-2	32.791596	-103.454201
AH-3	32.791277	-103.454412
AH-4	32.791530	-103.453673
AH-5	32.791734	-103.454632
BH-1	32.791410	-103.454446

TABLE 2  
SUMMARY OF ANALYTICAL RESULTS  
SOIL ASSESSMENT - 1RP-1391  
CONOCOPHILLIPS  
EVGSAU SATELLITE #6 GAS VENT LINE RELEASE  
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth Interval	Field Screening Results		Chloride <sup>1</sup>		BTEx <sup>2</sup>								TPH <sup>3</sup>							
							Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEx		Gro <sup>4</sup>		DRO		ORO	
			C <sub>3</sub> - C <sub>10</sub>														C <sub>10</sub> - C <sub>28</sub>		C <sub>28</sub> - C <sub>40</sub>			
		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	
AH-1	1/13/2021	0-1.5	-	-	509		0.763		< 0.0677	J3	11.3	V	8.04	J5	20.1	509		14100		10500		25,109
AH-2	1/13/2021	0-1	1180	2.1	806		< 0.00112		< 0.00559		< 0.00280		< 0.00727		-	< 0.106		< 4.24		0.935	B J	0.935
		3-4	1760	2.9	1,460		< 0.00112		< 0.00561		< 0.00280		< 0.00729		-	< 0.106		< 4.24		0.635	B J	0.635
AH-3	1/13/2021	0-1	280	1.6	318		< 0.00114		< 0.00570		< 0.00285		< 0.00741		-	< 0.107		7.11		7.02	B	7.02
		3-4	220	0.9	237		< 0.00113		< 0.00565		< 0.00283		< 0.00735		-	< 0.106		< 4.26		1.12	B J	1.12
AH-5	2/5/2021	0-1	-	-	< 10.1		< 0.00120		< 0.00598		< 0.00299		< 0.00777		-	0.0733	B J	10.4		11.6		22.1
BH-1	1/13/2021	0-1	-	-	5,030	V	0.000564	J	< 0.00623		0.00203	J	0.00589	J	0.00848	0.209		690		752		1,442
		2-3	-	-	1,190		< 0.00116		< 0.00580		< 0.00290		< 0.00754		-	0.0657	B J	13.7		18.6		32.4
		4-5	-	-	1,180		< 0.00110		< 0.00551		< 0.00275		< 0.00716		-	< 0.105		9.46		6.49		16.0
		6-7	-	-	674		< 0.00113		< 0.00563		< 0.00281		< 0.00732		-	< 0.106		8.34		7.03		15.4
		9-10	-	-	263		< 0.00120		< 0.00598		< 0.00299		< 0.00777		-	< 0.110		4.83		3.41	J	8.24
		14-15	-	-	75.7		< 0.00124		< 0.00619		< 0.00310		< 0.00805		-	< 0.112		3.17	J	2.13	J	5.30
		19-20	-	-	128		< 0.00122		< 0.00609		< 0.00304		< 0.00791		-	< 0.111		< 4.43		0.566	J	0.566
BH-3	1/14/2021	0-1	-	-	< 21.1		< 0.00111		< 0.00555		< 0.00277		< 0.00721		-	< 0.105		3.51	J	14.9		18.4

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***

Shaded rows indicate intervals proposed for excavation.

- 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.
- J5 The sample matrix interfered with the ability to make any accurate determination; spike value is low.
- V The sample concentration is too high to evaluate accurate spike recoveries.

## **APPENDIX A C-141 Forms**



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

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

Form C-141  
Revised October 10, 2003

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

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company <b>ConocoPhillips Company</b>	Contact <b>Kenneth N. Andersen</b>
Address <b>3300 North A St., Bldg. 6, Midland, TX 79705-5406</b>	Telephone No. <b>505.391.3158</b>
Facility Name <b>EVGASU Satellite # 6</b>	Facility Type <b>Oil and Gas</b>

Surface Owner <b>State of New Mexico</b>	Mineral Owner <b>State of New Mexico</b>	Lease No <b>B-1713-1</b>
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### LOCATION OF RELEASE

30-025-26682

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

Latitude **32.79138N** Longitude **-103.45432W**

### NATURE OF RELEASE

Type of Release <b>Crude Oil</b>	Volume of Release <b>74 bbl (74 oil, 0 water)</b>	Volume Recovered <b>(70 oil, 0 water)</b>
Source of Release <b>EVGSAU CTB gas vent line @ Sat. # 6 flare pit ~ 50ft east of EVGSAU 3333-007 (API # 30-025-26682)</b>	Date and Hour of Occurrence <b>11/29/2006 2330hrs</b>	Date and Hour of Discovery <b>11/30/2006 0800hrs</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>NMOCD Patricia A. Caperton, left voice message</b>	
By Whom? <b>Kenneth N. Andersen</b>	Date and Hour <b>12/01/2006 Evening</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

**The spill was caused by the CTB FWKO gas vent valve controller freezing which caused the FWKO valve to open bleeding the vessel pressure down to 18psi which allowed the crude oil to go to the EVLRP/CO2 Plant & Satellite # 6 flare pit. Engineering will investigate redesigning CTB FWKO venting system.**

Describe Area Affected and Cleanup Action Taken.\*

**20'X35' of dry caliche flare pit with no cows present. The spill site will be delineated and remediated in accordance with NMOCD guidelines.**

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

Signature: <i>Kenneth N. Andersen</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Kenneth N. Andersen</b>	Approved by District Supervisor: <i>[Signature]</i>	
Title: <b>Environmental Specialist</b>	Approval Date: <b>5-29-07</b>	Expiration Date: <b>8-29-07</b>
E-mail Address: <b>ken.n.andersen@conocophillips.com</b>	Conditions of Approval:	
Date: <b>12/06/2006</b> Phone: <b>505.391.3158</b>	Attached <input type="checkbox"/> <i>Submit Final Report w/ Supporting Documentation BY RP#1391</i>	

• Attach Additional Sheets If Necessary

incident - n PAC 0715048707  
PAC 0715048798  
Released by OCD: 7/21/2023 2:59:23 PM



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 <b>not</b> 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 II Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: Shelly Wells Date: 7/13/2023

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 II Date: \_\_\_\_\_

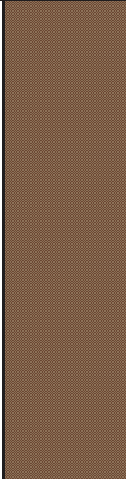
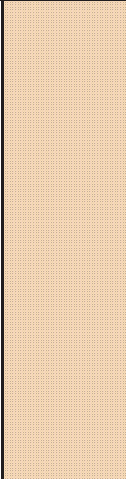
email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**Received by: Shelly Wells Date: 7/13/2023☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

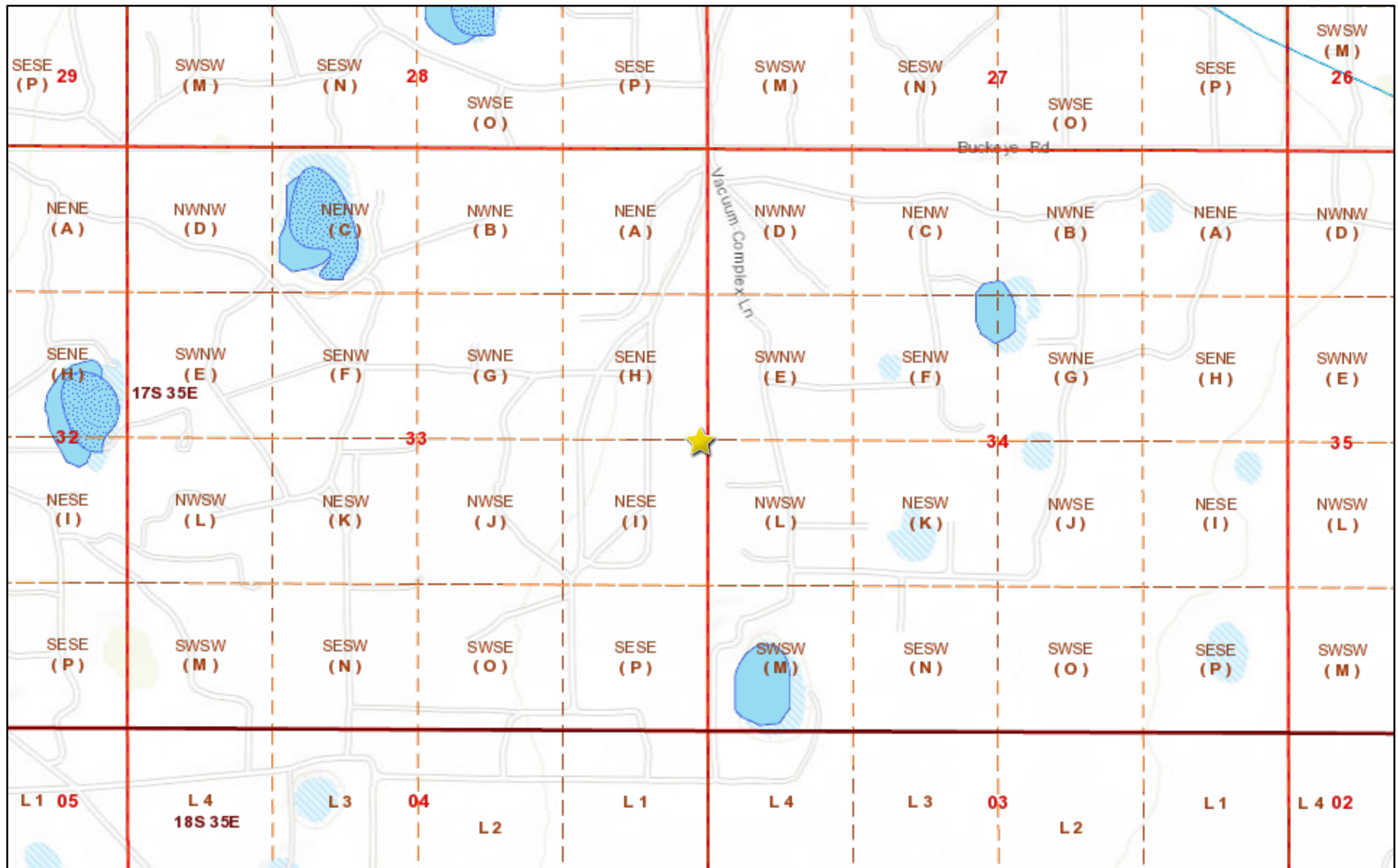
## **APPENDIX B**

### **Site Characterization Data**

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
40 ft	524		0.5	brown sand/sand stone		
45 ft	411		0.3			
50 ft	284	CL- 368	0.6			
		GRO <10				
		DRO <10				

Bentonite  
Seal

1RP-1391



2/16/2021, 12:07:13 PM



### Override 1



PLSS First Division



## PLSS Townships



## PLJV Probable Playas



## OCD District Offices

12

PLSS Second Division

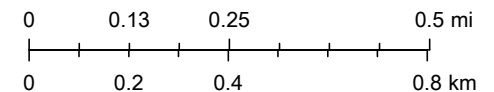


## OSE Water-bodies



## OSE Streams

1:18,056



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

New Mexico Oil Conservation Division

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

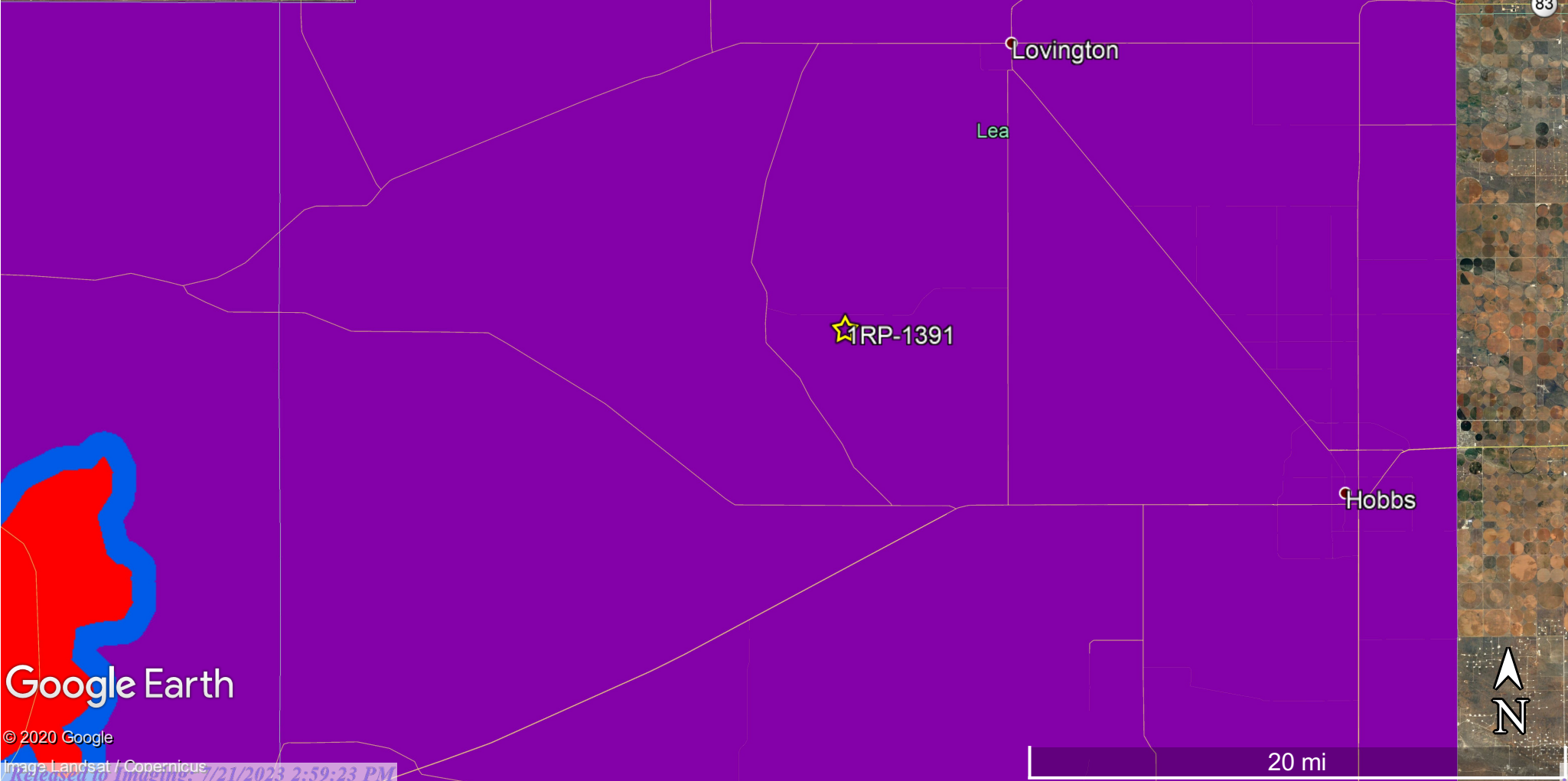
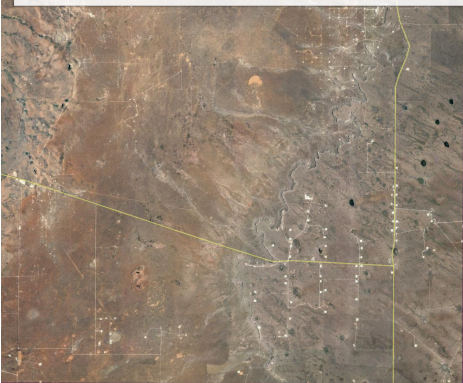


# KARST POTENTIAL MAP

1RP-1391

## Legend

- ☆ 1RP-1391
- High
- Low
- Medium



Google Earth

© 2020 Google

Image Landsat / Copernicus



# 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																	
POD Number	Sub-Code	basin	County	Q Q Q							X	Y	Distance	Depth Well	Depth Water	Water Column	
				64	16	4	Sec	Tws	Rng								
<a href="#">L 05834</a>	R	L	LE	2	2	4	33	17S	35E	644663	3629109*		131	160	70	90	
<a href="#">L 05834 POD5</a>		L	LE	2	2	4	33	17S	35E	644663	3629109*		131	234	65	169	
<a href="#">L 04633</a>		L	LE		2	4	33	17S	35E	644564	3629010*		270	130	65	65	
<a href="#">L 10297</a>		L	LE		1	1	34	17S	35E	644955	3629819*		640	150	42	108	
<a href="#">L 04618</a>		L	LE		3	3	34	17S	35E	644973	3628611*		648	128	55	73	
<a href="#">L 04775</a>		L	LE		4	1	34	17S	35E	645365	3629421*		657	133	68	65	
<a href="#">L 04578</a>		L	LE					33	17S	35E	643962	3629198*		778	126	60	66

Average Depth to Water: **60 feet**

Minimum Depth: **42 feet**

Maximum Depth: **70 feet**

Record Count: 7

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 644740

**Northing (Y):** 3629216

**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.

10/13/20 1:53 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

<b>Logger:</b>	Jacob Kamplain			
<b>Driller:</b>	White Drilling			
<b>Drilling Method:</b>	Air Rotary		<b>Company:</b> ConocoPhillips	
<b>Start Date:</b>	2/11/2016		<b>Project Name:</b> Vac ABO Battery #3	
<b>End Date:</b>	2/11/2016		<b>Well ID:</b> SB-2	
<b>Comments:</b> All Samples were taken from cuttings.			<b>Project Consultant:</b> Basin	
<b>DRAFTED BY:</b>			<b>Location:</b> U/L N Sec 34	
TD = 50'			T-17-S R-35-E	
GW = 71'			<b>Lat:</b> 32.787554	
			<b>Long:</b> -103.449746	
			<b>County:</b> Lea	
			<b>State:</b> NM	

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
SS	1295		9.7	dark brown clay w/ sandy clay		
5 ft	1362		2	caliche/limestone		
10 ft	1125	CL-2560	0.6	limestone		
		GRO <10				
		DRO <10				
15 ft	375		1.5	brown sand/sand stone		
20 ft	1447		0.7			
25 ft	1007	CL-1100	0.5			
		GRO <10				
		DRO <10				
30 ft	634		0.6			
35 ft	716	CL-704	0.5			
		GRO <10				
		DRO <10				

Bentonite Seal

## **APPENDIX C**

# **Photographic Documentation**





TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northeast of release area.	1
	SITE NAME	EVGSAU Satellite #6 Gas Vent Line Release	7/23/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northeast of release area.	2
	SITE NAME	EVGSAU Satellite #6 Gas Vent Line Release	7/23/2020





TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northwest of release area in background.	3
	SITE NAME	EVGSAU Satellite #6 Gas Vent Line Release	7/23/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing north of release area.	6
	SITE NAME	EVGSAU Satellite #6 Gas Vent Line Release	7/23/2020





TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing south of release area.	7
	SITE NAME	EVGSAU Satellite #6 Gas Vent Line Release	7/23/2020

## **APPENDIX D**

### **Laboratory Analytical Data**



## ANALYTICAL REPORT

January 27, 2021

Revised Report

**ConocoPhillips - Tetra Tech**

Sample Delivery Group: L1306492  
Samples Received: 01/14/2021  
Project Number: 212C-MD-02334 TASK12  
Description: EVGSAU Satellite #6 Gas Vent Line Release (1RP-1391)  
Site: LEA COUNTY, NEW MEXICO  
Report To: Christian Llull  
901 West Wall  
Suite 100  
Midland, TX 79701

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

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](http://www.pacenational.com)

<b>Cp: Cover Page</b>	<b>1</b>
<b>Tc: Table of Contents</b>	<b>2</b>
<b>Ss: Sample Summary</b>	<b>3</b>
<b>Cn: Case Narrative</b>	<b>6</b>
<b>Sr: Sample Results</b>	<b>7</b>
BH-1 (0'-1') L1306492-01	7
BH-1 (2'-3') L1306492-02	8
BH-1 (4'-5') L1306492-03	9
BH-1 (6'-7') L1306492-04	10
BH-1 (9'-10') L1306492-05	11
BH-1 (14'-15') L1306492-06	12
BH-1 (19'-20') L1306492-07	13
AH-2 (0'-1') L1306492-08	14
AH-2 (3'-4') L1306492-09	15
AH-3 (0'-1') L1306492-10	16
AH-3 (3'-4') L1306492-11	17
AH-1 (0-1.5') L1306492-12	18
<b>Qc: Quality Control Summary</b>	<b>19</b>
Total Solids by Method 2540 G-2011	19
Wet Chemistry by Method 300.0	21
Volatile Organic Compounds (GC) by Method 8015D/GRO	22
Volatile Organic Compounds (GC/MS) by Method 8260B	24
Semi-Volatile Organic Compounds (GC) by Method 8015	25
<b>Gl: Glossary of Terms</b>	<b>27</b>
<b>Al: Accreditations &amp; Locations</b>	<b>28</b>
<b>Sc: Sample Chain of Custody</b>	<b>29</b>



## BH-1 (0'-1') L1306492-01 Solid

Collected by  
John Thurston

Collected date/time  
01/13/21 12:00

Received date/time  
01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607236	1	01/18/21 14:44	01/18/21 14:55	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	10	01/14/21 17:21	01/15/21 02:38	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606710	1	01/15/21 22:26	01/16/21 13:38	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606651	1	01/15/21 22:26	01/16/21 11:02	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1606599	10	01/16/21 13:28	01/17/21 07:21	JN	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1606599	2	01/16/21 13:28	01/17/21 01:07	JN	Mt. Juliet, TN



## BH-1 (2'-3') L1306492-02 Solid

Collected by  
John Thurston

Collected date/time  
01/13/21 12:10

Received date/time  
01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607236	1	01/18/21 14:44	01/18/21 14:55	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	5	01/14/21 17:21	01/15/21 03:07	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1607076	1	01/15/21 22:26	01/18/21 00:39	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606651	1	01/15/21 22:26	01/16/21 11:21	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1606599	1	01/16/21 13:28	01/16/21 23:12	JN	Mt. Juliet, TN

## BH-1 (4'-5') L1306492-03 Solid

Collected by  
John Thurston

Collected date/time  
01/13/21 12:20

Received date/time  
01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607236	1	01/18/21 14:44	01/18/21 14:55	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	5	01/14/21 17:21	01/15/21 03:26	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606710	1	01/15/21 22:26	01/16/21 14:20	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606651	1	01/15/21 22:26	01/16/21 11:40	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1606599	1	01/16/21 13:28	01/16/21 21:42	JN	Mt. Juliet, TN

## BH-1 (6'-7') L1306492-04 Solid

Collected by  
John Thurston

Collected date/time  
01/13/21 12:30

Received date/time  
01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607236	1	01/18/21 14:44	01/18/21 14:55	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	1	01/14/21 17:21	01/15/21 03:35	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606710	1	01/15/21 22:26	01/16/21 14:40	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606651	1	01/15/21 22:26	01/16/21 11:59	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1606599	1	01/16/21 13:28	01/16/21 21:55	JN	Mt. Juliet, TN

## BH-1 (9'-10') L1306492-05 Solid

Collected by  
John Thurston

Collected date/time  
01/13/21 12:40

Received date/time  
01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607236	1	01/18/21 14:44	01/18/21 14:55	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	1	01/14/21 17:21	01/15/21 04:04	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606710	1	01/15/21 22:26	01/16/21 15:01	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606651	1	01/15/21 22:26	01/16/21 12:18	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1606599	1	01/16/21 13:28	01/16/21 21:04	JN	Mt. Juliet, TN



## BH-1 (14'-15') L1306492-06 Solid

Collected by  
John Thurston

Collected date/time  
01/13/21 12:50

Received date/time  
01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607237	1	01/18/21 14:33	01/18/21 14:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	1	01/14/21 17:21	01/15/21 04:13	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606710	1	01/15/21 22:26	01/16/21 15:22	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606651	1	01/15/21 22:26	01/16/21 12:37	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1606599	1	01/16/21 13:28	01/16/21 21:17	JN	Mt. Juliet, TN

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

## BH-1 (19'-20') L1306492-07 Solid

Collected by  
John Thurston

Collected date/time  
01/13/21 13:00

Received date/time  
01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607237	1	01/18/21 14:33	01/18/21 14:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	1	01/14/21 17:21	01/15/21 04:23	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606710	1	01/15/21 22:26	01/16/21 15:43	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606651	1	01/15/21 22:26	01/16/21 12:56	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1606599	1	01/16/21 13:28	01/16/21 21:29	JN	Mt. Juliet, TN

## AH-2 (0'-1') L1306492-08 Solid

Collected by  
John Thurston

Collected date/time  
01/13/21 13:20

Received date/time  
01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607237	1	01/18/21 14:33	01/18/21 14:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	1	01/14/21 17:21	01/15/21 04:32	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606710	1	01/15/21 22:26	01/16/21 16:03	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606651	1	01/15/21 22:26	01/16/21 13:15	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1609058	1	01/21/21 10:35	01/21/21 18:38	JDG	Mt. Juliet, TN

## AH-2 (3'-4') L1306492-09 Solid

Collected by  
John Thurston

Collected date/time  
01/13/21 13:30

Received date/time  
01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607237	1	01/18/21 14:33	01/18/21 14:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	5	01/14/21 17:21	01/15/21 12:40	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606710	1	01/15/21 22:26	01/16/21 16:24	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606651	1	01/15/21 22:26	01/16/21 13:33	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1609058	1	01/21/21 10:35	01/21/21 18:52	JDG	Mt. Juliet, TN

## AH-3 (0'-1') L1306492-10 Solid

Collected by  
John Thurston

Collected date/time  
01/13/21 13:50

Received date/time  
01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607237	1	01/18/21 14:33	01/18/21 14:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	1	01/14/21 17:21	01/15/21 12:49	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606710	1	01/15/21 22:26	01/16/21 16:45	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606651	1	01/15/21 22:26	01/16/21 13:52	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1609058	1	01/21/21 10:35	01/21/21 19:05	JDG	Mt. Juliet, TN

AH-3 (3'-4') L1306492-11 Solid

Collected by  
John Thurston

Collected date/time  
01/13/21 14:00

Received date/time  
01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607237	1	01/18/21 14:33	01/18/21 14:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	1	01/14/21 18:21	01/15/21 05:01	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606710	1	01/15/21 22:26	01/16/21 17:06	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606651	1	01/15/21 22:26	01/16/21 14:11	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1609058	1	01/21/21 10:35	01/21/21 19:19	JDG	Mt. Juliet, TN

1Cp

2Tc

3Ss

4Cn

AH-1 (0-1.5') L1306492-12 Solid

Collected by  
John Thurston

Collected date/time  
01/13/21 14:10

Received date/time  
01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607237	1	01/18/21 14:33	01/18/21 14:42	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606710	100	01/15/21 22:26	01/16/21 17:26	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606651	8	01/15/21 22:26	01/16/21 14:30	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1609058	40	01/21/21 10:35	01/21/21 22:31	JDG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1609058	80	01/21/21 10:35	01/22/21 00:24	JDG	Mt. Juliet, TN

5Sr

6Qc

7Gl

8Al

9Sc

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

### Report Revision History

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Level II Report - Version 1: 01/25/21 11:16

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/13/21 12:00

L1306492

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.1		1	01/18/2021 14:55	<a href="#">WG1607236</a>

## 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	5030	<u>V</u>	103	225	10	01/15/2021 02:38	<a href="#">WG1605875</a>

## 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	0.209		0.0244	0.112	1	01/16/2021 13:38	<a href="#">WG1606710</a>
(S) a,a,a-Trifluorotoluene(FID)	79.8			77.0-120		01/16/2021 13:38	<a href="#">WG1606710</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000654	<u>J</u>	0.000582	0.00125	1	01/16/2021 11:02	<a href="#">WG1606651</a>
Toluene	U		0.00162	0.00623	1	01/16/2021 11:02	<a href="#">WG1606651</a>
Ethylbenzene	0.00203	<u>J</u>	0.000918	0.00311	1	01/16/2021 11:02	<a href="#">WG1606651</a>
Total Xylenes	0.00589	<u>J</u>	0.00110	0.00809	1	01/16/2021 11:02	<a href="#">WG1606651</a>
(S) Toluene-d8	104			75.0-131		01/16/2021 11:02	<a href="#">WG1606651</a>
(S) 4-Bromofluorobenzene	94.8			67.0-138		01/16/2021 11:02	<a href="#">WG1606651</a>
(S) 1,2-Dichloroethane-d4	93.1			70.0-130		01/16/2021 11:02	<a href="#">WG1606651</a>

## 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	690		3.61	8.98	2	01/17/2021 01:07	<a href="#">WG1606599</a>
C28-C40 Oil Range	752		3.08	44.9	10	01/17/2021 07:21	<a href="#">WG1606599</a>
(S) o-Terphenyl	110			18.0-148		01/17/2021 01:07	<a href="#">WG1606599</a>
(S) o-Terphenyl	0.000	<u>J2</u>		18.0-148		01/17/2021 07:21	<a href="#">WG1606599</a>

## Sample Narrative:

L1306492-01 WG1606599: Surrogate failure due to matrix interference

Collected date/time: 01/13/21 12:10

L1306492

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.6		1	01/18/2021 14:55	<a href="#">WG1607236</a>

## 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	1190		49.7	108	5	01/15/2021 03:07	<a href="#">WG1605875</a>

## 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	0.0657	<a href="#">B J</a>	0.0234	0.108	1	01/18/2021 00:39	<a href="#">WG1607076</a>
(S) a,a,a-Trifluorotoluene(FID)	94.1			77.0-120		01/18/2021 00:39	<a href="#">WG1607076</a>

## 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		0.000542	0.00116	1	01/16/2021 11:21	<a href="#">WG1606651</a>
Toluene	U		0.00151	0.00580	1	01/16/2021 11:21	<a href="#">WG1606651</a>
Ethylbenzene	U		0.000855	0.00290	1	01/16/2021 11:21	<a href="#">WG1606651</a>
Total Xylenes	U		0.00102	0.00754	1	01/16/2021 11:21	<a href="#">WG1606651</a>
(S) Toluene-d8	108			75.0-131		01/16/2021 11:21	<a href="#">WG1606651</a>
(S) 4-Bromofluorobenzene	90.8			67.0-138		01/16/2021 11:21	<a href="#">WG1606651</a>
(S) 1,2-Dichloroethane-d4	92.4			70.0-130		01/16/2021 11:21	<a href="#">WG1606651</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	13.7		1.74	4.32	1	01/16/2021 23:12	<a href="#">WG1606599</a>
C28-C40 Oil Range	18.6		0.296	4.32	1	01/16/2021 23:12	<a href="#">WG1606599</a>
(S) o-Terphenyl	60.1			18.0-148		01/16/2021 23:12	<a href="#">WG1606599</a>

Collected date/time: 01/13/21 12:20

L1306492

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.2		1	01/18/2021 14:55	<a href="#">WG1607236</a>

## 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	1180		48.3	105	5	01/15/2021 03:26	<a href="#">WG1605875</a>

## 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	01/16/2021 14:20	<a href="#">WG1606710</a>
(S) a,a,a-Trifluorotoluene(FID)	89.3			77.0-120		01/16/2021 14:20	<a href="#">WG1606710</a>

## 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	01/16/2021 11:40	<a href="#">WG1606651</a>
Toluene	U		0.00143	0.00551	1	01/16/2021 11:40	<a href="#">WG1606651</a>
Ethylbenzene	U		0.000812	0.00275	1	01/16/2021 11:40	<a href="#">WG1606651</a>
Total Xylenes	U		0.000969	0.00716	1	01/16/2021 11:40	<a href="#">WG1606651</a>
(S) Toluene-d8	106			75.0-131		01/16/2021 11:40	<a href="#">WG1606651</a>
(S) 4-Bromofluorobenzene	92.1			67.0-138		01/16/2021 11:40	<a href="#">WG1606651</a>
(S) 1,2-Dichloroethane-d4	91.3			70.0-130		01/16/2021 11:40	<a href="#">WG1606651</a>

## 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	9.46		1.69	4.20	1	01/16/2021 21:42	<a href="#">WG1606599</a>
C28-C40 Oil Range	6.49		0.288	4.20	1	01/16/2021 21:42	<a href="#">WG1606599</a>
(S) o-Terphenyl	69.9			18.0-148		01/16/2021 21:42	<a href="#">WG1606599</a>

Collected date/time: 01/13/21 12:30

L1306492

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.1		1	01/18/2021 14:55	<a href="#">WG1607236</a>

## 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	674		9.78	21.3	1	01/15/2021 03:35	<a href="#">WG1605875</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0231	0.106	1	01/16/2021 14:40	<a href="#">WG1606710</a>
(S) a,a,a-Trifluorotoluene(FID)	89.6			77.0-120		01/16/2021 14:40	<a href="#">WG1606710</a>

## 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		0.000526	0.00113	1	01/16/2021 11:59	<a href="#">WG1606651</a>
Toluene	U		0.00146	0.00563	1	01/16/2021 11:59	<a href="#">WG1606651</a>
Ethylbenzene	U		0.000829	0.00281	1	01/16/2021 11:59	<a href="#">WG1606651</a>
Total Xylenes	U		0.000990	0.00732	1	01/16/2021 11:59	<a href="#">WG1606651</a>
(S) Toluene-d8	109			75.0-131		01/16/2021 11:59	<a href="#">WG1606651</a>
(S) 4-Bromofluorobenzene	92.3			67.0-138		01/16/2021 11:59	<a href="#">WG1606651</a>
(S) 1,2-Dichloroethane-d4	91.5			70.0-130		01/16/2021 11:59	<a href="#">WG1606651</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	8.34		1.71	4.25	1	01/16/2021 21:55	<a href="#">WG1606599</a>
C28-C40 Oil Range	7.03		0.291	4.25	1	01/16/2021 21:55	<a href="#">WG1606599</a>
(S) o-Terphenyl	74.1			18.0-148		01/16/2021 21:55	<a href="#">WG1606599</a>



Collected date/time: 01/13/21 12:40

L1306492

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.1		1	01/18/2021 14:55	<a href="#">WG1607236</a>

## 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	263		10.1	22.0	1	01/15/2021 04:04	<a href="#">WG1605875</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0238	0.110	1	01/16/2021 15:01	<a href="#">WG1606710</a>
(S) a,a,a-Trifluorotoluene(FID)	89.4			77.0-120		01/16/2021 15:01	<a href="#">WG1606710</a>

## 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		0.000558	0.00120	1	01/16/2021 12:18	<a href="#">WG1606651</a>
Toluene	U		0.00155	0.00598	1	01/16/2021 12:18	<a href="#">WG1606651</a>
Ethylbenzene	U		0.000881	0.00299	1	01/16/2021 12:18	<a href="#">WG1606651</a>
Total Xylenes	U		0.00105	0.00777	1	01/16/2021 12:18	<a href="#">WG1606651</a>
(S) Toluene-d8	106			75.0-131		01/16/2021 12:18	<a href="#">WG1606651</a>
(S) 4-Bromofluorobenzene	90.9			67.0-138		01/16/2021 12:18	<a href="#">WG1606651</a>
(S) 1,2-Dichloroethane-d4	94.1			70.0-130		01/16/2021 12:18	<a href="#">WG1606651</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.83		1.77	4.39	1	01/16/2021 21:04	<a href="#">WG1606599</a>
C28-C40 Oil Range	3.41	J	0.301	4.39	1	01/16/2021 21:04	<a href="#">WG1606599</a>
(S) o-Terphenyl	73.0			18.0-148		01/16/2021 21:04	<a href="#">WG1606599</a>

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.4		1	01/18/2021 14:42	<a href="#">WG1607237</a>

## 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	75.7		10.3	22.4	1	01/15/2021 04:13	<a href="#">WG1605875</a>

## 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		0.0243	0.112	1	01/16/2021 15:22	<a href="#">WG1606710</a>
(S) a,a,a-Trifluorotoluene(FID)	89.2			77.0-120		01/16/2021 15:22	<a href="#">WG1606710</a>

## 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		0.000579	0.00124	1	01/16/2021 12:37	<a href="#">WG1606651</a>
Toluene	U		0.00161	0.00619	1	01/16/2021 12:37	<a href="#">WG1606651</a>
Ethylbenzene	U		0.000913	0.00310	1	01/16/2021 12:37	<a href="#">WG1606651</a>
Total Xylenes	U		0.00109	0.00805	1	01/16/2021 12:37	<a href="#">WG1606651</a>
(S) Toluene-d8	109			75.0-131		01/16/2021 12:37	<a href="#">WG1606651</a>
(S) 4-Bromofluorobenzene	92.1			67.0-138		01/16/2021 12:37	<a href="#">WG1606651</a>
(S) 1,2-Dichloroethane-d4	90.3			70.0-130		01/16/2021 12:37	<a href="#">WG1606651</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3.17	J	1.80	4.48	1	01/16/2021 21:17	<a href="#">WG1606599</a>
C28-C40 Oil Range	2.13	J	0.307	4.48	1	01/16/2021 21:17	<a href="#">WG1606599</a>
(S) o-Terphenyl	80.4			18.0-148		01/16/2021 21:17	<a href="#">WG1606599</a>

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

Collected date/time: 01/13/21 13:00

L1306492

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.2		1	01/18/2021 14:42	<a href="#">WG1607237</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	128		10.2	22.2	1	01/15/2021 04:23	<a href="#">WG1605875</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0240	0.111	1	01/16/2021 15:43	<a href="#">WG1606710</a>
(S) a,a,a-Trifluorotoluene(FID)	88.6			77.0-120		01/16/2021 15:43	<a href="#">WG1606710</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000568	0.00122	1	01/16/2021 12:56	<a href="#">WG1606651</a>
Toluene	U		0.00158	0.00609	1	01/16/2021 12:56	<a href="#">WG1606651</a>
Ethylbenzene	U		0.000897	0.00304	1	01/16/2021 12:56	<a href="#">WG1606651</a>
Total Xylenes	U		0.00107	0.00791	1	01/16/2021 12:56	<a href="#">WG1606651</a>
(S) Toluene-d8	108			75.0-131		01/16/2021 12:56	<a href="#">WG1606651</a>
(S) 4-Bromofluorobenzene	91.7			67.0-138		01/16/2021 12:56	<a href="#">WG1606651</a>
(S) 1,2-Dichloroethane-d4	92.5			70.0-130		01/16/2021 12:56	<a href="#">WG1606651</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.78	4.43	1	01/16/2021 21:29	<a href="#">WG1606599</a>
C28-C40 Oil Range	0.566	J	0.304	4.43	1	01/16/2021 21:29	<a href="#">WG1606599</a>
(S) o-Terphenyl	81.2			18.0-148		01/16/2021 21:29	<a href="#">WG1606599</a>

Collected date/time: 01/13/21 13:20

L1306492

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.4		1	01/18/2021 14:42	<a href="#">WG1607237</a>

## 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	806		9.75	21.2	1	01/15/2021 04:32	<a href="#">WG1605875</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	01/16/2021 16:03	<a href="#">WG1606710</a>
(S) a,a,a-Trifluorotoluene(FID)	89.9			77.0-120		01/16/2021 16:03	<a href="#">WG1606710</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000522	0.00112	1	01/16/2021 13:15	<a href="#">WG1606651</a>
Toluene	U		0.00145	0.00559	1	01/16/2021 13:15	<a href="#">WG1606651</a>
Ethylbenzene	U		0.000825	0.00280	1	01/16/2021 13:15	<a href="#">WG1606651</a>
Total Xylenes	U		0.000985	0.00727	1	01/16/2021 13:15	<a href="#">WG1606651</a>
(S) Toluene-d8	109			75.0-131		01/16/2021 13:15	<a href="#">WG1606651</a>
(S) 4-Bromofluorobenzene	91.9			67.0-138		01/16/2021 13:15	<a href="#">WG1606651</a>
(S) 1,2-Dichloroethane-d4	92.4			70.0-130		01/16/2021 13:15	<a href="#">WG1606651</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.71	4.24	1	01/21/2021 18:38	<a href="#">WG1609058</a>
C28-C40 Oil Range	0.935	<a href="#">B J</a>	0.290	4.24	1	01/21/2021 18:38	<a href="#">WG1609058</a>
(S) o-Terphenyl	62.8			18.0-148		01/21/2021 18:38	<a href="#">WG1609058</a>

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



## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.3		1	01/18/2021 14:42	<a href="#">WG1607237</a>

## 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	1460		48.8	106	5	01/15/2021 12:40	<a href="#">WG1605875</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	01/16/2021 16:24	<a href="#">WG1606710</a>
(S) a,a,a-Trifluorotoluene(FID)	87.8			77.0-120		01/16/2021 16:24	<a href="#">WG1606710</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000524	0.00112	1	01/16/2021 13:33	<a href="#">WG1606651</a>
Toluene	U		0.00146	0.00561	1	01/16/2021 13:33	<a href="#">WG1606651</a>
Ethylbenzene	U		0.000827	0.00280	1	01/16/2021 13:33	<a href="#">WG1606651</a>
Total Xylenes	U		0.000987	0.00729	1	01/16/2021 13:33	<a href="#">WG1606651</a>
(S) Toluene-d8	104			75.0-131		01/16/2021 13:33	<a href="#">WG1606651</a>
(S) 4-Bromofluorobenzene	88.3			67.0-138		01/16/2021 13:33	<a href="#">WG1606651</a>
(S) 1,2-Dichloroethane-d4	93.6			70.0-130		01/16/2021 13:33	<a href="#">WG1606651</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.71	4.24	1	01/21/2021 18:52	<a href="#">WG1609058</a>
C28-C40 Oil Range	0.635	<a href="#">B J</a>	0.291	4.24	1	01/21/2021 18:52	<a href="#">WG1609058</a>
(S) o-Terphenyl	56.1			18.0-148		01/21/2021 18:52	<a href="#">WG1609058</a>

Collected date/time: 01/13/21 13:50

L1306492

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.5		1	01/18/2021 14:42	<a href="#">WG1607237</a>

## 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	318		9.84	21.4	1	01/15/2021 12:49	<a href="#">WG1605875</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	01/16/2021 16:45	<a href="#">WG1606710</a>
(S) a,a,a-Trifluorotoluene(FID)	88.6			77.0-120		01/16/2021 16:45	<a href="#">WG1606710</a>

## 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		0.000532	0.00114	1	01/16/2021 13:52	<a href="#">WG1606651</a>
Toluene	U		0.00148	0.00570	1	01/16/2021 13:52	<a href="#">WG1606651</a>
Ethylbenzene	U		0.000840	0.00285	1	01/16/2021 13:52	<a href="#">WG1606651</a>
Total Xylenes	U		0.00100	0.00741	1	01/16/2021 13:52	<a href="#">WG1606651</a>
(S) Toluene-d8	106			75.0-131		01/16/2021 13:52	<a href="#">WG1606651</a>
(S) 4-Bromofluorobenzene	93.6			67.0-138		01/16/2021 13:52	<a href="#">WG1606651</a>
(S) 1,2-Dichloroethane-d4	94.4			70.0-130		01/16/2021 13:52	<a href="#">WG1606651</a>

## 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	7.11		1.72	4.28	1	01/21/2021 19:05	<a href="#">WG1609058</a>
C28-C40 Oil Range	7.02	<u>B</u>	0.293	4.28	1	01/21/2021 19:05	<a href="#">WG1609058</a>
(S) o-Terphenyl	64.0			18.0-148		01/21/2021 19:05	<a href="#">WG1609058</a>

Collected date/time: 01/13/21 14:00

L1306492

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.9		1	01/18/2021 14:42	<a href="#">WG1607237</a>

## 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	237		9.80	21.3	1	01/15/2021 05:01	<a href="#">WG1605875</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0231	0.106	1	01/16/2021 17:06	<a href="#">WG1606710</a>
(S) a,a,a-Trifluorotoluene(FID)	91.0			77.0-120		01/16/2021 17:06	<a href="#">WG1606710</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000528	0.00113	1	01/16/2021 14:11	<a href="#">WG1606651</a>
Toluene	U		0.00147	0.00565	1	01/16/2021 14:11	<a href="#">WG1606651</a>
Ethylbenzene	U		0.000833	0.00283	1	01/16/2021 14:11	<a href="#">WG1606651</a>
Total Xylenes	U		0.000995	0.00735	1	01/16/2021 14:11	<a href="#">WG1606651</a>
(S) Toluene-d8	107			75.0-131		01/16/2021 14:11	<a href="#">WG1606651</a>
(S) 4-Bromofluorobenzene	92.0			67.0-138		01/16/2021 14:11	<a href="#">WG1606651</a>
(S) 1,2-Dichloroethane-d4	94.6			70.0-130		01/16/2021 14:11	<a href="#">WG1606651</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.71	4.26	1	01/21/2021 19:19	<a href="#">WG1609058</a>
C28-C40 Oil Range	1.12	<a href="#">B J</a>	0.292	4.26	1	01/21/2021 19:19	<a href="#">WG1609058</a>
(S) o-Terphenyl	61.7			18.0-148		01/21/2021 19:19	<a href="#">WG1609058</a>

Collected date/time: 01/13/21 14:10

L1306492

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	74.3		1	01/18/2021 14:42	<a href="#">WG1607237</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

## 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	509		3.67	16.9	100	01/16/2021 17:26	<a href="#">WG1606710</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	94.2			77.0-120		01/16/2021 17:26	<a href="#">WG1606710</a>

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.763		0.00633	0.0135	8	01/16/2021 14:30	<a href="#">WG1606651</a>
Toluene	U	<a href="#">J3</a>	0.0176	0.0677	8	01/16/2021 14:30	<a href="#">WG1606651</a>
Ethylbenzene	11.3	<a href="#">V</a>	0.00998	0.0338	8	01/16/2021 14:30	<a href="#">WG1606651</a>
Total Xylenes	8.04	<a href="#">J5</a>	0.0119	0.0880	8	01/16/2021 14:30	<a href="#">WG1606651</a>
(S) Toluene-d8	104			75.0-131		01/16/2021 14:30	<a href="#">WG1606651</a>
(S) 4-Bromofluorobenzene	85.5			67.0-138		01/16/2021 14:30	<a href="#">WG1606651</a>
(S) 1,2-Dichloroethane-d4	96.3			70.0-130		01/16/2021 14:30	<a href="#">WG1606651</a>

## 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	14100		86.6	215	40	01/21/2021 22:31	<a href="#">WG1609058</a>
C28-C40 Oil Range	10500		29.5	430	80	01/22/2021 00:24	<a href="#">WG1609058</a>
(S) o-Terphenyl	0.000	<a href="#">J7</a>		18.0-148		01/21/2021 22:31	<a href="#">WG1609058</a>
(S) o-Terphenyl	0.000	<a href="#">J7</a>		18.0-148		01/22/2021 00:24	<a href="#">WG1609058</a>



Total Solids by Method 2540 G-2011 [L1306492-01,02,03,04,05](#)

Method Blank (MB)

(MB) R3613858-1 01/18/21 14:55

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

L1306492-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1306492-04 01/18/21 14:55 • (DUP) R3613858-3 01/18/21 14:55

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	94.1	94.0	1	0.127		10

Laboratory Control Sample (LCS)

(LCS) R3613858-2 01/18/21 14:55

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Total Solids by Method 2540 G-2011 [L1306492-06,07,08,09,10,11,12](#)

Method Blank (MB)

(MB) R3613857-1 01/18/21 14:42

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

L1306492-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1306492-06 01/18/21 14:42 • (DUP) R3613857-3 01/18/21 14:42

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	89.4	89.5	1	0.154		10

Laboratory Control Sample (LCS)

(LCS) R3613857-2 01/18/21 14:42

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 300.0

[L1306492-01,02,03,04,05,06,07,08,09,10,11](#)

Method Blank (MB)

(MB) R3613040-1 01/15/21 01:14

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

L1306492-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1306492-02 01/15/21 03:07 • (DUP) R3613040-4 01/15/21 03:16

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1190	1040	5	14.1		20

L1306499-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1306499-08 01/15/21 06:36 • (DUP) R3613040-5 01/15/21 06:46

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	4020	4510	5	11.7		20

Laboratory Control Sample (LCS)

(LCS) R3613040-2 01/15/21 01:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	199	99.5	90.0-110	

L1306492-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1306492-01 01/15/21 02:38 • (MS) R3613040-3 01/15/21 02:48 • (MSD) R3613040-7 01/15/21 14:48

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	56.1	5030	5470	5590	78.7	101	10	80.0-120	V		2.26	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO L1306492-01,03,04,05,06,07,08,09,10,11,12

Method Blank (MB)

(MB) R3613339-2 01/16/21 12:57

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)	94.4			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3613339-1 01/16/21 12:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.59	102	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			102	77.0-120	

L1306492-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1306492-12 01/16/21 17:26 • (MS) R3613339-3 01/16/21 20:54 • (MSD) R3613339-4 01/16/21 21:14

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	931	509	1330	1580	88.2	115	100	10.0-151			17.0	28
(S) a,a,a-Trifluorotoluene(FID)					106	106		77.0-120				

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

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

[L1306492-02](#)

Method Blank (MB)

(MB) R3613500-2 01/17/21 23:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0429	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	97.4			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3613500-1 01/17/21 22:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.25	114	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			107	77.0-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



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

L1306492-01,02,03,04,05,06,07,08,09,10,11,12

Method Blank (MB)

(MB) R3614054-3 01/16/21 08:58

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	107			75.0-131
(S) 4-Bromofluorobenzene	91.6			67.0-138
(S) 1,2-Dichloroethane-d4	93.1			70.0-130

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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

(LCS) R3614054-1 01/16/21 07:44 • (LCSD) R3614054-2 01/16/21 08:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.103	0.112	82.4	89.6	70.0-123			8.37	20
Ethylbenzene	0.125	0.113	0.122	90.4	97.6	74.0-126			7.66	20
Toluene	0.125	0.115	0.120	92.0	96.0	75.0-121			4.26	20
Xylenes, Total	0.375	0.336	0.361	89.6	96.3	72.0-127			7.17	20
(S) Toluene-d8				105	106	75.0-131				
(S) 4-Bromofluorobenzene				89.3	91.8	67.0-138				
(S) 1,2-Dichloroethane-d4				98.3	98.5	70.0-130				

L1306492-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1306492-12 01/16/21 14:30 • (MS) R3614054-4 01/16/21 14:49 • (MSD) R3614054-5 01/16/21 15:08

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	1.69	0.763	2.42	3.11	97.9	139	8	10.0-149			25.1	37
Ethylbenzene	1.69	11.3	19.1	20.8	462	562	8	10.0-160	V	V	8.47	38
Toluene	1.69	U	1.23	1.95	72.7	115	8	10.0-156		J3	45.1	38
Xylenes, Total	5.08	8.04	16.2	18.8	161	212	8	10.0-160	J5	J5	14.8	38
(S) Toluene-d8					107	107		75.0-131				
(S) 4-Bromofluorobenzene					91.5	93.3		67.0-138				
(S) 1,2-Dichloroethane-d4					93.8	91.4		70.0-130				

Semi-Volatile Organic Compounds (GC) by Method 8015

L1306492-01,02,03,04,05,06,07

Method Blank (MB)

(MB) R3613279-1 01/16/21 20:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	74.6			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3613279-2 01/16/21 20:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	46.7	93.4	50.0-150	
(S) o-Terphenyl			71.8	18.0-148	

L1307250-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1307250-01 01/16/21 22:08 • (MS) R3613279-3 01/16/21 22:21 • (MSD) R3613279-4 01/16/21 22:33

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	70.5	U	63.3	63.3	89.8	90.9	1	50.0-150			0.000	20
(S) o-Terphenyl					58.7	61.9		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

L1306492-08,09,10,11,12

Method Blank (MB)

(MB) R3615225-4 01/21/21 23:15

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	3.15	J	0.274	4.00
(S) o-Terphenyl	69.1			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3615225-1 01/21/21 18:25

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			81.7	18.0-148	

L1306492-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1306492-11 01/21/21 19:19 • (MS) R3615225-2 01/21/21 19:33 • (MSD) R3615225-3 01/21/21 19:46

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	50.5	U	32.9	33.7	65.2	63.2	1	50.0-150			2.24	20
(S) o-Terphenyl					76.4	73.0		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.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
V	The sample concentration is too high to evaluate accurate spike recoveries.

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gi
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.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN, 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	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 <sup>1 6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1 4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
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	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

Pace Analytical National 1313 Point Mallard Parkway SE Suite B Decatur, AL, 35601

Alabama	40160
ANSI National Accreditation Board	L2239

Pace Analytical National 660 Bercut Dr. Ste. C Sacramento, CA, 95811

California	2961	Oregon	CA300002
Minnesota	006-999-465	Washington	C926
North Dakota	R-214		

Pace Analytical National 6000 South Eastern Avenue Ste 9A Las Vegas, NV, 89119

Nevada	NV009412021-1
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Pace Analytical National 1606 E. Brazos Street Suite D Victoria, TX, 77901

Texas	T104704328-20-18
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<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



## Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

L1306492

E162

<b>Client Name:</b>	Conoco Phillips	<b>Site Manager:</b>	Christian Llull
<b>Project Name:</b>	EVGSAU Satellite #6 Gas Vent Line Release (IRP-1391)	<b>Contact Info:</b>	Email: christian.llull@tetratech.com Phone: (512) 338-1667
<b>Project Location:</b> (county, state)	Lea County, New Mexico	<b>Project #:</b>	212C-MD-02334, Task No. 12
<b>Invoice to:</b>	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
<b>Receiving Laboratory:</b>	Pace Analytical	<b>Sampler Signature:</b>	John Thurston
<b>Comments:</b> COPTETRA Acctnum			

## ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB #  (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX			PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX TPH TX1005 (Ext to C35) TPH 8015M ( GRO - DRO - ORO - MRO ) PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg TCPL Metals Ag As Ba Cd Cr Pb Se Hg TCPL Volatiles TCPL Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos) Chloride 300.0 Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance TPH 8015R	HOLD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		YEAR: 2021		WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	NONE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Relinquished by:	Date:	Received by:	Date:	Time:
<i>[Signature]</i>				
Relinquished by:	Date:	Received by:	Date:	Time:
Relinquished by:	Date:	Received by:	Date:	Time:
		<i>[Signature]</i>	1-14-21	9:00

LAB USE ONLY

Sample Temperature

## REMARKS:

☒ Standard☐ RUSH: Same Day 24 hr. 48 hr. 72 hr.☐ Rush Charges Authorized☐ Special Report Limits or TRRP Report

ORIGINAL COPY

MDA3 1-1-3-8

(Circle) HAND DELIVERED FEDEX UPS Tracking #:



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

L1306492

<b>Client Name:</b>	Conoco Phillips	<b>Site Manager:</b>	Christian Llull
<b>Project Name:</b>	EVGSAU Satellite #6 Gas Vent Line Release (1RP-1391)	<b>Contact Info:</b>	Email: christian.llull@tetratech.com Phone: (512) 338-1667
<b>Project Location:</b> (county, state)	Lea County, New Mexico	<b>Project #:</b>	212C-MD-02334, Task No. 12
<b>Invoice to:</b>	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
<b>Receiving Laboratory:</b>	Pace Analytical	<b>Sampler Signature:</b>	John Thurston
<b>Comments:</b>	COPTETRA Acctnum		

ANALYSIS REQUEST  
(Circle or Specify Method No.)

			X	BTEX 8021B BTEX 8260B
		X	X	TPH TX1D05 (Ext to C35)
		X	X	TPH 8015M ( GRO - DRO - ORO - MRO)
				PAH 8270C
				Total Metals Ag As Ba Cd Cr Pb Se Hg
				TCLP Metals Ag As Ba Cd Cr Pb Se Hg
				TCLP Volatiles
				TCLP Semi Volatiles
				RCI
				GC/MS Vol. 8260B / 624
				GC/MS Semi. Vol. 8270C/625
				PCB's 8082 / 608
				NORM
				PLM (Asbestos)
			X	Chloride 300.0
				Chloride Sulfate TDS
				General Water Chemistry (see attached list)
				Anion/Cation Balance
				TPH 8015R
				HOLD

[illegible]

Sample Receipt Checklist			
COC Seal Present/Intact:	<u>Y</u>	N	If Applicable
COC Signed/Accurate:	<u>Y</u>	N	VOA Zero Headspace: <u>Y</u> N
Bottles arrive intact:	<u>Y</u>	N	Pres. Correct/Check: <u>Y</u> N
Correct bottles used:	<u>Y</u>	N	
Sufficient volume sent:	<u>Y</u>	N	
RAE Screen <0.5 mR/hr:	<u>Y</u>	N	

Relinquished by:	<i>Time</i> 16:23	Date:	1/13/21	Received by:		Date:		Time:
Relinquished by:		Date:		Received by:		Date:		Time:
Relinquished by:		Date:		Received by:	<i>[Signature]</i>	Date:	1-13-21	Time: 9:00

<b>LAB USE ONLY</b>  Sample Temperature	<b>REMARKS:</b> <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

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

NP 93 1.1-3-8

Erica McNeese

---

From: Abbott, Sam <Sam.Abbott@tetrattech.com>  
Sent: Tuesday, January 26, 2021 5:55 PM  
To: Chris McCord; Erica McNeese  
Subject: FW: Pace Analytical National Level II Report for 212C-MD-02334 TASK12 EVGSAU Satellite #6 Gas Vent Line Release (1RP-1391) L1306492  
Attachments: L1306492.pdf  
Importance: High  
Categories: Report

**CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.**

For this one, please revise the sample IDs as follows:

Change from:	Change to:
BH-1 (1'-3')	BH-1 (2'-3')
BH-1 (3'-5')	BH-1 (4'-5')
BH-1 (5'-7')	BH-1 (6'-7')
BH-1 (7'-10')	BH-1 (9'-10')
BH-1 (10'-15')	BH-1 (14'-15')
BH-1 (15'-20')	BH-1 (19'-20')
PB-1 (0'-1.5')	AH1 (0'-1.5')

This should be the last one. Thank you!

Sam



---

From: Llull, Christian <Christian.Llull@tetrattech.com>  
Sent: Monday, January 25, 2021 11:50 AM  
To: Abbott, Sam <Sam.Abbott@tetrattech.com>  
Subject: FW: Pace Analytical National Level II Report for 212C-MD-02334 TASK12 EVGSAU Satellite #6 Gas Vent Line Release (1RP-1391) L1306492  
Importance: High

Christian

---

From: [erica.mcneese@pacelabs.com](mailto:erica.mcneese@pacelabs.com) <[erica.mcneese@pacelabs.com](mailto:erica.mcneese@pacelabs.com)>  
Sent: Monday, January 25, 2021 11:16 AM  
To: Llull, Christian <[Christian.Llull@tetrattech.com](mailto:Christian.Llull@tetrattech.com)>  
Subject: Pace Analytical National Level II Report for 212C-MD-02334 TASK12 EVGSAU Satellite #6 Gas Vent Line Release (1RP-1391) L1306492  
Importance: High

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## ANALYTICAL REPORT

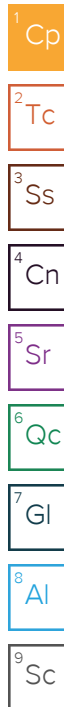
February 05, 2021

Revised Report

**ConocoPhillips - Tetra Tech**

Sample Delivery Group: L1307337  
Samples Received: 01/16/2021  
Project Number: 212C-MD-02334 TASK12  
Description: 1RP-1391

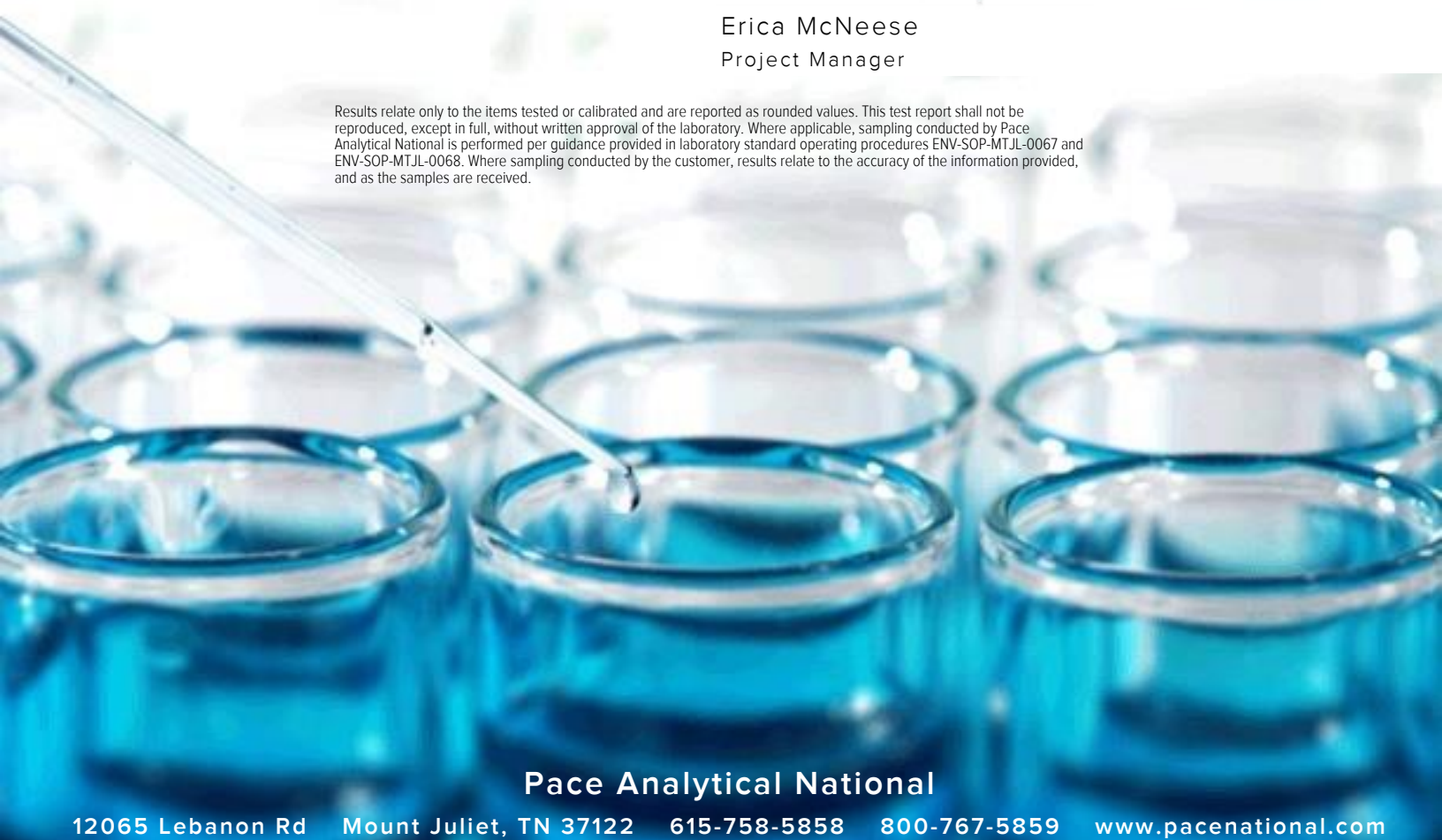
Report To: Christian Llull  
901 West Wall  
Suite 100  
Midland, TX 79701



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](http://www.pacenational.com)

Cp: Cover Page	1	<sup>1</sup> Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	<sup>2</sup> Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	<sup>3</sup> Ss
AH-4 (0-1') L1307337-01	5	<sup>4</sup> Cn
Qc: Quality Control Summary	6	
Total Solids by Method 2540 G-2011	6	<sup>5</sup> Sr
Wet Chemistry by Method 300.0	7	
Volatile Organic Compounds (GC) by Method 8015D/GRO	8	<sup>6</sup> Qc
Volatile Organic Compounds (GC/MS) by Method 8260B	9	
Semi-Volatile Organic Compounds (GC) by Method 8015	10	<sup>7</sup> Gl
Gl: Glossary of Terms	11	
Al: Accreditations & Locations	12	<sup>8</sup> Al
Sc: Sample Chain of Custody	13	<sup>9</sup> Sc



AH-4 (0-1') L1307337-01 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 19:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1609773	1	01/20/21 11:05	01/22/21 00:16	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1609427	1	01/20/21 11:05	01/21/21 19:10	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1609433	1	01/21/21 22:54	01/22/21 14:35	WCR	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>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

### Report Revision History

---

Level II Report - Version 1: 01/25/21 11:32

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

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

L1307337

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.8		1	01/22/2021 09:42	<a href="#">WG1607928</a>

## Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.70	21.1	1	01/20/2021 19:24	<a href="#">WG1606938</a>

## 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		0.0229	0.105	1	01/22/2021 00:16	<a href="#">WG1609773</a>
(S) a,a,a-Trifluorotoluene(FID)	90.8			77.0-120		01/22/2021 00:16	<a href="#">WG1609773</a>

## 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		0.000518	0.00111	1	01/21/2021 19:10	<a href="#">WG1609427</a>
Toluene	U		0.00144	0.00555	1	01/21/2021 19:10	<a href="#">WG1609427</a>
Ethylbenzene	U		0.000818	0.00277	1	01/21/2021 19:10	<a href="#">WG1609427</a>
Total Xylenes	U		0.000976	0.00721	1	01/21/2021 19:10	<a href="#">WG1609427</a>
(S) Toluene-d8	125			75.0-131		01/21/2021 19:10	<a href="#">WG1609427</a>
(S) 4-Bromofluorobenzene	99.8			67.0-138		01/21/2021 19:10	<a href="#">WG1609427</a>
(S) 1,2-Dichloroethane-d4	103			70.0-130		01/21/2021 19:10	<a href="#">WG1609427</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.51	J	1.70	4.22	1	01/22/2021 14:35	<a href="#">WG1609433</a>
C28-C40 Oil Range	14.9		0.289	4.22	1	01/22/2021 14:35	<a href="#">WG1609433</a>
(S) o-Terphenyl	76.3			18.0-148		01/22/2021 14:35	<a href="#">WG1609433</a>

Total Solids by Method 2540 G-2011 [L1307337-01](#)

Method Blank (MB)

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

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

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

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

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

Laboratory Control Sample (LCS)

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

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 300.0

L1307337-01

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

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

L1308441-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1308441-04 01/20/21 22:24 • (DUP) R3614945-6 01/20/21 22:34

Analyte	Original Result mg/kg	DUP Result 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	

L1307347-43 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1307347-43 01/20/21 20:40 • (MS) R3614945-4 01/20/21 20:49 • (MSD) R3614945-5 01/20/21 20:59

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	508	U	544	468	107	92.1	1	80.0-120			15.1	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



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

[L1307337-01](#)

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

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	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

[L1307337-01](#)

Method Blank (MB)

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

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

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Laboratory Control Sample (LCS)

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

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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	

Semi-Volatile Organic Compounds (GC) by Method 8015 [L1307337-01](#)

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	

L1307109-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1307109-01 01/22/21 09:57 • (MS) R3615428-3 01/22/21 10:12 • (MSD) R3615428-4 01/22/21 10:28

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	59.2	U	33.6	30.4	56.8	51.4	1	50.0-150			9.89	20
(S) o-Terphenyl					59.4	47.4		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

## 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

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	Gi
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.

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California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
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Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
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Kansas	E-10277	Rhode Island	LAO00356
Kentucky <sup>1 6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1 4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	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
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Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
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Nevada	NV009412021-1
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Pace Analytical National 1606 E. Brazos Street Suite D Victoria, TX, 77901

Texas	T104704328-20-18
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<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



[illegible]



**Erica McNeese**

---

**From:** Abbott, Sam <Sam.Abbott@tetrattech.com>  
**Sent:** Friday, February 5, 2021 12:24 PM  
**To:** Chris McCord; Erica McNeese  
**Subject:** FW: Pace Analytical National Level II Report for 212C-MD-02334 TASK12 1RP-1391 L1307337  
**Attachments:** L1307337.pdf

**Importance:** High

**Categories:** Report

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning,

Could you please revise this sample ID to be "AH-4 (0-1')"?

Thank you!  
Sam

**Samantha Abbott, PG** | Senior Staff Geoscientist  
Direct +1 (512) 338-2852 | Business +1 (512) 338-1667 | Mobile +1 (512) 739-7874 | Sam.Abbott@tetrattech.com

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**TETRA TECH**

---

**From:** Llull, Christian <Christian.Llull@tetrattech.com>  
**Sent:** Monday, January 25, 2021 11:46 AM  
**To:** Abbott, Sam <Sam.Abbott@tetrattech.com>  
**Subject:** FW: Pace Analytical National Level II Report for 212C-MD-02334 TASK12 1RP-1391 L1307337  
**Importance:** High

Christian

---

**From:** [erica.mcneese@pacelabs.com](mailto:erica.mcneese@pacelabs.com) <[erica.mcneese@pacelabs.com](mailto:erica.mcneese@pacelabs.com)>  
**Sent:** Monday, January 25, 2021 11:32 AM  
**To:** Llull, Christian <[Christian.Llull@tetrattech.com](mailto:Christian.Llull@tetrattech.com)>

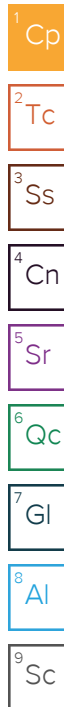


## ANALYTICAL REPORT

February 18, 2021

**ConocoPhillips - Tetra Tech**

Sample Delivery Group: L1314748  
Samples Received: 02/06/2021  
Project Number: 212C-MD-02334 TASK12  
Description: 1RP-1391  
Site: LEA COUNTY, NEW MEXICO  
Report To: Christian Llull  
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](http://www.pacenational.com)

Cp: Cover Page	1	<sup>1</sup> Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	<sup>2</sup> Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	<sup>3</sup> Ss
AH 5 (0'-1') L1314748-01	5	
Qc: Quality Control Summary	6	<sup>4</sup> Cn
Total Solids by Method 2540 G-2011	6	<sup>5</sup> Sr
Wet Chemistry by Method 300.0	7	
Volatile Organic Compounds (GC) by Method 8015D/GRO	8	<sup>6</sup> Qc
Volatile Organic Compounds (GC/MS) by Method 8260B	9	
Semi-Volatile Organic Compounds (GC) by Method 8015	10	<sup>7</sup> Gl
Gl: Glossary of Terms	11	
Al: Accreditations & Locations	12	<sup>8</sup> Al
Sc: Sample Chain of Custody	13	<sup>9</sup> Sc

AH 5 (0'-1') L1314748-01 Solid

Collected by  
Adrian Garcia

Collected date/time  
02/05/21 11:00

Received date/time  
02/06/21 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1618803	1	02/11/21 09:34	02/11/21 09:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1619263	1	02/10/21 23:03	02/11/21 03:32	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1618378	1	02/07/21 00:17	02/09/21 11:55	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1617635	1	02/07/21 00:17	02/17/21 16:00	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1619397	1	02/12/21 01:49	02/13/21 15:52	WCR	Mt. Juliet, TN

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>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

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

Collected date/time: 02/05/21 11:00

L1314748

## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.1		1	02/11/2021 09:44	<a href="#">WG1618803</a>

## Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		10.1	22.0	1	02/11/2021 03:32	<a href="#">WG1619263</a>

## 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	0.0733	<a href="#">B J</a>	0.0238	0.110	1	02/09/2021 11:55	<a href="#">WG1618378</a>
(S) a,a,a-Trifluorotoluene(FID)	92.5			77.0-120		02/09/2021 11:55	<a href="#">WG1618378</a>

## 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		0.000558	0.00120	1	02/17/2021 16:00	<a href="#">WG1617635</a>
Toluene	U		0.00155	0.00598	1	02/17/2021 16:00	<a href="#">WG1617635</a>
Ethylbenzene	U		0.000881	0.00299	1	02/17/2021 16:00	<a href="#">WG1617635</a>
Total Xylenes	U		0.00105	0.00777	1	02/17/2021 16:00	<a href="#">WG1617635</a>
(S) Toluene-d8	92.3			75.0-131		02/17/2021 16:00	<a href="#">WG1617635</a>
(S) 4-Bromofluorobenzene	97.6			67.0-138		02/17/2021 16:00	<a href="#">WG1617635</a>
(S) 1,2-Dichloroethane-d4	97.1			70.0-130		02/17/2021 16:00	<a href="#">WG1617635</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	10.4		1.77	4.39	1	02/13/2021 15:52	<a href="#">WG1619397</a>
C28-C40 Oil Range	11.6		0.301	4.39	1	02/13/2021 15:52	<a href="#">WG1619397</a>
(S) o-Terphenyl	33.7			18.0-148		02/13/2021 15:52	<a href="#">WG1619397</a>



QUALITY CONTROL SUMMARY

L1314748-01

Method Blank (MB)

(MB) R3621893-1 02/11/21 09:44

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

Laboratory Control Sample (LCS)

(LCS) R3621893-2 02/11/21 09:44

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 300.0

Method Blank (MB)

(MB) R3621520-1 02/11/21 02:31

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

Laboratory Control Sample (LCS)

(LCS) R3621520-2 02/11/21 02:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Chloride	200	214	107	90.0-110	

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO [L1314748-01](#)

Method Blank (MB)

(MB) R3621524-2 02/09/21 05:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0688	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	96.3			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3621524-1 02/09/21 04:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.88	107	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			105	77.0-120	

L1314322-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1314322-09 02/09/21 07:19 • (MS) R3621524-3 02/09/21 15:00 • (MSD) R3621524-4 02/09/21 15:23

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	139	1.16	164	160	117	114	25	10.0-151			2.43	28
(S) a,a,a-Trifluorotoluene(FID)					108	120		77.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 8260B [L1314748-01](#)

Method Blank (MB)

(MB) R3622910-3 02/17/21 09:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	93.1			75.0-131
(S) 4-Bromofluorobenzene	97.4			67.0-138
(S) 1,2-Dichloroethane-d4	93.9			70.0-130

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

(LCS) R3622910-1 02/17/21 07:52 • (LCSD) R3622910-2 02/17/21 08:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.145	0.138	116	110	70.0-123			4.95	20
Ethylbenzene	0.125	0.116	0.113	92.8	90.4	74.0-126			2.62	20
Toluene	0.125	0.122	0.118	97.6	94.4	75.0-121			3.33	20
Xylenes, Total	0.375	0.349	0.336	93.1	89.6	72.0-127			3.80	20
(S) Toluene-d8				90.1	90.4	75.0-131				
(S) 4-Bromofluorobenzene				102	103	67.0-138				
(S) 1,2-Dichloroethane-d4				104	104	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Semi-Volatile Organic Compounds (GC) by Method 8015 L1314748-01

Method Blank (MB)

(MB) R3622239-1 02/13/21 01:11

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	98.0			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3622239-2 02/13/21 01:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	44.6	89.2	50.0-150	
(S) o-Terphenyl			65.2	18.0-148	

L1314732-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1314732-01 02/13/21 01:37 • (MS) R3622239-3 02/13/21 01:50 • (MSD) R3622239-4 02/13/21 02:03

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	60.9	U	53.4	49.6	87.7	81.7	1	50.0-150			7.43	20
(S) o-Terphenyl					59.0	58.7		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

## Guide to Reading and Understanding Your Laboratory Report

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

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

### Abbreviations and Definitions

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

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

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gi
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.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN, 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	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 <sup>1 6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1 4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
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	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

Pace Analytical National 1313 Point Mallard Parkway SE Suite B Decatur, AL, 35601

Alabama	40160
ANSI National Accreditation Board	L2239

Pace Analytical National 660 Bercut Dr. Ste. C Sacramento, CA, 95811

California	2961	Oregon	CA300002
Minnesota	006-999-465	Washington	C926
North Dakota	R-214		

Pace Analytical National 6000 South Eastern Avenue Ste 9A Las Vegas, NV, 89119

Nevada	NV009412021-1
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Pace Analytical National 1606 E. Brazos Street Suite D Victoria, TX, 77901

Texas	T104704328-20-18
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<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

J103

Page: 1 of 1

## Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

## ANALYSIS REQUEST

(Circle or Specify Method No.)

L1314748

Client Name: Conoco Phillips

Site Manager: Christian Llull

Project Name: 1RP-1391

Contact Info: Email: christian.llull@tetratech.com  
Phone: (512) 338-1667Project Location: Lea County, New Mexico  
(county, state)

Project #: 212C-MD-02334 Task 12

Invoice to: Accounts Payable  
901 West Wall Street, Suite 100 Midland, Texas 79701

Sampler Signature: Adrian Garcia

Receiving Laboratory: Pace Analytical

Comments: COPTETRA Acctnum

Comments: COPTETRA Acctnum		SAMPLE IDENTIFICATION		SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)																		HOLD		
LAB # (LAB USE ONLY)	DATE			TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	NONE	BTX 8021B			BTX 8260B	TPH TX1005 (Ext to C	TPH 8015M (GRO -	PAH 8270C	Total Metals Ag As Ba	TCLP Metals Ag As B	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B	GC/MS Semi. Vol. 8	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Sulfate	General Water Chem		Anion/Cation Balan	TPH 8015R
201	AH 5 (0'-1')	02/05/21	1100	X				X		1	N	X	X													X							
											</																						

 Relinquished by: *Adrian Llull* Date: 2/5/21 Time: 13:00  
 Relinquished by: *Patricia Muller* Date: 2-5-21 Time: 14:30  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

 Received by: *Patricia Muller* Date: 2-5-21 Time: 13:00  
 Received by: *SWA* Date: 2-5-21 Time: 14:30  
 Received by: *Patricia Muller* Date: 2-6-21 Time: 10:00

## LAB USE ONLY

Sample Temperature

## REMARKS:

- ☒ Standard
- ☐ RUSH: Same Day 24 hr. 48 hr. 72 hr.
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: \_\_\_\_\_

 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  
 Sufficient bottles used: Y N  
 Sufficient volume: Y N

MPAS 2.871-2.2

**District I**

1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**

1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 238754

**CONDITIONS**

Operator: Maverick Permian LLC 1111 Bagby Street Suite 1600 Houston, TX 77002	OGRID: 331199
	Action Number: 238754
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
jharimon	This Remediation Plan is approved with the following conditions. Please make sure the floor confirmation samples are delineated/excavated to meet closure criteria standards for proven depth to water determination. Sidewall samples should be delineated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. The request for an alternative sampling variance of sidewall and floor samples representative of no more than approximately 500 square feet is denied. An alternative sampling variance of sidewall and floor samples representative of no more than 400 Square feet is approved.	7/21/2023
jharimon	Additionally, the request for variance for the placement of a liner at four feet is denied. The OCD does not have sufficient data showing the need for a liner at this location. A deferral can be requested for specific sample points. If you believe a certain area will require a deferral, please make sure that it has been fully delineated and specify the exact soil sample locations to be deferred. The OCD needs to see that every measure has been taken to remediate the release before a deferral can be granted. After all possible contaminated soil has been removed, a formal deferral request will need to be uploaded to the OCD payment portal for review.	7/21/2023