



May 31, 2022

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

**Re: REVISED Release Characterization and Remediation Work Plan  
ConocoPhillips  
VGEU 02-20 West Flowline Release  
Unit Letter D, Section 32, Township 17 South, Range 35 East  
Lea County, New Mexico  
Incident ID nRM2017856312**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a release that occurred from the flowline of the Vacuum Glorieta East Unit (VGEU) 02-20 well (Associated API No. 30-025-37850). The release footprint is located approximately 2,800 feet west-northwest of the wellhead. The release footprint is located in Public Land Survey System (PLSS) Unit Letter D, Section 32, Township 17 South, and Range 35 East, Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.796421°, -103.487760°, as shown on Figures 1 and 2.

## BACKGROUND

According to the State of New Mexico C-141 Initial Report (Appendix A), the VGEU 02-20 West release was discovered on June 16, 2020. The release occurred as the result of a flowline rupture and encompasses an estimated area of 3,255 square feet. Approximately 56.48 barrels (bbls) of produced water and 14.12 bbls of oil were reported released, of which 0.0 bbls of produced water and 5.0 bbls of oil were recovered. The New Mexico Oil Conservation District (NMOCD) received the C-141 form for the release on June 26, 2020. The NMOCD Incident ID for this release is nRM2017856312.

## SITE CHARACTERIZATION

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

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are five water wells within ½ mile (800m) of the Site with an average depth to groundwater of 100 feet below ground surface (bgs). The site characterization data is included in Appendix B.

## REGULATORY FRAMEWORK

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

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

Constituent	Site RRALs
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 requirements for surface soils (0-4 ft bgs) outside of active oil and gas operations are as follows:

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

## INITIAL RESPONSE AND REMEDIAL ACTIVITIES

In accordance with 19.15.29.8. B. (4) NMAC that states “the responsible party may commence remediation immediately after discovery of a release”, ConocoPhillips elected to begin remediation of the impacted area in 2020. At some point between the discovery of the release and July 1, 2020, the release area was partially excavated to depths ranging from 2 feet bgs to 5 feet bgs. This excavated area encompasses approximately 3,000 square feet. Figure 3 depicts the approximate release extent and the excavated area.

## INITIAL ASSESSMENT ACTIVITIES AND SAMPLING RESULTS

As a portion of the initial response, on July 1, 2020, COP personnel collected a total of thirty-two (32) soil samples from sample point (SP) locations in and around the release extent (SP#1 through SP#33). Twenty-eight (28) samples (SP #1 through SP #28) were collected within the excavated release area and four (4) samples (SP #29 through SP #32) were collected outside the excavated release area. These soil samples were sent to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for chloride via EPA Method SM4500Cl-B, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. Sample locations are shown in Figure 3.

Analytical results associated with all but three (3) sample locations exceeded Site RRALs for TPH, chloride and/or BTEX. The analytical results associated with SP#17, SP#29 and SP#30 were below Site RRALs and/or reclamation requirements above 4 feet bgs. A copy of the analytical laboratory report and chain-of-custody documentation are included in Appendix C. Sample results from the initial assessment are summarized in Table 1. Neither horizontal nor vertical delineation was achieved during the initial assessment. Photographic documentation of the release area and initial response extent is included as Appendix D.

## ADDITIONAL SITE ASSESSMENT AND SAMPLING RESULTS

In order to achieve horizontal and vertical delineation of the release extent, Tetra Tech personnel conducted soil sampling from January 18, 2021 to May 25, 2021 on behalf of ConocoPhillips. On January 18, 2021, a total of nine (9) borings (BH-1 through BH-9) were installed using an air rotary drilling rig. Three (3) borings (BH-1 and BH-3) were installed within the release extent to depths ranging from 15 feet bgs to 30 feet bgs to achieve vertical delineation. Five (5) borings (BH-4 through BH-8) were installed along the perimeter of the release extent to a depth of 10 feet bgs to achieve horizontal delineation. Due to drill rig access issues west of the release footprint, one (1) hand auger boring (BH-9) was installed to a depth of 1.5 feet bgs to horizontally delineate to the west of the release footprint. Boring logs, included as Appendix

E, present soil descriptions, sample depths, and field screening data from the January 2021 assessment activities.

During the January 2021 assessment activities Tetra Tech personnel observed potential historically impacted and disturbed areas in the vicinity of the release footprint. In an attempt to delineate the observed impacted area, a total of six (6) borings (BH-10 through BH-14 and BH-16) were installed around the perimeter of the affected area on May 14, 2021. BH-10 through BH-14 and BH-16 were installed using an air rotary drilling rig to depths ranging from 8 feet bgs to 15 feet bgs.

On May 25, 2021, seven (7) additional borings (AH-1 through AH-7) were installed within and around the potential historically impacted area using a hand auger to discern between the release footprint and the previously disturbed areas. Samples were collected at the 0-1' depth interval from borings AH-1 through AH-7 and at the 1-2' depth interval at AH-6.

A total of eighty-nine (89) samples were collected from the twenty-two (22) additional borings 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. Copies of the laboratory analytical reports and chain-of-custody documentation are included in Appendix C. Figure 4 depicts the release extent, excavated area and the January and May 2021 soil boring locations.

Results from the January and May 2021 soil sampling events are summarized in Table 2. The analytical results associated with the BH-1 (4-5' interval), BH-2 (2-5' interval), BH-3 (2-3' interval), BH-7 (0-7' interval), BH-8 (0-3' interval) and BH-9 (0-1.5' interval) either exceeded the Site RRALs and/or reclamation requirements for soil above 4 feet bgs. Additionally, analytical results associated with BH-4 at the 9-10' interval exceeded the Site RRAL for TPH; however, all analytical results above the 9-foot depth interval were below Site RRALs and/or reclamation requirements. These TPH exceedances at 9 feet bgs are presumably related to an unrelated historical release, based on the uncontaminated surface soil. Given the depth to groundwater in the area, the proposed RRALs for the site, and the unimpacted pastureland overlying these strata, COP proposes to leave these impacts in place. There were no other analytical results which exceeded the Site RRALs during the January 2021 sampling event.

The analytical results associated with the May 2021 assessment activities indicate unrelated historical impact in the vicinity of the release footprint. Analytical results at BH-11 (9-10') and BH-16 (9-10') exceeded the Site RRAL for TPH, but the analyzed samples stratigraphically above 9 feet were below Site RRALs and reclamation requirements. Again, these TPH exceedances at 9 feet bgs are presumably related to an unrelated historical release, based on the uncontaminated surface soil. Analytical results associated with AH-2 were above the reclamation requirement for TPH; however, analytical results associated with boring locations between the nRM2017856312 release footprint and AH-2 (BH-11, AH-3, AH-6 and AH-7) were below the Site RRALs and/or reclamation requirements at corresponding depth intervals.

## REMEDIATION WORK PLAN AND EXTENSION REQUEST

The Release Characterization Work Plan (Work Plan) was prepared by Tetra Tech on behalf of ConocoPhillips and submitted to NMOCD on October 7, 2021 with fee application payment PO Number AGLL5-211007-C-1410. The Work Plan described the results of the release assessment and provided characterization of the impact at the site. The Work Plan was approved via email by Chad Hensley on Monday, November 15, 2021.

Chad Hensley stated the following conditions of the approval:

- *"Mentioned samples have not been fully delineated vertically: BH-4, BH-11, and BH-16. Please show on closure report delineation from 10ft bgs to closure criteria in five foot increments.*
- *Closure report due 02/15/2022"*

On December 20, 2021, COP requested a 60-day extension for Incident ID nRM2017856312 via email. This extension was requested to allow sufficient time to conduct additional assessment activities to address the conditions of the Work Plan approval. The 60-day extension was granted via email by Chad Hensley on December 20, 2021. Regulatory correspondence concerning the initial work plan approval and extension request is included in Appendix F.

## ADDITIONAL DELINEATION AND SAMPLING RESULTS

On February 18, 2022, Tetra Tech personnel were at the Site to conduct additional delineation of the release area to address the conditions of the Work Plan approval. A total of three (3) soil borings (BH-17 through BH-19) were installed outside the release extent. BH-17 was installed south of BH-4, BH-18 was installed between the release extent and BH-11, and BH-19 was installed north of BH-16. Soil samples were collected at depths from 6 to 13 feet in BH-17 and BH-18 and from 6 to 10 feet at BH-19. Boring logs, included as Appendix E, present soil descriptions, sample depths, and field screening data from the additional assessment activities.

A total of ten (10) samples were collected from the three (3) borings and submitted to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico to be analyzed for chlorides via SM4500CL-B, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. Copies of the laboratory analytical reports and chain-of-custody documentation are included in Appendix C.

Analytical results associated with BH-17 (12-13') and BH-18 at depth intervals 6-7', 8-9' and 10-11' were above the Site RRAL for TPH. All other analytical results were below Site RRALs and/or reclamation requirements.

During the February 2022 additional delineation, drilling was limited to depths of 13 feet bgs at BH-17 and BH-17 and 10 feet bgs at BH-19. These limitations were due to unconsolidated material below the lithified surface soils sloughing into the borehole, making collection of representative soil samples below these depths impractical. Thus, on March 31, 2022, Tetra Tech, on behalf of COP, requested the NMOCD grant a second 60-day extension to complete additional assessment using alternative methods to address difficulties associated with Site conditions. The extension request was granted on April 4, 2022 by Chad Hensley via email. The 60-day extension approval revised the deadline to July 15, 2022. NMOCD email correspondence is included in Appendix F.

On May 24, 2022, Tetra Tech personnel were onsite to complete delineation per NMOCD request. Soil borings BH-17A and BH-18A were installed at the previously drilled boring locations BH-17 and BH-18. Soil samples were collected from BH-17A and BH-18A below the previously sampled intervals at BH-17 and BH-18 down to depths of 45 feet and 50 feet, respectively. Soil boring BH-20 was installed south of BH-18 to complete horizontal delineation to the south. The February and May 2022 boring locations are shown on Figure 5.

A total of twenty-one (21) samples were collected from BH-17A, BH-18A and BH-20 and analyzed for chlorides via SM4500CI-B, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B by Cardinal. Copies of the laboratory analytical reports and chain-of-custody documentation are included in Appendix C.

Analytical results associated with samples collected from BH-17A (from depths ranging from 14' to 25') and BH-18A (from depths ranging from 14' to 20') were above Site RRALs for TPH and/or BTEX. However, sample results from BH-17A and BH-18A were below Site RRALs at depths below 29 feet and 24 feet, respectively. All results associated with BH-20 were below Site RRALs and/or reclamation requirements.

## FINDINGS

These additional delineation activities provided a comprehensive study of not only the subsurface conditions in the vicinity of the release, but along with the previously collected data, also the surrounding

impacts previously noted. Based on a review of all collected analytical results associated with the Site release characterization, a few patterns emerged.

1. The original reported release extent closely mirrored the excavated area indicated in Figure 4. The release extent was modified based upon data collected from BH-7, BH-8 and BH-9, borings from the site assessment conducted in January 2021. The data from these borings indicated TPH impact in the surficial soils adjacent to the reported release extent. Thus, as indicated in Figure 6, these areas were included in the approximate release extent and proposed for remediation given their proximity to the initial response area. However, upon review of the collected data, borings BH-1, BH-2 and BH-3, drilled within the original reported extent, all have significant chloride impacts which coincide with the TPH impacts. The chloride concentrations within BH-7, BH-8 and BH-9 are virtually non-detect, and if found, do not exceed the reclamation requirement of 600 mg/kg.
2. As mentioned earlier in this report and in the previous Work Plan, the analytical results associated with the May 2021 assessment activities indicate unrelated deep historical impact in the vicinity of the release footprint. Analytical results at BH-11 (9-10') and BH-16 (9-10') exceeded the Site RRAL for TPH, but the collected samples stratigraphically above 9 feet were below Site RRALs and reclamation requirements. Therefore, these TPH exceedances at 9 feet bgs are presumably related to an unrelated historical release, based on the uncontaminated surface soil. In extension request #1, COP outlined the notion that these observed impacts at depth are unrelated to the nRM2017856312 incident. This inference was based on the reported incident footprint, the lack of lateral transmissivity at the site, and the lack of widespread contamination in the overlying strata in these areas. Additionally, after review, the analytical results associated with these borings do not contain the accompanying chloride impacts which have now been determined to be coexistent with the nRM2017856312 release.

The conditions of the Work Plan approval have been met. The areas of BH-4, BH-11, and BH-16 have been delineated both vertically and horizontally. To recap, the areas of BH-4, BH-11, and BH-16 contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg. The soil cover includes a top layer, which has established vegetation at the site.

Given these observed analytical data patterns described above, the lack of shallow groundwater in the area and that observed impacted intervals begin at a depth of 9 ft, COP believes that remediation in these areas would cause more damage to the existing surficial environment and create additional risk for a line strike during remedial activities.

## VARIANCE REQUEST

The variance request is to leave this impacted material in the areas of BH-4, BH-11, and BH-16 in place. The data indicates that these deep impacts are unrelated to the nRM2017856312 release. The variance will provide equal protection of fresh water, public health and the environment, as the areas of disturbance will be minimized, and the existing uniform vegetative cover will not be eradicated.

## REMEDIATION WORK PLAN

Due to the proximity of borings BH-7, BH-8 and BH-9 to the originally reported release extent and the Work Plan approval, these areas will continue to be included within the proposed area of remedial action. Thus, based on the collected analytical results, the remaining impacted material is proposed to be removed as shown in Figure 6. Impacted soils will be excavated using heavy equipment (backhoes, hoe rams, and track hoes) to a maximum depth of 10 feet below the surrounding surface or until a representative sample from the walls and bottom of the excavation is below the Site RRALs and/or reclamation requirements. The area containing BH-8 and BH-9 and the area between BH-1 and BH-2 will be excavated to a depth of 4 feet below pre-release grade. The areas containing BH-1 and BH-2 will be excavated to a depth of 5 feet below pre-release grade. The areas containing BH-7 and BH-3 will be excavated to depths of 8 feet and 10 feet

below pre-release grade, respectively. The northern and western area of the release extent that contains steel surface lines will be hand-dug to a depth of 3 feet or the maximum extent practicable and heavy equipment will come no more than 4 feet from any pressurized lines. A pressurized pipeline runs across the southern end of the open excavation, and coordination with the pipeline owner, Plains All American (Plains), will be required to complete the remediation. It is unclear what type of remedial activities Plains will authorize at the Site.

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Confirmation bottom and sidewall samples will be collected for verification of remedial activities, and analyzed for TPH, BTEX, and chlorides. Once results are received, NMOCD will be notified, and the excavation will then be backfilled with clean material to surface grade. The estimated volume of material to be remediated is approximately 1,375 cubic yards.

### **ALTERNATIVE CONFIRMATION SAMPLING PLAN**

In accordance with 19.15.29.12(D)(1)(b) NMAC, ConocoPhillips proposes the following alternative confirmation sampling plan to adhere with NMOCD requirements. The proposed confirmation sample locations are depicted in Figure 7. Twenty (20) confirmation floor samples and twenty-four (24) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses a surface area of approximately 7,560 square feet.

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

### **SITE RECLAMATION AND RESTORATION PLAN**

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

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

### **CONCLUSION**

The Previous Work Plan was conditionally approved. However, as noted, a second extension request was granted on April 4, 2022, by Chad Hensley via email. The additional drilling was completed as described, and the conditions of approval have been met. The 60-day extension approval revised the deadline to July 15, 2022. NMOCD email correspondence is included in Appendix F.

The final remedial extents are indicated in the figure set. This revised Work Plan presents the findings of the additional assessment and delineation activities, the conclusions upon review of the collected data and a variance request. 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.

REVISED Release Characterization and Remediation Work Plan  
May 31, 2022

ConocoPhillips

If you have any questions concerning the soil assessment, additional delineation, or the proposed remediation activities for the Site, please call me at (512) 338-2861 or email at [Christian.llull@tetratech.com](mailto:Christian.llull@tetratech.com).

Sincerely,  
**Tetra Tech, Inc.**

A handwritten signature in blue ink, appearing to read 'CLL', is positioned below the typed name.

Christian M. Llull, P.G.  
Program Manager

cc:  
Mr. Sam Widmer, RMR – ConocoPhillips

## LIST OF ATTACHMENTS

### Figures:

- Figure 1 – Overview Map
- Figure 2 – Site Location/Topographic Map
- Figure 3 – Initial Response and Assessment
- Figure 4 – Additional Assessment
- Figure 5 – Additional Delineation Locations
- Figure 6 – Proposed Remediation and Reclamation
- Figure 7 – Alternative Confirmation Sampling Plan

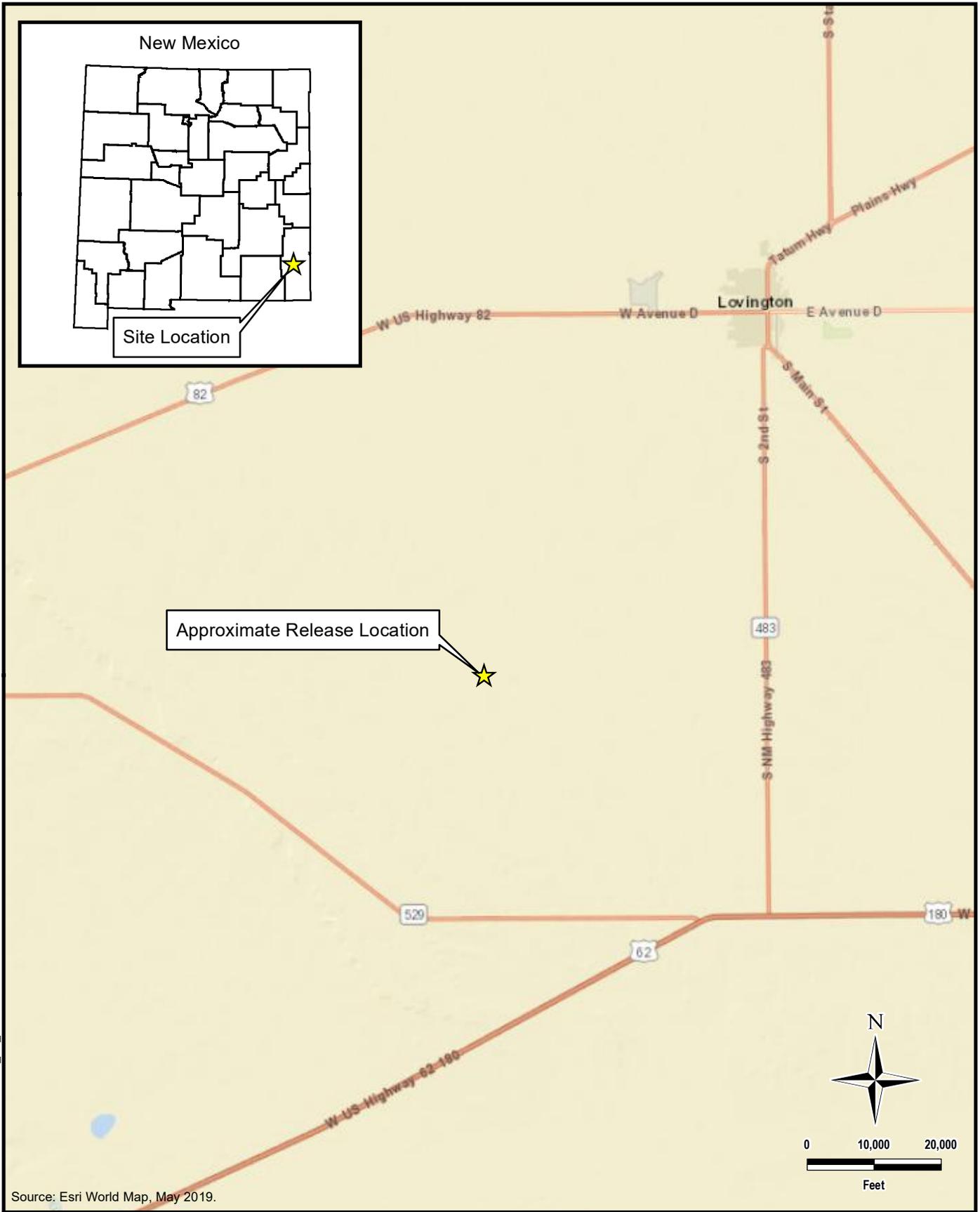
### Tables:

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

### Appendices:

- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – Laboratory Analytical Data
- Appendix D – Photographic Documentation
- Appendix E – Soil Boring Logs
- Appendix F – Regulatory Correspondence
- Appendix G – NMSLO Seed Mixture Details

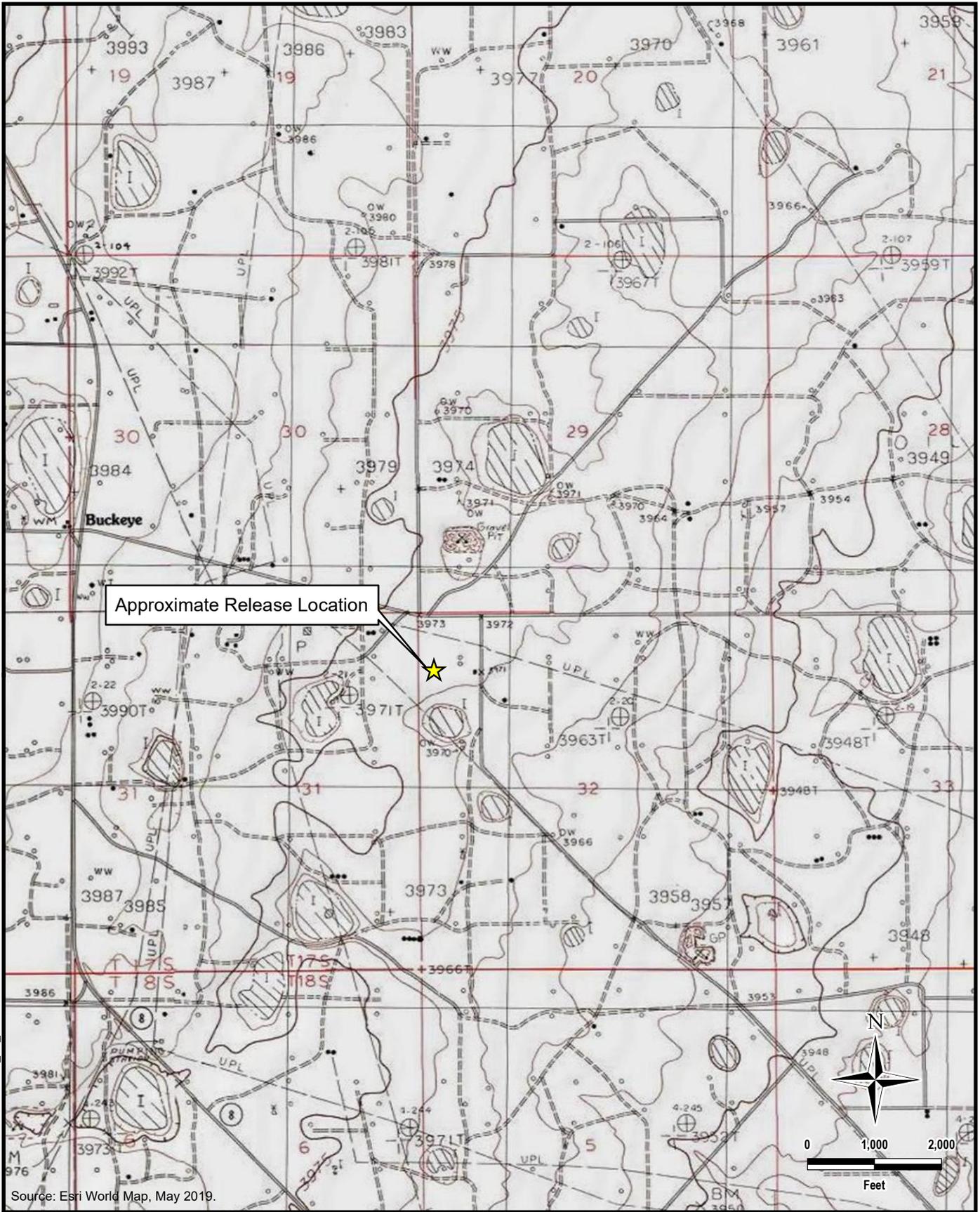
# FIGURES



\\TTS134FS1\UP-GIS\ARCP\2\NERT\MXDFIGURE1\_TS\_LOCATION.MXD

Source: Esri World Map, May 2019.

 <p><b>TETRA TECH</b></p> <p>www.tetratech.com</p> <p>901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946</p>	<p>CONOCOPHILLIPS</p> <p>NRM2017856312 (32.796085°, -103.485063°) LEA COUNTY, NEW MEXICO</p>	<p>PROJECT NO.: 212C-MD-02377</p>
	<p><b>VGEU 02-20 WEST FLOWLINE RELEASE OVERVIEW MAP</b></p>	<p>DATE: MARCH 26, 2021</p> <p>DESIGNED BY: AAM</p>
	<p>Figure No. <b>1</b></p>	



Approximate Release Location

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Source: Esri World Map, May 2019.



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 LEA COUNTY, NEW MEXICO

**VGEU 02-20 WEST FLOWLINE RELEASE  
 TOPOGRAPHIC MAP**

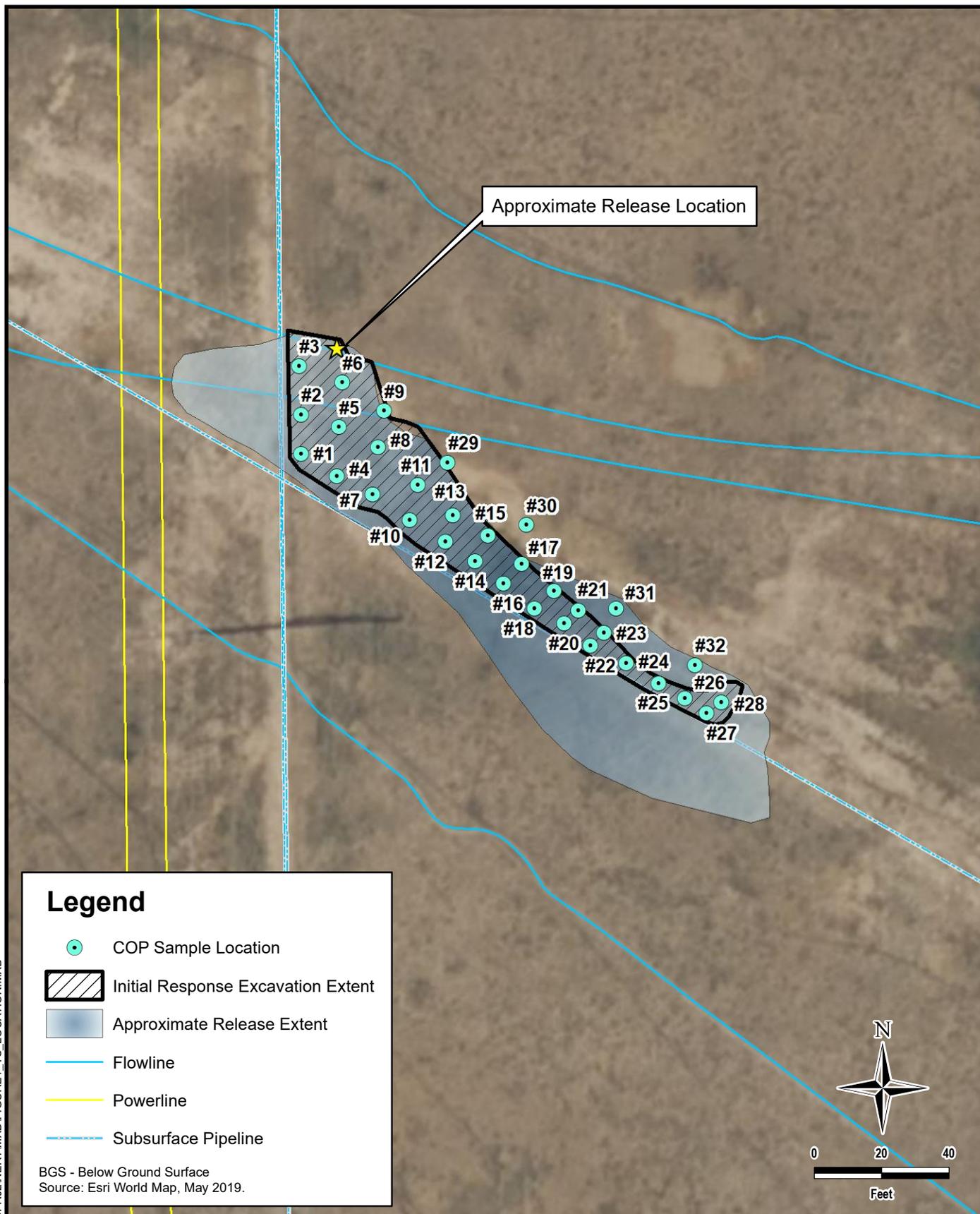
PROJECT NO.: 212C-MD-02377

DATE: MARCH 26, 2021

DESIGNED BY: AAM

Figure No.

**2**



**Legend**

- COP Sample Location
- Initial Response Excavation Extent
- Approximate Release Extent
- Flowline
- Powerline
- Subsurface Pipeline

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

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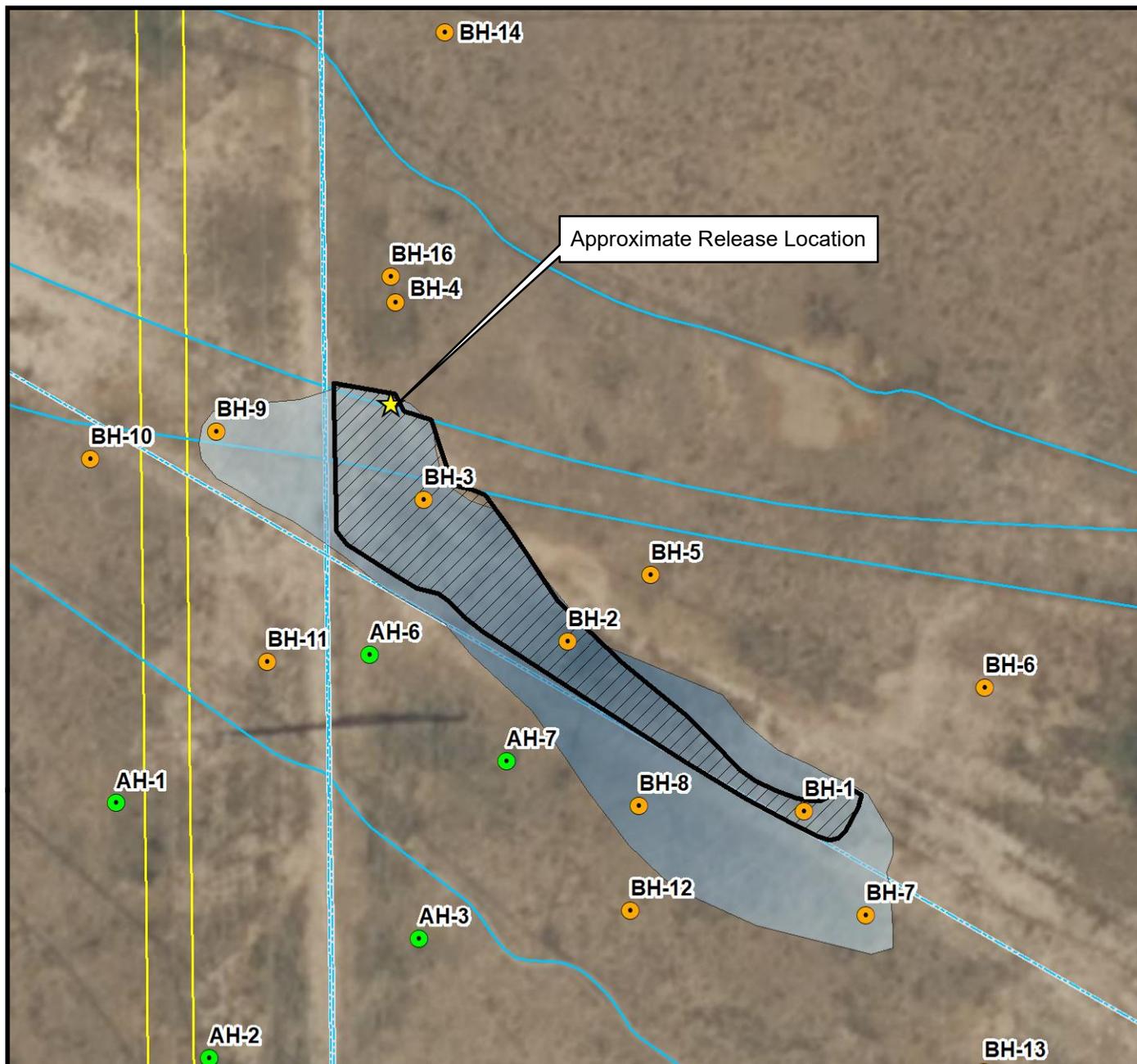
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CONOCOPHILLIPS  
NRM2017856312  
(32.796085°, -103.485063°)  
LEA COUNTY, NEW MEXICO

**VGEU 02-20 WEST FLOWLINE RELEASE  
INITIAL RESPONSE AND ASSESSMENT**

PROJECT NO.: 212C-MD-02377  
DATE: OCTOBER 05, 2021  
DESIGNED BY: AAM

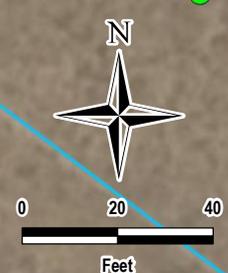
Figure No.  
**3**



### Legend

- Boring Location
- Boring Location - Hand Auger
- Flowline
- Powerline
- Subsurface Pipeline
- Approximate Release Extent
- Initial Response Excavation Extent

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



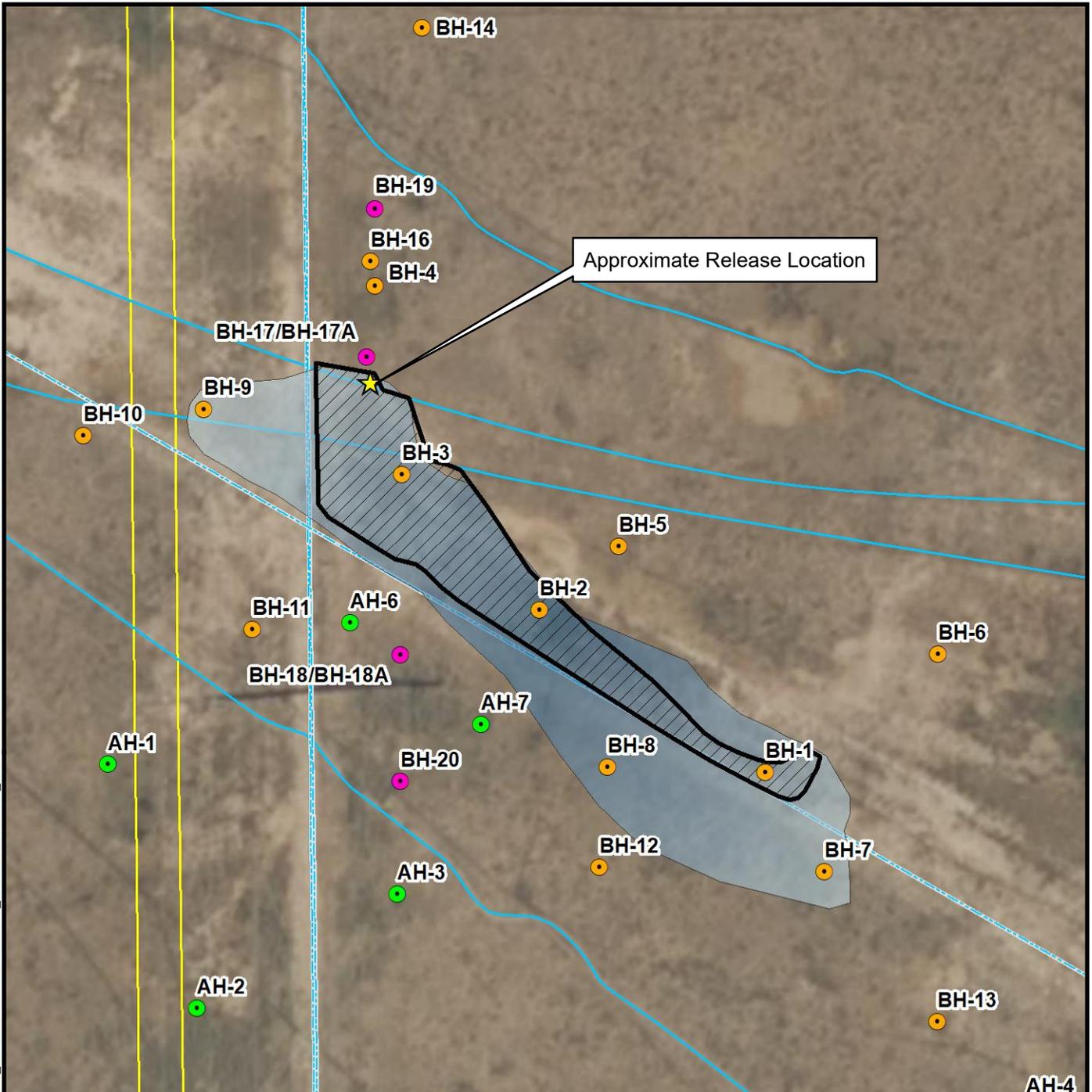
\\TTS134F51\SUP-GIS\ARCP\RJ2\NERT\MXD\FIGURE1\_TS\_LOCATION.MXD

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**VGEU 02-20 WEST FLOWLINE RELEASE  
 ADDITIONAL ASSESSMENT**

PROJECT NO.:	212C-MD-02377
DATE:	OCTOBER 05, 2021
DESIGNED BY:	AAM
Figure No.	<b>4</b>

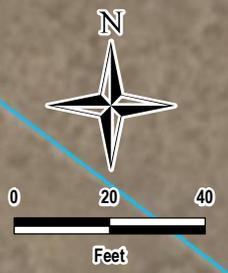


DOCUMENT PATH: D:\CONOCOPHILLIPS\MD\VGEU 02-20\WEST\WEST\_AUG21\FIGURE 7 ADD DEL\_VGEU 02-20 WEST\_REM.MXD

**Legend**

- Boring Location
- Boring Location - Hand Auger
- Additional Delineation Location
- Flowline
- Powerline
- Subsurface Pipeline
- Initial Response Excavation Extent
- Approximate Release Extent

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



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CONOCOPHILLIPS

NRM2017856312  
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**VGEU 02-20 WEST FLOWLINE RELEASE  
ADDITIONAL DELINEATION LOCATIONS**

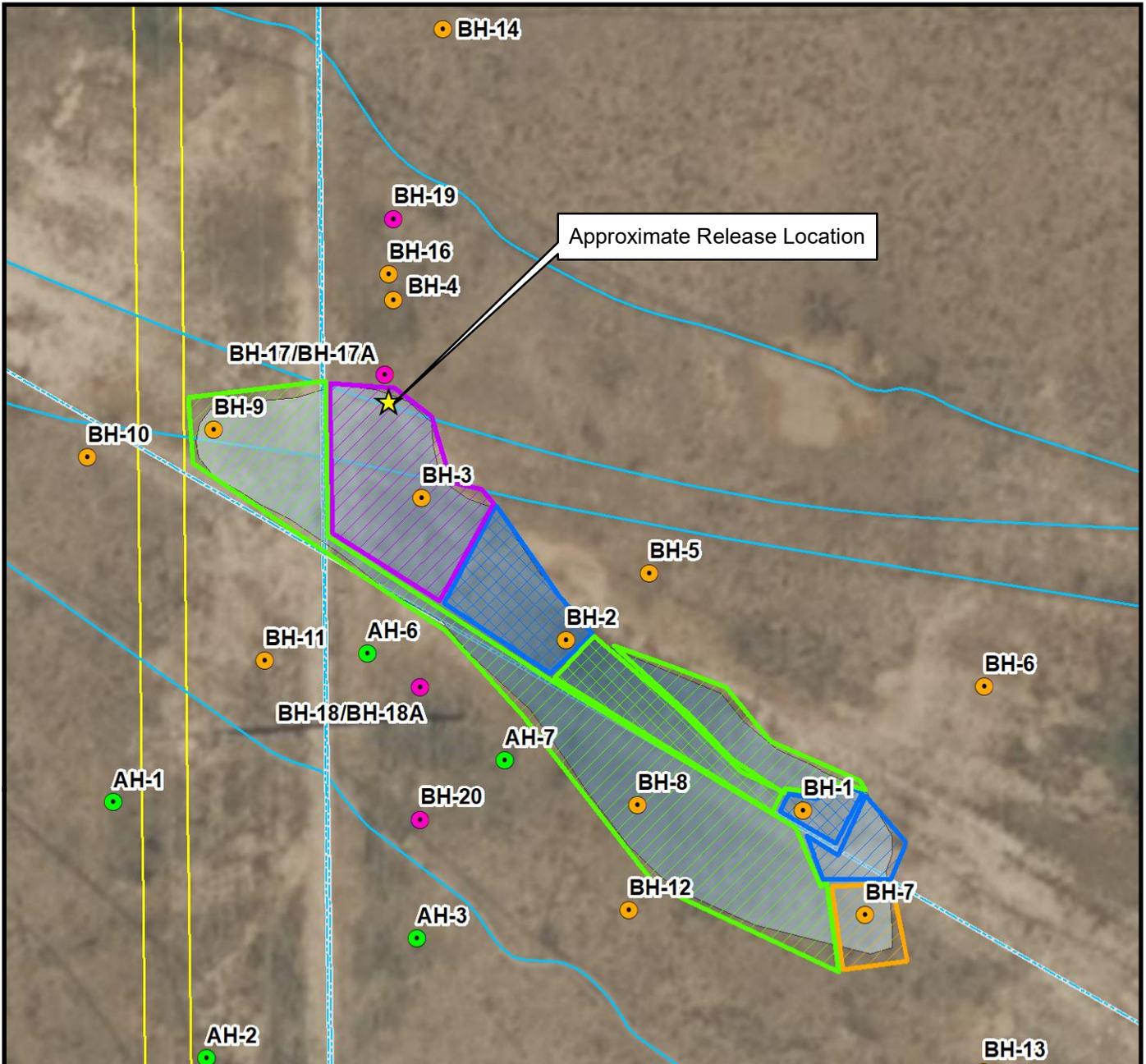
PROJECT NO.: 212C-MD-02377

DATE: MAY 26, 2022

DESIGNED BY: AAM

Figure No.

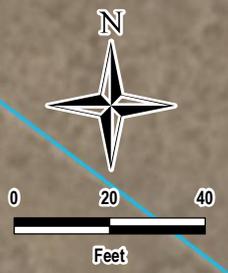
**5**



**Legend**

- Boring Location
- Boring Location - Hand Auger
- Additional Delineation Location
- Approximate Release Extent
- Flowline
- Powerline
- Subsurface Pipeline
- Proposed Excavation - 4' BGS
- Proposed Excavation - 4' BGS (Current 3' BGS)
- Proposed Excavation - 5' BGS
- Proposed Excavation - 5' BGS (Current 4' BGS)
- Proposed Excavation - 5' BGS (Current 2' BGS)
- Proposed Excavation - 8' BGS
- Proposed Excavation - 10' BGS (Current 2' BGS)

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



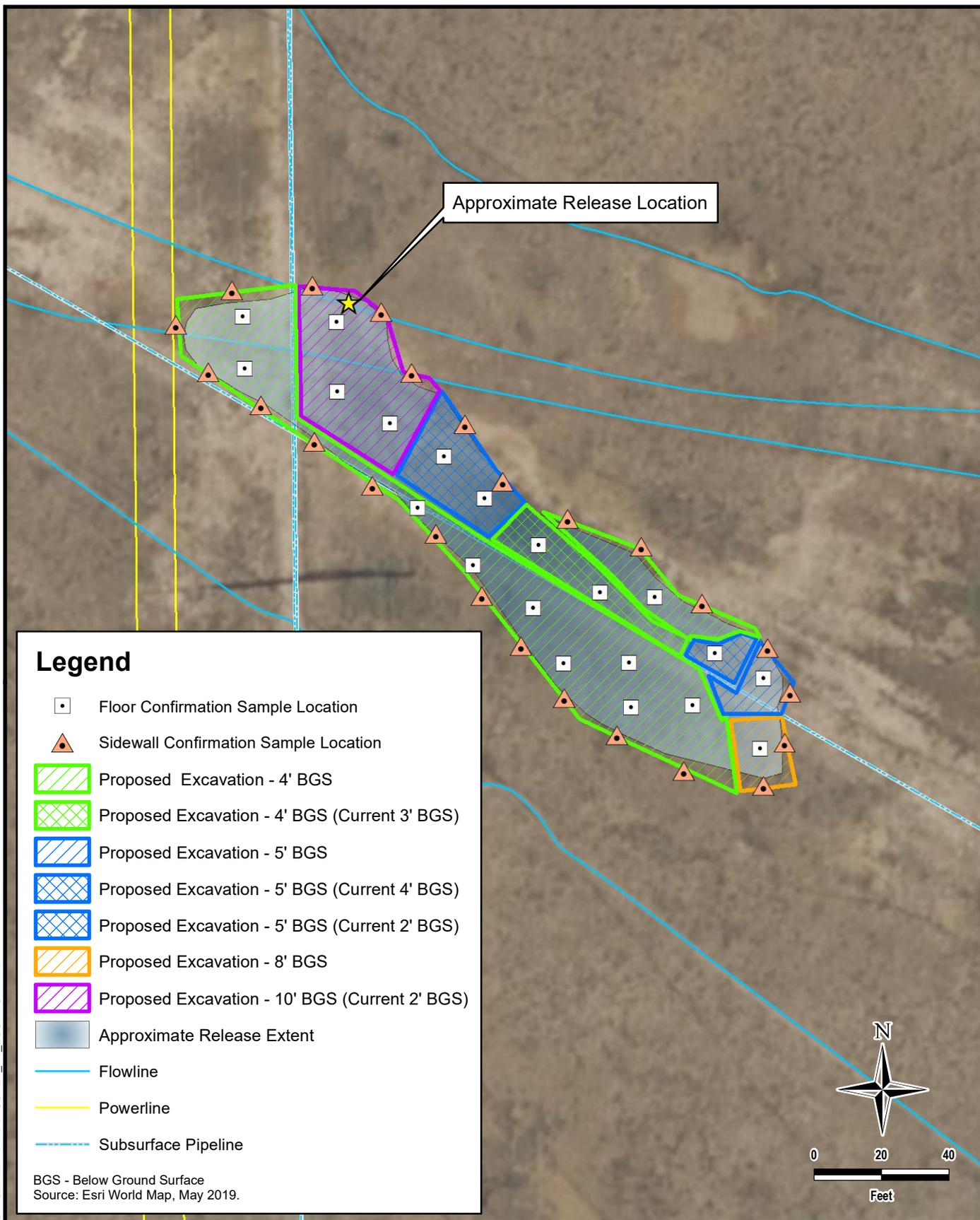
\\TTS134F51\SUP-GIS\ARCP\2\NERT\MXD\FIGURE1\_TS\_LOCATION.MXD

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(32.796085°, -103.485063°)  
LEA COUNTY, NEW MEXICO

**VGEU 02-20 WEST FLOWLINE RELEASE  
PROPOSED REMEDIATION EXTENT**

PROJECT NO.:	212C-MD-02377
DATE:	MAY 26, 2022
DESIGNED BY:	AAM
Figure No.	<b>6</b>



### Legend

- Floor Confirmation Sample Location
- ▲ Sidewall Confirmation Sample Location
- ▨ Proposed Excavation - 4' BGS
- ▩ Proposed Excavation - 4' BGS (Current 3' BGS)
- ▧ Proposed Excavation - 5' BGS
- ▦ Proposed Excavation - 5' BGS (Current 4' BGS)
- ▥ Proposed Excavation - 5' BGS (Current 2' BGS)
- ▤ Proposed Excavation - 8' BGS
- ▣ Proposed Excavation - 10' BGS (Current 2' BGS)
- Approximate Release Extent
- Flowline
- Powerline
- - - Subsurface Pipeline

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

\\TTS194F51\SUP-GIS\ARCP\RJ2\NERT\MXD\FIGURE1\_TS\_LOCATION.MXD

 <p>www.tetrattech.com                  901 West Wall Street, Suite 100                  Midland, Texas 79701                  Phone: (432) 682-4559                  Fax: (432) 682-3946</p>	CONOCOPHILLIPS NRM2017856312 (32.796085°, -103.485063°) LEA COUNTY, NEW MEXICO	PROJECT NO.: 212C-MD-02377 DATE: OCTOBER 05, 2021 DESIGNED BY: AAM
	<b>VGEU 02-20 WEST FLOWLINE RELEASE                  ALTERNATIVE CONFIRMATION SAMPLING PLAN</b>	
	Figure No. <b>7</b>	

# TABLES

TABLE 1  
SUMMARY OF ANALYTICAL RESULTS  
CONOCOPHILLIPS INITIAL SOIL ASSESSMENT  
VGEU 02-20 WEST FLOWLINE RELEASE  
LEA COUNTY, NM

Sample ID	Sample Date	Sampled Depth	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		Total TPH
					mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	C <sub>3</sub> - C <sub>10</sub>	mg/kg	Q	C <sub>10</sub> - C <sub>28</sub>	
SP #1	7/1/2020	2.0	<b>4,360</b>		< 0.050		0.051		0.158		< 0.150		0.323		< 10.0		1,560		517		<b>2,077</b>
SP #2	7/1/2020	2.0	<b>12,400</b>		< 0.050		0.073		0.147		0.302		0.523		11.0		7,450		1,700		<b>9,161</b>
SP #3	7/1/2020	2.0	<b>3,600</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		5,680		1,750		<b>7,430</b>
SP #4	7/1/2020	2.0	<b>10,400</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1,920		687		<b>2,607</b>
SP #5	7/1/2020	2.0	<b>18,300</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		2,140		786		<b>2,926</b>
SP #6	7/1/2020	2.0	<b>15,600</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		533		188		<b>721</b>
SP #7	7/1/2020	2.0	<b>15,600</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1,670		610		<b>2,280</b>
SP #8	7/1/2020	2.0	<b>17,200</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		3,780		1,190		<b>4,970</b>
SP #9	7/1/2020	2.0	<b>7,600</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		4,260		1,300		<b>5,560</b>
SP #10	7/1/2020	2.0	<b>15,000</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1,260		327		<b>1,587</b>
SP #11	7/1/2020	2.0	<b>14,800</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1,930		595		<b>2,525</b>
SP #12	7/1/2020	2.0	<b>6,130</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		452		247		<b>699</b>
SP #13	7/1/2020	2.0	<b>8,660</b>		< 0.050		< 0.050		0.067		0.168		< 0.300		< 10.0		2,300		651		<b>2,951</b>
SP #14	7/1/2020	2.0	<b>5,860</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		8,550		2,330		<b>10,880</b>
SP #15	7/1/2020	2.0	<b>8,660</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1,260		543		<b>1,803</b>
SP #16	7/1/2020	5.0	3,040		< 0.500		2.77		43.0		31.2		77.0		1,160		3,970		543		<b>5,673</b>
SP #17	7/1/2020	5.0	2,360		< 0.050		0.216		4.18		2.78		7.17		71.8		369		< 50.0		441
SP #18	7/1/2020	5.0	8,660		< 0.500		0.848		16.6		16.1		33.5		868		4,030		612		<b>5,510</b>
SP #19	7/1/2020	5.0	1,880		< 0.100		0.442		< 0.100		10.900		11.4		597		5,050		826		<b>6,473</b>
SP #20	7/1/2020	3.5	<b>6,160</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		19.3		1,840		605		<b>2,464</b>
SP #21	7/1/2020	3.5	<b>5,060</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		2,470		674		<b>3,144</b>
SP #22	7/1/2020	3.5	<b>2,200</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		15.8		3,270		803		<b>4,089</b>
SP #23	7/1/2020	3.5	<b>5,600</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		365		124		<b>489</b>
SP #24	7/1/2020	3.0	<b>3,840</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		10.8		2,100		467		<b>2,578</b>
SP #25	7/1/2020	3.0	<b>3,280</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1,050		390		<b>1,440</b>
SP #26	7/1/2020	2.5	<b>1,540</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		15.0		2,610		710		<b>3,335</b>
SP #27	7/1/2020	2.5	<b>1,920</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		14.8		3,140		857		<b>4,012</b>
SP #28	7/1/2020	2.5	<b>1,380</b>		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		3,180		936		<b>4,116</b>
SP #29	7/1/2020	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		< 10.0
SP #30	7/1/2020	-	64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		< 10.0
SP #31	7/1/2020	-	464		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		313		64		<b>377</b>
SP #32	7/1/2020	-	304		< 0.050		< 0.050		0.176		0.243		0.419		10.2		325		121		<b>456</b>

NOTES:

- ft. Feet
- bgs Below ground surface
- ppm Parts per million
- mg/kg Milligrams per kilogram
- NS Not sampled
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline range organics
- DRO Diesel range organics
- ORO Oil range organics
- 1 Method 4500.0
- 2 EPA Method 8260B
- 3 EPA Method 8015
- 4 EPA Method 8015D/GRO

**Bold and italicized values indicate exceedance of proposed Site RRALs and/or reclamation requirements above 4 feet bgs.**

TABLE 2  
 SUMMARY OF ANALYTICAL RESULTS  
 SOIL ASSESSMENT - hRM2017856312  
 CONOCOPHILLIPS  
 VGEU 02-20 FLOWLINE RELEASE - WEST  
 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>										
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO <sup>4</sup> C <sub>1</sub> - C <sub>10</sub>		DRO C <sub>10</sub> - C <sub>28</sub>		ORO C <sub>28</sub> - C <sub>50</sub>		Total TPH (GRO+DRO+ORO)
			ft. bgs	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	
BH-1	1/18/2021	4-5	3210	-	4430		< 0.00111		< 0.00557		0.0959		0.203		0.299		0.973		1540		1850		<b>3391</b>
		6-7	220	8.0	213		< 0.00104		< 0.00522		0.00149	J	0.00492	J	0.00641		1.27		273		210		484
		9-10	42	5.0	12.4	J	< 0.00105		< 0.00526		< 0.00263		< 0.00683		-		0.0298	J	5.75		6.71		12.5
		15	-	-	< 20.7		< 0.00107		< 0.00533		< 0.00266		0.00114	J	0.00114		< 0.103		9.02		8.98		18.0
BH-2	1/18/2021	2-3	-	-	<b>2450</b>		< 0.00110		< 0.00551		0.0562		0.142		0.198		1.73		930		1040		<b>1972</b>
		4-5	778	8.0	3620		< 0.00114		< 0.00568		0.0376		0.0948		0.132		2.97		1520		1420		<b>2943</b>
		6-7	554	5.0	499		< 0.00116		< 0.00581		< 0.00290		< 0.00755		-		0.0458	J	72.6		83.5		156
		9-10	78	3.7	41.8		0.00151		< 0.00589		< 0.00294		< 0.00765		0.00151		0.0292	J	7.87		8.95		16.8
		15	88	5.6	33.9		< 0.00114		< 0.00570		< 0.00285		< 0.00741		-		0.0334	J	9.16		9.25		18.4
BH-3	1/18/2021	2-3	-	-	<b>3550</b>		< 0.00113		< 0.00567		0.00639		0.0196		0.0260		2.22		784		649		<b>1435</b>
		4-5	-	-	5070		< 0.0459		< 0.229		0.0352	J	0.109	J	0.144		411		3460		1650		<b>5521</b>
		6-7	1250	-	6370		< 0.0475		< 0.237		0.0843	J	0.451		0.535		633		3210		1450		<b>5293</b>
		9-10	790	0.7	2940		< 0.0481		< 0.241		0.0697	J	0.284	J	0.354		327		2280		1220		<b>3827</b>
		15	346	0.6	648		< 0.00112		< 0.00562		0.00208	J	0.00824		0.0103		2.40		337		199		538
		20	338	1.6	811		< 0.00451		< 0.0225		0.00349	J	0.0128	J	0.0163		47.4		330		183		560
		25	-	-	45.6		< 0.00115		< 0.00575		< 0.00288		< 0.00748		-		0.0305	J	19.5	T8	18.5	T8	38.0
30	-	-	27.8		< 0.00112		< 0.00560		< 0.00280		< 0.00729		-		< 0.106		19.6		13.6		33.2		
BH-4	1/18/2021	0-1	77	3.0	< 21.2	J	< 0.00112		< 0.00560		0.000840	J	< 0.00728		0.000840		0.0528	BJ	3.81	J	9.72		13.6
		2-3	55	9.0	17.3	J	< 0.00107		< 0.00536		0.000912	J	0.00279	J	0.00370		0.100	BJ	3.38	J	5.71		9.19
		4-5	378	5.0	< 20.8		< 0.00108		< 0.00538		< 0.00269		< 0.00699		-		< 0.104		2.29	J	3.49	J	5.78
		6-7	79	-	< 20.6		< 0.00106		< 0.00531		< 0.00266		< 0.00691		-		< 0.103		3.73	J	12.5		16.2
		9-10	56	-	< 20.8		< 0.00108		< 0.00542		< 0.00271		< 0.00704		-		< 0.104		1410		1980		<b>3390</b>
BH-5	1/18/2021	0-1	79	5.0	13.9	J	< 0.00109		< 0.00547		< 0.00273		< 0.00711		-		< 0.105		8.23		19.7		27.9
		2-3	90	5.0	211		< 0.00109		< 0.00545		< 0.00272		< 0.00708		-		< 0.104		19.0		24.7		43.7
		4-5	44	5.0	48.5		< 0.00106		< 0.00531		< 0.00266		< 0.00691		-		< 0.103		10.3		12.4		22.7
		6-7	-	-	< 20.9		< 0.00109		< 0.00546		< 0.00273		< 0.00710		-		< 0.105		8.91		9.22		18.1
		9-10	-	-	< 20.9	J	< 0.00109		< 0.00544		< 0.00272		< 0.00707		-		< 0.104		4.72		5.18		9.90
BH-6	1/18/2021	0-1	99	3.0	12.5	J	0.000905	BJ	< 0.00603		0.00145	J	0.00317	J	0.00553		0.0715	BJ	12.4		29.7		42.2
		2-3	195	9.0	< 20.7		0.000643	BJ	< 0.00536		< 0.00268		< 0.00697		0.000643		< 0.104		3.47	J	7.13		10.6
		4-5	126	5.0	31.6		0.000927	BJ	< 0.00567		0.00259	J	0.00573	J	0.009247		0.0466	BJ	238		742		980
		6-7	-	-	< 21.5		0.000720	J	0.00738		0.00461		0.0270		0.0397		7.68		2.20	J	2.28	J	12.2
		9-10	-	-	< 20.9		< 0.00109		< 0.00544		< 0.00272		< 0.00707		-		0.0574	J	80.8		137		218
BH-7	1/18/2021	0-1	142	-	19.5	J	0.000780	BJ	< 0.00578		0.0475		0.0896		0.138		0.770		293		869		<b>1163</b>
		2-3	44	-	< 20.6		0.000576	BJ	< 0.00530		0.0353		0.0841		0.120		1.89		233		586		<b>821</b>
		4-5	66	-	< 21.3		< 0.00901		< 0.0451		0.205		0.497		0.702		401		3980		2090		<b>6471</b>
		6-7	59	-	< 21.4		< 0.00913		< 0.0457		0.0404		0.116		0.156		111		2320		1130		<b>3561</b>
		9-10	64	-	< 21.9		< 0.00119		< 0.00595		< 0.00297		< 0.00773		-		0.386		84.6		52.3		137
BH-8	1/18/2021	0-1	84	5.0	17.1	J	0.000746	BJ	< 0.00552		0.0278		0.0564		0.0849		0.985		314		820		<b>1135</b>
		2-3	42	5.0	14.9	J	0.000778	BJ	< 0.00519		0.00288		0.00875		0.0124		0.915		921		1330		<b>2252</b>
		4-5	41	5.0	< 20.4		0.000488	BJ	< 0.00519		< 0.00260		0.00164	J	0.00213		0.0843	BJ	320		612		932
		6-7	56	-	12.6	J	< 0.00107		< 0.00533		< 0.00267		< 0.00693		-		< 0.103		13.0		22.2		35.2
		9-10	32	-	214		< 0.00110		< 0.00548		< 0.00274		0.00195	J	0.00195		0.629		242		143		386
BH-9	1/18/2021	0-1	77	3.0	16.7	J	< 0.00112		< 0.00562		0.00227	J	0.0126		0.0149		0.338		1260		5100		<b>6360</b>
		1-1.5	55	3.0	< 20.6		0.000663	BJ	< 0.00530		0.00313		0.00822		0.0114		0.173	B	520		1150		<b>1670</b>

TABLE 2  
 SUMMARY OF ANALYTICAL RESULTS  
 SOIL ASSESSMENT - nRM2017856312  
 CONOCOPHILLIPS  
 VGEU 02-20 FLOWLINE RELEASE - WEST  
 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>						
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO <sup>4</sup> C <sub>1</sub> - C <sub>10</sub>		DRO		ORO		Total TPH (GRO+DRO+ORO)
			ft. bgs	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	
BH-10	5/14/2021	0-1	84.7	0.1	10.3	J	< 0.00113		< 0.00567		< 0.00283		0.00113	J	0.00113		< 0.107		14.7		30.9		45.6
		2-3	73.5	0.1	19.7	J	< 0.00108		< 0.00540		< 0.00270		< 0.00702		-		< 0.104		1.70	J	3.79	J	5.49
		3-4	72.7	0.1	13.6	J	< 0.00103		< 0.00515		< 0.00258		< 0.00670		-		0.0441	J	< 4.06		1.58	J	1.62
BH-11	5/14/2021	0-1	100	0.1	< 21.0		< 0.00110		< 0.00549		< 0.00274		< 0.00713		-		< 0.105		21.4		29.8		51.2
		3-4	70.5	0.1	< 20.4		< 0.00104		< 0.00521		< 0.00260		< 0.00677		-		< 0.102		14.0		35.6		49.6
		4-5	82.3	0.3	< 20.5		< 0.00105		< 0.00527		< 0.00263		0.00276	J	0.00276		0.119		188		438		626
		9-10	79.3	365.4	< 20.7		< 0.00857	J3	< 0.0428		0.0450	J3	0.703	J3	0.748		94.6		2170		1240		3505
BH-12	5/14/2021	0-1	196	0.4	104		< 0.00115		< 0.00575		< 0.00288		< 0.00748		-		< 0.107		3.91	J	16.6		20.5
		2-3	106	0.5	58.4		< 0.00106		< 0.00532		< 0.00266		< 0.00692		-		< 0.103		< 4.13		2.56	J	2.56
		4-5	78.7	0.3	17.0		< 0.00105		< 0.00523		< 0.00261		< 0.00680		-		< 0.102		< 4.09		0.908	J	0.908
		9-10	62.2	0.3	13.4	J	< 0.00109		< 0.00547		< 0.00273		< 0.00711		-		< 0.105		< 4.19		0.458	J	0.458
BH-13	5/14/2021	0-1	375	0.3	592		< 0.00116		< 0.00581		< 0.00290		< 0.00755		-		< 0.108		3.78	J	15.3		19.1
		2-3	377	0.3	397		< 0.00109		< 0.00545		< 0.00272		< 0.00708		-		< 0.104		< 4.18		1.92	J	1.92
		3-4	623	0.3	495		< 0.00107		< 0.00537		< 0.00269		< 0.00699		-		< 0.104		< 4.15		0.786	J	0.786
		4-5	1020	0.3	847		< 0.00113		< 0.00563		< 0.00282		< 0.00732		-		< 0.106		< 4.25		0.340	J	0.340
BH-14	5/14/2021	0-1	66.7	0.1	14.2	J	< 0.00111		< 0.00553		< 0.00276		< 0.00719		-		< 0.105		15.4		31.9		47.3
		2-3	100	0.1	19.0	J	< 0.00108		< 0.00538		< 0.00269		< 0.00700		-		< 0.104		2.67	J	4.95		7.62
		3-4	92.1	0.1	15.1	J	< 0.00106		< 0.00530		< 0.00265		< 0.00690		-		< 0.103		2.35	J	3.37	J	5.72
		9-10	73.2	0.1	< 20.6		< 0.00106		< 0.00531		< 0.00265		< 0.00690		-		< 0.103		< 4.12				-
BH-16	5/14/2021	0-1	92.3	0.7	107		< 0.00114		< 0.00571		< 0.00286		< 0.00742		-		< 0.107		4.54		15.7		20.2
		9-10	70.2	61.2	< 21.2		< 0.00112	J3	< 0.00559	J3	< 0.00280	J3	< 0.00727	J3	-		0.488		1960		2260		4220
AH-1	5/25/2021	0-1	86.7	-	< 21.4		0.000824	B	0.00219	J	0.00171	J	0.00418	J	0.00890		< 0.107		9.48		28.7		38.2
AH-2	5/25/2021	0-1	82.4	-	< 21.8		< 0.00118		< 0.00590		< 0.00295		< 0.00767		-		< 0.109		293		908		1201
AH-3	5/25/2021	0-1	94.0	-	< 22.8		0.000825	J	0.00333	J	0.00127	J	0.00615	J	-		< 0.114		3.45	J	8.82		12.3
AH-4	5/25/2021	0-1	96.0	-	< 21.6		< 0.00116		0.00163	J	< 0.00289		0.00198	J	0.00361		< 0.108		6.78		15.0		21.8
AH-5	5/25/2021	0-1	198	-	10.5	J	< 0.00115		0.00168	J	< 0.00287		0.00247	J	0.00415		< 0.107		13.2		33.2		46.4
AH-6	5/25/2021	0-1	209	-	< 23.2		< 0.00132		0.00225	J	< 0.00331		0.00278	J	0.00503		< 0.116		6.33		20.0		26.3
		1-2	250	-	< 22.1		< 0.00121		0.00191	J	< 0.00302		0.00276	J	0.00467		< 0.110		2.65	J	5.63	B	8.28
AH-7	5/25/2021	0-1	93.0	-	< 22.9		< 0.00129		0.00367	J	< 0.00322		0.00338	J	0.00705		< 0.114		4.99		8.02		13.0

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 Site RRALs and/or reclamation requirements above 4 feet bgs.**  
 Shaded rows indicate depth intervals proposed for excavation and remediation

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  
 T8 Sample(s) received past/too close to holding time expiration.

TABLE 3  
 SUMMARY OF ANALYTICAL RESULTS  
 ADDITIONAL DELINEATION - nRM2017856312  
 CONOCOPHILLIPS  
 VGEU 02-20 FLOWLINE RELEASE - WEST  
 LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride <sup>1</sup>		BTEX <sup>2</sup>										TPH <sup>3</sup>						
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH (GRO+DRO+EXT DRO)
					mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	
BH-17	2/18/2022	6-7	64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		8-9	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		158		120		278
		10-11	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		18.3		1,200		355		1,573
		12-13	< 16.0		< 0.050		< 0.050		0.121	GC-NC1	0.960	GC-NC1	1.08	GC-NC1	130		2,370		503		<b>3,003</b>
BH-17A	5/24/2022	14-15	32.0		< 0.050		< 0.050	GC-NC	< 0.050	GC-NC	< 0.150	GC-NC	< 0.300		200	QM-07	4,860	QM-07	1,060		<b>6,120</b>
		19-20	32.0		< 0.050		0.332		0.294		4.60		5.23		284		4,360		851		<b>5,495</b>
		24-25	16.0		< 0.050		0.136		0.121		2.69		2.95		145		2,800		557		<b>3,502</b>
		29-30	< 16.0		< 0.050		< 0.050		0.062		0.730		0.793		38.9		1,440		287		1,766
		34-35	< 16.0		< 0.050		0.108		0.177		1.24		1.53		41.4		1,400		287		1,728
		39-40	16.0		< 0.050		< 0.050		0.076		0.407		0.483		21.6		997		219		1,238
BH-18	2/18/2022	6-7	< 16.0		< 0.050		< 0.050		0.610	GC-NC1	3.06	GC-NC1	3.67	GC-NC1	201		2,140		414		<b>2,755</b>
		8-9	< 16.0		< 0.050		< 0.050		0.802	GC-NC1	3.90	GC-NC1	4.70	GC-NC1	223		2,190		431		<b>2,844</b>
		10-11	< 16.0		< 0.050		< 0.050		0.598	GC-NC1	2.68	GC-NC1	3.28	GC-NC1	182		2,100		418		<b>2,700</b>
		12-13	< 16.0		< 0.050		< 0.050		< 0.050		0.194		< 0.300	GC-NC1	23.8		340		45.6		409
		14-15	< 16.0		< 0.200		4.06		13.3		27.6		44.9		366		2,590		496		<b>3,452</b>
		19-20	< 16.0		< 0.500		8.44		20.9		37.9		<b>67.2</b>		728		3,580		638		<b>4,946</b>
BH-18A	5/24/2022	24-25	< 16.0		< 0.050		0.383		1.25		2.48		4.11		58.9		1,000		191		1,250
		29-30	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		54.2		< 10.0		54.2
		34-35	< 16.0		< 0.050		< 0.050		0.067		< 0.150		< 0.300		< 10.0		86.8		< 10.0		86.8
		39-40	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		101		13.1		114
		44-45	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		45.4		< 10.0		45.4
		49-50	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		16.0		< 10.0		16.0
BH-19	2/18/2022	6-7	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		9-10	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
BH-20	5/24/2022	0-1	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		53.7		< 10.0		53.7
		2-3	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		20.2		< 10.0		20.2
		4-5	64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		6-7	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		9-10	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
14-15	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-		

NOTES:

- ft. Feet
- bgs Below ground surface
- mg/kg Milligrams per kilogram
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline range organics
- DRO Diesel range organics
- 1 Method SM4500Cl-B
- 2 Method 8021B
- 3 Method 8015M

**Bold and italicized values indicate exceedance of proposed Remediation RRALs and/or Reclamation Requirements.**  
 Shaded rows indicate intervals proposed for excavation.

QUALIFIERS:

- GC-NC 8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND
- GC-NC1 8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS.

# **APPENDIX A C-141 Forms**

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

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

Incident ID	nRM2017856312
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	ConocoPhillips Company	OGRID	217817
Contact Name	Kelsy Waggaman	Contact Telephone	505-577-9071
Contact email	Kelsy.Waggaman@ConocoPhillips.com	Incident # (assigned by OCD)	
Contact mailing address	29 Vacuum Complex Lane, Lovington, NM 88260		

### Location of Release Source

Latitude 32.796111 Longitude - 103.487222  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	VGEU 02-20	Site Type	Off location
Date Release Discovered	6/16/20	API# (if applicable)	N/A

Unit Letter	Section	Township	Range	County
D	32	17S	35E	Lea

Surface Owner:  State  Federal  Tribal  Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls)	14.12	Volume Recovered (bbls)	5
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls)	56.48	Volume Recovered (bbls)	0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
<input type="checkbox"/> Condensate	Volume Released (bbls)		Volume Recovered (bbls)	
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)		Volume Recovered (Mcf)	
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)		Volume/Weight Recovered (provide units)	

Cause of Release

Flowline split

Incident ID	nRM2017856312
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?  The release exceeded 25 bbls of produced water.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Email notification was given to Bradford Billings and Jim Griswold, OCD by Kelsy Waggaman, ConocoPhillips Environmental Coordinator on 6/17/20.	

### Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:  	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
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: <u>Kelsy Waggaman</u>	Title: <u>Environmental Coordinator</u>
Signature: <u></u>	Date: <u>6/26/20</u>
email: <u>Kelsy.Waggaman@ConocoPhillips.com</u>	Telephone: <u>505-577-9071</u>
<b><u>OCD Only</u></b>  Received by: _____ Date: _____	

## L48 Spill Volume Estimate Form

Received by *OCD: 5/31/2022 1:14:59 PM*  
 Facility Name & Number: VSEU 02-29  
 Asset Area: Buckeye

Page 25 of 331

Release Discovery Date &amp; Time: 6/16/2020

Release Type: Oil Mixture

Provide any known details about the event: FL leak

## Spill Calculation - Subsurface Spill - Rectangle

Was the release on pad or off-pad?

On Pad - 10.5%; Off Pad - 15.12% soil spilled-fluid saturation factor

Has it rained at least a half inch in the last 24 hours?

Yes, On Pad - 8%; Off Pad - 13.57% soil spilled-fluid saturation factor; if No, use factors above.

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Depth (in.)	Soil Spilled-Fluid Saturation	Estimated volume of each area (bbl.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)
Rectangle A	57.0	5.0	6.00	15.12%	25.365	3.835	20.00%	0.767	3.068
27	90.0	15.0	6.00	15.12%	120.150	18.167	20.00%	3.633	14.533
Rectangle C	54.0	30.0	12.00	15.12%	288.360	43.600	20.00%	8.720	34.880
Rectangle D					0.000	0.000		0.000	0.000
Rectangle E					0.000	0.000		0.000	0.000
Rectangle F					0.000	0.000		0.000	0.000
Rectangle G					0.000	0.000		0.000	0.000
Rectangle H					0.000	0.000		0.000	0.000
Rectangle I					0.000	0.000		0.000	0.000
Rectangle J					0.000	0.000		0.000	0.000
Total Volume Release:						65.602		13.120	52.482

Released to Imaging: 9/23/2022 12:51:39 PM

Incident ID	nRM2017856312
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?	_____ 100 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" 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.

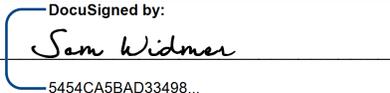
**Characterization Report Checklist:** *Each of the following items must be included in the report.*

- 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.

Incident ID	nRM2017856312
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: Sam Widmer Title: Principal Program Manager  
 Signature:  Date: May-30-2022  
 email: Sam.widmer@conocophillips.com Telephone: 281-206-5298

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Form C-141

State of New Mexico  
Oil Conservation Division

Page 5

Incident ID	nRM2017856312
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: Samuel Widmer Title: RM&R Program Manager  
 Signature: [Signature] Date: 10/07/21  
 email: Sam.Widmer@cop.com Telephone: 281-206-5298

**OCD Only**

Received by: Chad Hensley Date: 11/15/2021

Approved     Approved with Attached Conditions of Approval     Denied     Deferral Approved

Signature: [Signature] Date: 11/15/2021

Incident ID	nRM2017856312
District RP	
Facility ID	
Application ID	

## Remediation Plan

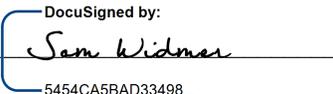
**Remediation Plan Checklist:** Each of the following items must be included in the plan.

- 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)

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Printed Name: Sam Widmer Title: Principal Program Manager  
 Signature:  Date: May-30-2022  
 email: Sam.widmer@conocophillips.com Telephone: 281-206-5298

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

- Approved     Approved with Attached Conditions of Approval     Denied     Deferral Approved

Signature:  Date: 09/23/2022

## **APPENDIX B**

### **Site Characterization Data**



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

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">L 14183 POD2</a>	L	LE		3	2	2	31	17S	35E	641304	3629691	300	227	105	122
<a href="#">L 14183 POD1</a>	L	LE		3	2	2	31	17S	35E	641266	3629667	341	229	106	123
<a href="#">L 14183 POD3</a>	L	LE		3	2	2	31	17S	35E	641213	3629731	388	227	104	123
<a href="#">L 03875 S2</a>	R	L	LE			2	31	17S	35E	641131	3629576*	496	120	95	25
<a href="#">L 03875 S4</a>	L	LE				2	31	17S	35E	641131	3629576*	496	120		
<a href="#">L 03874</a>	L	LE		3	1	2	31	17S	35E	640823	3629678*	780	229	90	139

Average Depth to Water: **100 feet**  
 Minimum Depth: **90 feet**  
 Maximum Depth: **106 feet**

Record Count: 6

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 641601.32

**Northing (Y):** 3629736

**Radius:** 800

\*UTM location was derived from PLSS - see Help

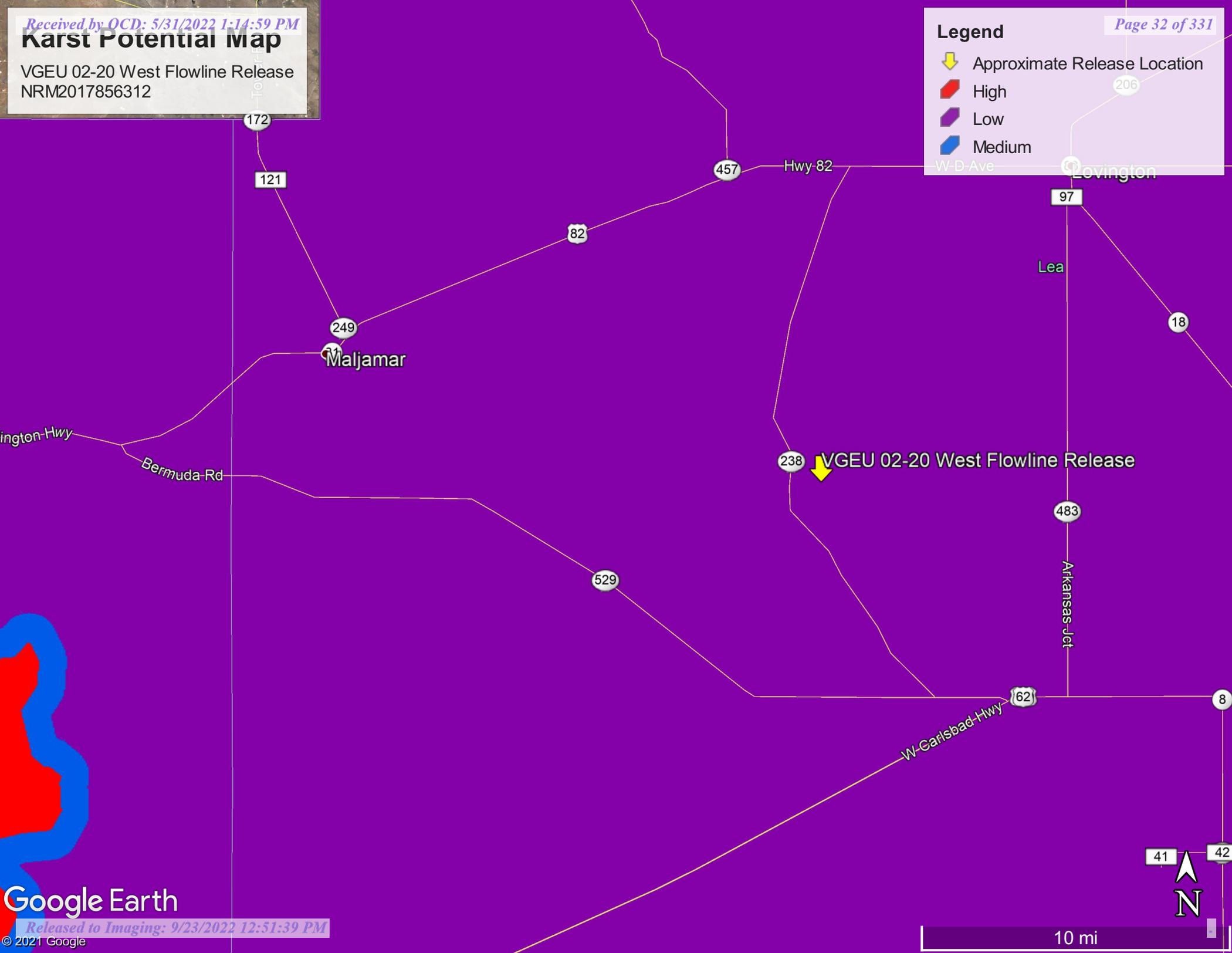
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

# Karst Potential Map

VGEU 02-20 West Flowline Release  
NRM2017856312

**Legend**

-  Approximate Release Location
-  High
-  Low
-  Medium



ington Hwy

Bermuda Rd

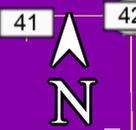
Maljamar

VGEU 02-20 West Flowline Release

Lea

Lovington

Google Earth



# VGEU 02-20 West Flowline Release



6/2/2021, 9:48:38 AM



Override 1

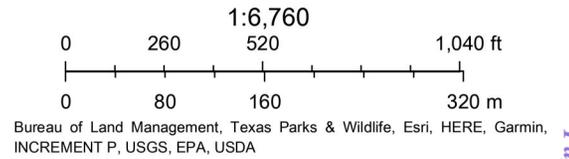


OSE Water-bodies

OSE Streams



PLJV Probable Playas



# **APPENDIX C**

## **Laboratory Analytical Data**



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

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July 07, 2020

JUSTIN WRIGHT

Conoco Phillips - Hobbs

P. O. BOX 325

Hobbs, NM 88240

RE: VGEU 02 - 20

Enclosed are the results of analyses for samples received by the laboratory on 07/01/20 15:28.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 1 - 2 (H001735-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.0	2.00	3.04	
<b>Toluene*</b>	<b>0.051</b>	0.050	07/06/2020	ND	1.93	96.3	2.00	3.01	
<b>Ethylbenzene*</b>	<b>0.158</b>	0.050	07/06/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/06/2020	ND	5.66	94.4	6.00	3.42	
<b>Total BTEX</b>	<b>0.323</b>	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>4360</b>	16.0	07/06/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	174	86.8	200	0.287	
<b>DRO &gt;C10-C28*</b>	<b>1560</b>	10.0	07/02/2020	ND	169	84.5	200	2.06	
<b>EXT DRO &gt;C28-C36</b>	<b>517</b>	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 87.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 123 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 2 - 2 (H001735-02)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.0	2.00	3.04	
<b>Toluene*</b>	<b>0.073</b>	0.050	07/06/2020	ND	1.93	96.3	2.00	3.01	
<b>Ethylbenzene*</b>	<b>0.147</b>	0.050	07/06/2020	ND	1.95	97.3	2.00	3.30	
<b>Total Xylenes*</b>	<b>0.302</b>	0.150	07/06/2020	ND	5.66	94.4	6.00	3.42	
<b>Total BTEX</b>	<b>0.523</b>	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>12400</b>	16.0	07/06/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>11.0</b>	10.0	07/02/2020	ND	174	86.8	200	0.287		
<b>DRO &gt;C10-C28*</b>	<b>7450</b>	10.0	07/02/2020	ND	169	84.5	200	2.06		
<b>EXT DRO &gt;C28-C36</b>	<b>1700</b>	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 97.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 410 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 3 - 2 (H001735-03)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/06/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/06/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/06/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3600</b>	16.0	07/06/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<50.0	50.0	07/02/2020	ND	174	86.8	200	0.287		
<b>DRO &gt;C10-C28*</b>	<b>5680</b>	50.0	07/02/2020	ND	169	84.5	200	2.06		
<b>EXT DRO &gt;C28-C36</b>	<b>1750</b>	50.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 85.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 301 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 4 - 2 (H001735-04)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>10400</b>	16.0	07/06/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	174	86.8	200	0.287	
<b>DRO &gt;C10-C28*</b>	<b>1920</b>	10.0	07/02/2020	ND	169	84.5	200	2.06	
<b>EXT DRO &gt;C28-C36</b>	<b>687</b>	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 83.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 153 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 5 - 2 (H001735-05)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.1 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>18300</b>	16.0	07/06/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	174	86.8	200	0.287		
<b>DRO &gt;C10-C28*</b>	<b>2140</b>	10.0	07/02/2020	ND	169	84.5	200	2.06		
<b>EXT DRO &gt;C28-C36</b>	<b>786</b>	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 78.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 169 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 6 - 2 (H001735-06)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.4 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>15600</b>	16.0	07/06/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	174	86.8	200	0.287	
<b>DRO &gt;C10-C28*</b>	<b>533</b>	10.0	07/02/2020	ND	169	84.5	200	2.06	
<b>EXT DRO &gt;C28-C36</b>	<b>188</b>	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 74.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 83.8 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 7 - 2 (H001735-07)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.6 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>15600</b>	16.0	07/06/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	174	86.8	200	0.287	
<b>DRO &gt;C10-C28*</b>	<b>1670</b>	10.0	07/02/2020	ND	169	84.5	200	2.06	
<b>EXT DRO &gt;C28-C36</b>	<b>610</b>	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 86.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 153 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 8 - 2 (H001735-08)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.9 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>17200</b>	16.0	07/06/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	174	86.8	200	0.287		
<b>DRO &gt;C10-C28*</b>	<b>3780</b>	10.0	07/02/2020	ND	169	84.5	200	2.06		
<b>EXT DRO &gt;C28-C36</b>	<b>1190</b>	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 88.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 251 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 9 - 2 (H001735-09)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/06/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/06/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/06/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.1 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>7600</b>	16.0	07/06/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	174	86.8	200	0.287		
<b>DRO &gt;C10-C28*</b>	<b>4260</b>	10.0	07/02/2020	ND	169	84.5	200	2.06		
<b>EXT DRO &gt;C28-C36</b>	<b>1300</b>	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 87.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 249 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 10 - 2 (H001735-10)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.1 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>15000</b>	16.0	07/06/2020	ND	416	104	400	0.00	QM-07

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	208	104	200	1.20	
<b>DRO &gt;C10-C28*</b>	<b>1260</b>	10.0	07/02/2020	ND	218	109	200	1.17	
<b>EXT DRO &gt;C28-C36</b>	<b>327</b>	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 89.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 137 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 11 - 2 (H001735-11)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.4 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>14800</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	208	104	200	1.20		
<b>DRO &gt;C10-C28*</b>	<b>1930</b>	10.0	07/02/2020	ND	218	109	200	1.17		
<b>EXT DRO &gt;C28-C36</b>	<b>595</b>	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 81.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 158 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 12 - 2 (H001735-12)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.3 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6130</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	208	104	200	1.20	
<b>DRO &gt;C10-C28*</b>	<b>452</b>	10.0	07/02/2020	ND	218	109	200	1.17	
<b>EXT DRO &gt;C28-C36</b>	<b>247</b>	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 83.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 101 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 13 - 2 (H001735-13)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01	
<b>Ethylbenzene*</b>	<b>0.067</b>	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
<b>Total Xylenes*</b>	<b>0.168</b>	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.5 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8660</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	208	104	200	1.20	
<b>DRO &gt;C10-C28*</b>	<b>2300</b>	10.0	07/02/2020	ND	218	109	200	1.17	
<b>EXT DRO &gt;C28-C36</b>	<b>651</b>	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 71.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 153 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 14 - 2 (H001735-14)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/06/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/06/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/06/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.9 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5860</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<50.0	50.0	07/02/2020	ND	208	104	200	1.20		
<b>DRO &gt;C10-C28*</b>	<b>8550</b>	50.0	07/02/2020	ND	218	109	200	1.17		
<b>EXT DRO &gt;C28-C36</b>	<b>2330</b>	50.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 86.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 401 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 15 - 2 (H001735-15)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8660</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	208	104	200	1.20	
<b>DRO &gt;C10-C28*</b>	<b>1260</b>	10.0	07/02/2020	ND	218	109	200	1.17	
<b>EXT DRO &gt;C28-C36</b>	<b>543</b>	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 79.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 130 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 16 - 5 (H001735-16)**

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	07/03/2020	ND	1.92	96.0	2.00	3.04	
<b>Toluene*</b>	<b>2.77</b>	0.500	07/03/2020	ND	1.93	96.3	2.00	3.01	
<b>Ethylbenzene*</b>	<b>43.0</b>	0.500	07/03/2020	ND	1.95	97.3	2.00	3.30	
<b>Total Xylenes*</b>	<b>31.2</b>	1.50	07/03/2020	ND	5.66	94.4	6.00	3.42	
<b>Total BTEX</b>	<b>77.0</b>	3.00	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 135 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3040</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>1160</b>	100	07/02/2020	ND	208	104	200	1.20	
<b>DRO &gt;C10-C28*</b>	<b>3970</b>	100	07/02/2020	ND	218	109	200	1.17	
<b>EXT DRO &gt;C28-C36</b>	<b>543</b>	100	07/02/2020	ND					

Surrogate: 1-Chlorooctane 167 % 44.3-144

Surrogate: 1-Chlorooctadecane 203 % 42.2-156

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 17 - 5 (H001735-17)**

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.0	2.00	3.04	
<b>Toluene*</b>	<b>0.216</b>	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01	
<b>Ethylbenzene*</b>	<b>4.18</b>	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
<b>Total Xylenes*</b>	<b>2.78</b>	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42	
<b>Total BTEX</b>	<b>7.17</b>	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 207 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2360</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>71.8</b>	50.0	07/02/2020	ND	208	104	200	1.20	
<b>DRO &gt;C10-C28*</b>	<b>369</b>	50.0	07/02/2020	ND	218	109	200	1.17	
EXT DRO >C28-C36	<50.0	50.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 101 % 44.3-144

Surrogate: 1-Chlorooctadecane 108 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 18 - 5 (H001735-18)**

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	07/03/2020	ND	1.92	96.0	2.00	3.04	
<b>Toluene*</b>	<b>0.848</b>	0.500	07/03/2020	ND	1.93	96.3	2.00	3.01	
<b>Ethylbenzene*</b>	<b>16.6</b>	0.500	07/03/2020	ND	1.95	97.3	2.00	3.30	
<b>Total Xylenes*</b>	<b>16.1</b>	1.50	07/03/2020	ND	5.66	94.4	6.00	3.42	
<b>Total BTEX</b>	<b>33.5</b>	3.00	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 132 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8660</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>868</b>	50.0	07/02/2020	ND	208	104	200	1.20	
<b>DRO &gt;C10-C28*</b>	<b>4030</b>	50.0	07/02/2020	ND	218	109	200	1.17	
<b>EXT DRO &gt;C28-C36</b>	<b>612</b>	50.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 157 % 44.3-144

Surrogate: 1-Chlorooctadecane 174 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 19 - 5 (H001735-19)**

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	07/06/2020	ND	1.92	96.0	2.00	3.04	
<b>Toluene*</b>	<b>0.442</b>	0.100	07/06/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.100	0.100	07/06/2020	ND	1.95	97.3	2.00	3.30	
<b>Total Xylenes*</b>	<b>10.9</b>	0.300	07/06/2020	ND	5.66	94.4	6.00	3.42	
<b>Total BTEX</b>	<b>11.4</b>	0.600	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 137 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1880</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>597</b>	50.0	07/02/2020	ND	208	104	200	1.20	
<b>DRO &gt;C10-C28*</b>	<b>5050</b>	50.0	07/02/2020	ND	218	109	200	1.17	
<b>EXT DRO &gt;C28-C36</b>	<b>826</b>	50.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 138 % 44.3-144

Surrogate: 1-Chlorooctadecane 223 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 20 - 3.5 (H001735-20)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.0	2.00	3.04	
Toluene*	<0.050	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	<0.050	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	<0.150	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	<0.300	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6160</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>19.3</b>	10.0	07/06/2020	ND	207	103	200	2.16	QM-07
<b>DRO &gt;C10-C28*</b>	<b>1840</b>	10.0	07/06/2020	ND	224	112	200	0.916	
<b>EXT DRO &gt;C28-C36</b>	<b>605</b>	10.0	07/06/2020	ND					

Surrogate: 1-Chlorooctane 75.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 122 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 21 - 3.5 (H001735-21)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2020	ND	1.92	96.1	2.00	1.64	
Toluene*	<0.050	0.050	07/02/2020	ND	1.93	96.3	2.00	2.00	
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.96	98.0	2.00	2.04	
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.71	95.1	6.00	2.01	
Total BTEX	<0.300	0.300	07/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.2 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5060</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	207	103	200	2.16	
<b>DRO &gt;C10-C28*</b>	<b>2420</b>	10.0	07/06/2020	ND	224	112	200	0.916	
<b>EXT DRO &gt;C28-C36</b>	<b>674</b>	10.0	07/06/2020	ND					

Surrogate: 1-Chlorooctane 74.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 142 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 22 - 3.5 (H001735-22)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2020	ND	1.92	96.1	2.00	1.64	
Toluene*	<0.050	0.050	07/02/2020	ND	1.93	96.3	2.00	2.00	
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.96	98.0	2.00	2.04	
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.71	95.1	6.00	2.01	
Total BTEX	<0.300	0.300	07/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2200</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>15.8</b>	10.0	07/03/2020	ND	207	103	200	2.16		
<b>DRO &gt;C10-C28*</b>	<b>3270</b>	10.0	07/03/2020	ND	224	112	200	0.916		
<b>EXT DRO &gt;C28-C36</b>	<b>803</b>	10.0	07/03/2020	ND						

Surrogate: 1-Chlorooctane 91.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 192 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 23 - 3.5 (H001735-23)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2020	ND	1.92	96.1	2.00	1.64	
Toluene*	<0.050	0.050	07/02/2020	ND	1.93	96.3	2.00	2.00	
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.96	98.0	2.00	2.04	
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.71	95.1	6.00	2.01	
Total BTEX	<0.300	0.300	07/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.9 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5600</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/03/2020	ND	207	103	200	2.16	
<b>DRO &gt;C10-C28*</b>	<b>365</b>	10.0	07/03/2020	ND	224	112	200	0.916	
<b>EXT DRO &gt;C28-C36</b>	<b>124</b>	10.0	07/03/2020	ND					

Surrogate: 1-Chlorooctane 92.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 107 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 24 - 3 (H001735-24)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2020	ND	1.92	96.1	2.00	1.64	
Toluene*	<0.050	0.050	07/03/2020	ND	1.93	96.3	2.00	2.00	
Ethylbenzene*	<0.050	0.050	07/03/2020	ND	1.96	98.0	2.00	2.04	
Total Xylenes*	<0.150	0.150	07/03/2020	ND	5.71	95.1	6.00	2.01	
Total BTEX	<0.300	0.300	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3840</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>10.8</b>	10.0	07/03/2020	ND	207	103	200	2.16		
<b>DRO &gt;C10-C28*</b>	<b>2100</b>	10.0	07/03/2020	ND	224	112	200	0.916		
<b>EXT DRO &gt;C28-C36</b>	<b>467</b>	10.0	07/03/2020	ND						

Surrogate: 1-Chlorooctane 90.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 164 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 25 - 3 (H001735-25)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.1	2.00	0.415	
Toluene*	<0.050	0.050	07/06/2020	ND	1.93	96.5	2.00	0.694	
Ethylbenzene*	<0.050	0.050	07/06/2020	ND	1.95	97.5	2.00	0.476	
Total Xylenes*	<0.150	0.150	07/06/2020	ND	5.63	93.9	6.00	0.648	
Total BTEX	<0.300	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3280</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	207	103	200	2.16	
<b>DRO &gt;C10-C28*</b>	<b>1050</b>	10.0	07/06/2020	ND	224	112	200	0.916	
<b>EXT DRO &gt;C28-C36</b>	<b>390</b>	10.0	07/06/2020	ND					

Surrogate: 1-Chlorooctane 72.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 105 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 26 - 2.5 (H001735-26)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.1	2.00	0.415	
Toluene*	<0.050	0.050	07/06/2020	ND	1.93	96.5	2.00	0.694	
Ethylbenzene*	<0.050	0.050	07/06/2020	ND	1.95	97.5	2.00	0.476	
Total Xylenes*	<0.150	0.150	07/06/2020	ND	5.63	93.9	6.00	0.648	
Total BTEX	<0.300	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1540</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>15.0</b>	10.0	07/03/2020	ND	207	103	200	2.16		
<b>DRO &gt;C10-C28*</b>	<b>2610</b>	10.0	07/03/2020	ND	224	112	200	0.916		
<b>EXT DRO &gt;C28-C36</b>	<b>710</b>	10.0	07/03/2020	ND						

Surrogate: 1-Chlorooctane 89.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 172 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 27 - 2.5 (H001735-27)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.1	2.00	0.415	
Toluene*	<0.050	0.050	07/06/2020	ND	1.93	96.5	2.00	0.694	
Ethylbenzene*	<0.050	0.050	07/06/2020	ND	1.95	97.5	2.00	0.476	
Total Xylenes*	<0.150	0.150	07/06/2020	ND	5.63	93.9	6.00	0.648	
Total BTEX	<0.300	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1920</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>14.8</b>	10.0	07/03/2020	ND	207	103	200	2.16		
<b>DRO &gt;C10-C28*</b>	<b>3140</b>	10.0	07/03/2020	ND	224	112	200	0.916		
<b>EXT DRO &gt;C28-C36</b>	<b>857</b>	10.0	07/03/2020	ND						

Surrogate: 1-Chlorooctane 93.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 195 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 28 - 2.5 (H001735-28)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.1	2.00	0.415	
Toluene*	<0.050	0.050	07/06/2020	ND	1.93	96.5	2.00	0.694	
Ethylbenzene*	<0.050	0.050	07/06/2020	ND	1.95	97.5	2.00	0.476	
Total Xylenes*	<0.150	0.150	07/06/2020	ND	5.63	93.9	6.00	0.648	
Total BTEX	<0.300	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1380</b>	16.0	07/06/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	181	90.6	200	0.0215		
<b>DRO &gt;C10-C28*</b>	<b>3180</b>	10.0	07/06/2020	ND	193	96.6	200	0.138	QM-07	
<b>EXT DRO &gt;C28-C36</b>	<b>936</b>	10.0	07/06/2020	ND						

Surrogate: 1-Chlorooctane 85.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 185 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 29 (H001735-29)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.1	2.00	0.415	
Toluene*	<0.050	0.050	07/06/2020	ND	1.93	96.5	2.00	0.694	
Ethylbenzene*	<0.050	0.050	07/06/2020	ND	1.95	97.5	2.00	0.476	
Total Xylenes*	<0.150	0.150	07/06/2020	ND	5.63	93.9	6.00	0.648	
Total BTEX	<0.300	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	207	103	200	2.16	
DRO >C10-C28*	<10.0	10.0	07/06/2020	ND	224	112	200	0.916	
EXT DRO >C28-C36	<10.0	10.0	07/06/2020	ND					

Surrogate: 1-Chlorooctane 77.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.4 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 30 (H001735-30)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.1	2.00	0.415	
Toluene*	<0.050	0.050	07/06/2020	ND	1.93	96.5	2.00	0.694	
Ethylbenzene*	<0.050	0.050	07/06/2020	ND	1.95	97.5	2.00	0.476	
Total Xylenes*	<0.150	0.150	07/06/2020	ND	5.63	93.9	6.00	0.648	
Total BTEX	<0.300	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	207	103	200	2.16	
DRO >C10-C28*	<10.0	10.0	07/06/2020	ND	224	112	200	0.916	
EXT DRO >C28-C36	<10.0	10.0	07/06/2020	ND					

Surrogate: 1-Chlorooctane 70.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 70.8 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 31 (H001735-31)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.1	2.00	0.415	
Toluene*	<0.050	0.050	07/06/2020	ND	1.93	96.5	2.00	0.694	
Ethylbenzene*	<0.050	0.050	07/06/2020	ND	1.95	97.5	2.00	0.476	
Total Xylenes*	<0.150	0.150	07/06/2020	ND	5.63	93.9	6.00	0.648	
Total BTEX	<0.300	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.0 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>464</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/03/2020	ND	207	103	200	2.16	
<b>DRO &gt;C10-C28*</b>	<b>313</b>	10.0	07/03/2020	ND	224	112	200	0.916	
<b>EXT DRO &gt;C28-C36</b>	<b>63.8</b>	10.0	07/03/2020	ND					

Surrogate: 1-Chlorooctane 83.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 95.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Conoco Phillips - Hobbs  
 JUSTIN WRIGHT  
 P. O. BOX 325  
 Hobbs NM, 88240  
 Fax To: (575) 297-1477

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	VGEU 02 - 20	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SP 32 (H001735-32)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/06/2020	ND	1.92	96.1	2.00	0.415	
Toluene*	<0.050	0.050	07/06/2020	ND	1.93	96.5	2.00	0.694	
<b>Ethylbenzene*</b>	<b>0.176</b>	0.050	07/06/2020	ND	1.95	97.5	2.00	0.476	
<b>Total Xylenes*</b>	<b>0.243</b>	0.150	07/06/2020	ND	5.63	93.9	6.00	0.648	
<b>Total BTEX</b>	<b>0.419</b>	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>304</b>	16.0	07/06/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>10.2</b>	10.0	07/03/2020	ND	207	103	200	2.16	
<b>DRO &gt;C10-C28*</b>	<b>325</b>	10.0	07/03/2020	ND	224	112	200	0.916	
<b>EXT DRO &gt;C28-C36</b>	<b>121</b>	10.0	07/03/2020	ND					

Surrogate: 1-Chlorooctane 72.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 82.1 % 42.2-156

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240  
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: ConocoPhillips Project Manager: Justin Wright Address: Hobbs St NM Zip ## Phone #: 575-631-9092 Fax #: Project Owner: COPC Project #: Project Name: Project Location: VGEU 02-20 Dea County, NM Sampler Name: Justin Wright		P.O. #: <b>BILL TO</b> Company: ConocoPhillips Attn: Address: City: State: Zip: Phone #: Fax #:	
Lab I.D. Sample I.D. H001735		ANALYSIS REQUEST	
FOR LAB USE ONLY		MATRIX PRESERV. SAMPLING	
(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER:		Chlorides TPH BTEX	
1 SP1-2 2 SPA-2 3 SP3-2 4 SP4-2 5 SP5-2 6 SP6-2 7 SP7-2 8 SP8-2 9 SP9-2 10 SP10-2	G G G G G G G G G G #	DATE 7-1-20 7-1-20 7-1-20 7-1-20 7-1-20 7-1-20 7-1-20 7-1-20 7-1-20 7-1-20 7-1-20	TIME 13:00 13:06 13:02 13:03 13:04 13:05 13:06 13:07 13:08 13:09
Relinquished By: <i>Keene</i> Date: 7-1-20 Time: 3:28pm Received By: <i>Celej Keene</i> Date: Time:		Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Thermometer ID: <i>497-113</i> Correction Factor: <i>+0.4°C</i> Bacteria (only) Sample Condition: Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No Observed Temp. °C: <i>28.9</i> Corrected Temp. °C:	
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FORM-006 R 3.0

† Cardinal cannot accept verbal changes. Please email changes to celej.keene@cardinallabsnm.com



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: ConocoPhillips		P.O. #:		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>					
Project Manager: Justin Wright		Company: ConocoPhillips									
Address:		Attn:									
City: Hobbs		St NM		Zip #:							
Phone #: 575-631-9092		Fax #:		Address:							
Project #:		Project Owner: COPC		City:							
Project Name: VGETU 01-20		State:		Zip:							
Project Location: Lea County, NM.		Phone #:									
Sampler Name: Justin Wright		Fax #:									
FOR LAB USE ONLY											
Lab I.D. Sample I.D.											
HDD01735											
11 SP11-2		(G)RAB OR (C)OMP.									
12 SP12-2		# CONTAINERS									
13 SP13-2		GROUNDWATER									
14 SP14-2		WASTEWATER									
15 SP15-2		SOIL									
16 SP16-5		OIL									
17 SP17-5		SLUDGE									
18 SP18-5		OTHER:									
19 SP19-5		ACID/BASE:									
20 SP20-3.5		ICE / COOL									
		OTHER:									
		DATE		TIME							
		7-1-20		13:20		Chlorides					
		7-1-20		13:21		TPH					
		7-1-20		13:22		BTEX					
		7-1-20		13:23							
		7-1-20		13:24							
		7-1-20		13:25							
		7-1-20		13:26							
		7-1-20		13:27							
		7-1-20		13:28							
		7-1-20		13:29							

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Relinquished By: *Justin Wright* Date: 7-1-20 Time: 3:28pm Received By: *Keene* Date: 7-1-20 Time: 11:33am

Delivered By: (Circle One) Observed Temp. °C: 28.9 Sample Condition:  Intact  Cool  Yes  No

Sampler - UPS - Bus - Other: Corrected Temp. °C:  Yes  No

Turnaround Time: 113 Standard  Bacteria (only)  Sample Condition  Cool  Intact  Observed Temp. °C  Yes  No  Corrected Temp. °C  Yes  No

Thermometer ID: 497 Correction Factor + 0.4 °C

Verbal Result:  Yes  No Add'l Phone #: All Results are emailed. Please provide Email address: REMARKS:

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: ConocoPhillips  
 Project Manager: Justin Wright  
 Address: Hobbs St NM Zip ##  
 City: Hobbs Phone #: 575-631-9092 Fax #: Project Owner: COPC  
 Project #: Project Name: VGETL 02-20 State: Zip:  
 Project Location: Dea County, NM Phone #: Fax #:  
 Sampler Name: Justin Wright

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	Chlorides	TPH	BTEX
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
HD01735	SP 21 - 3.5	G							7-1-20	13:10	✓	✓	✓	
	SP 22 - 3.5	G							7-1-20	13:11	✓	✓	✓	
	SP 23 - 3.5	G							7-1-20	13:12	✓	✓	✓	
	SP 24 - 3	G							7-1-20	13:13	✓	✓	✓	
	SP 25 - 3	G							7-1-20	13:14	✓	✓	✓	
	SP 26 - 2.5	G							7-1-20	13:15	✓	✓	✓	
	SP 27 - 2.5	G							7-1-20	13:16	✓	✓	✓	
	SP 28 - 2.5	G							7-1-20	13:17	✓	✓	✓	
	SP 29	G							7-1-20	13:18	✓	✓	✓	
	SP 30	G							7-1-20	13:19	✓	✓	✓	

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Relinquished By: [Signature]  
 Date: 7-1-20  
 Time: 8:28 pm  
 Received By: [Signature]  
 Date: 7-1-20  
 Time: [Blank]  
 Turnaround Time: Standard [checked] Rush [ ]  
 Thermometer ID #97-113  
 Correction Factor + 0.4 °C  
 Bacteria (only) Sample Condition Cool Intact [checked] Yes [ ] No [ ]  
 Observed Temp. °C [Blank] Corrected Temp. °C [Blank]

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

**BILL TO**

**ANALYSIS REQUEST**

Company Name: ConocoPhillips	P.O. #:	
Project Manager: Justin Wright	Company: ConocoPhillips	
Address:	Attn:	
City: Hobbs	Address:	
Phone #: 575-631-9092	City:	
Project #: Project Owner: COPC	State: Zip:	
Project Name:	Phone #:	
Project Location: V-GEU 02-20 dea COUNTY, NM	Fax #:	
Sampler Name: Justin Wright		

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	Chlorides	TPH	BTEX
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:					
HD01735	SP 31	G									7-1-20	13:30	✓	✓	✓
	SP 32	G									7-1-20	13:31	✓	✓	✓
		G									7-1-20		✓	✓	✓
		G									7-1-20		✓	✓	✓
		G									7-1-20		✓	✓	✓
		G									7-1-20		✓	✓	✓
		G									7-1-20		✓	✓	✓
		G									7-1-20		✓	✓	✓
		G									7-1-20		✓	✓	✓

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Relinquished By: <i>[Signature]</i>	Date: 7-1-20	Time: 5:28 PM	Received By: <i>[Signature]</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:
Relinquished By: <i>[Signature]</i>	Date: 7-1-20	Time: 5:28 PM	Received By: <i>[Signature]</i>	All Results are emailed. Please provide Email address:

Delivered By: (Circle One)	Observed Temp. °C	28.9	Sample Condition	Checked By: <i>[Signature]</i>	Turnaround Time:	Standard	<input checked="" type="checkbox"/>	Bacteria (only)	Sample Condition
Sampler - UPS - Bus - Other:	Corrected Temp. °C		Cool <input type="checkbox"/> Intact <input checked="" type="checkbox"/>	Initials: <i>[Signature]</i>	Thermometer ID: <i>113</i>	Rush	<input type="checkbox"/>	Cool <input type="checkbox"/> Intact <input checked="" type="checkbox"/>	Observed Temp. °C
			No <input type="checkbox"/> Yes <input checked="" type="checkbox"/>		Correction Factor + 0.4 °C		<input type="checkbox"/>	No <input type="checkbox"/> Yes <input checked="" type="checkbox"/>	Corrected Temp. °C



# ANALYTICAL REPORT

January 31, 2021

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

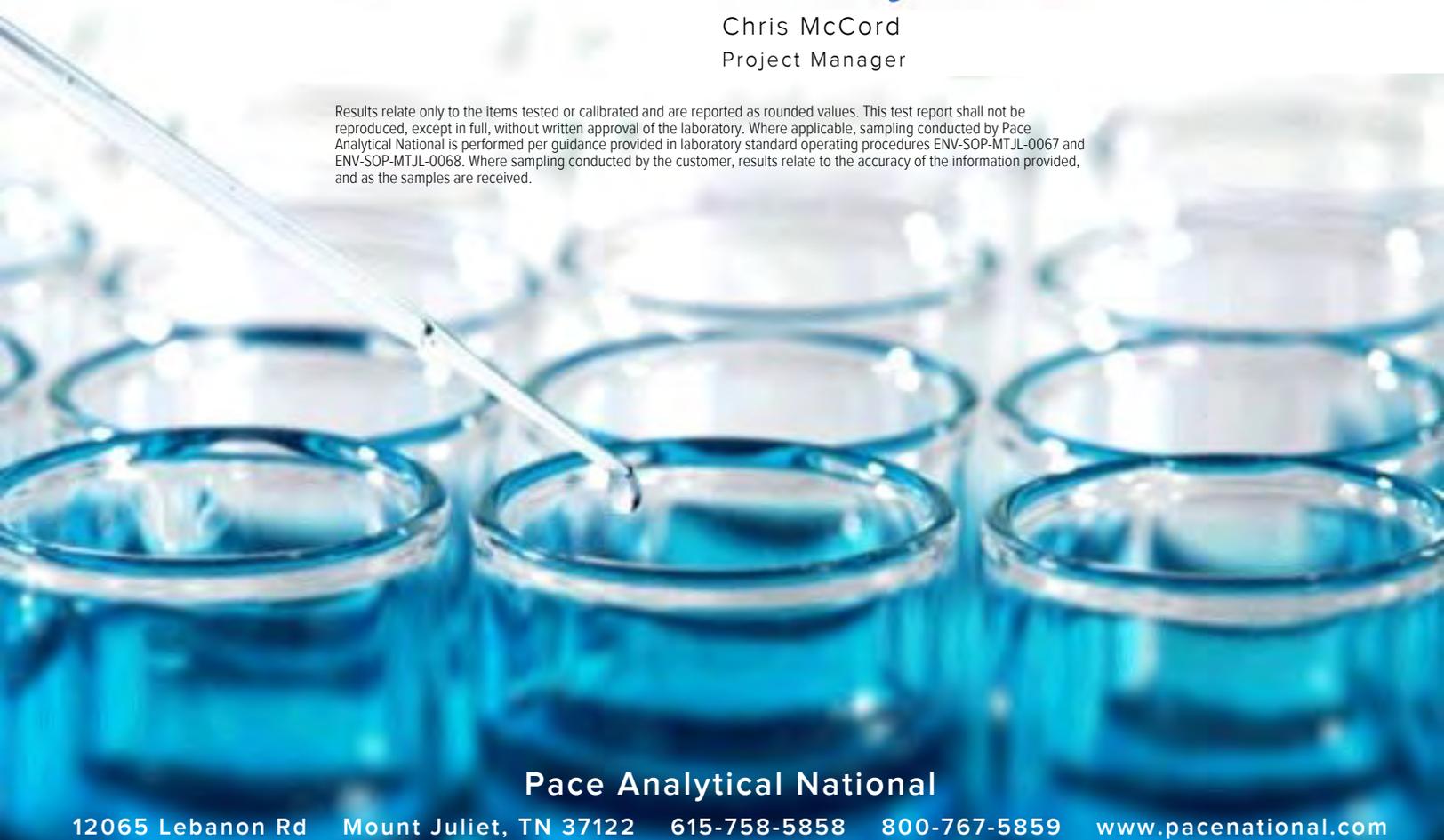
## ConocoPhillips - Tetra Tech

Sample Delivery Group: L1308926  
 Samples Received: 01/21/2021  
 Project Number: 212-MD-02305  
 Description: VGEU 02-20 West  
 Site: LEA COUNTY, NM  
 Report To: Christian Lull  
 901 West Wall  
 Suite 100  
 Midland, TX 79701

Entire Report Reviewed By:

Chris McCord  
Project Manager

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



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 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>4</b>
<b>Cn: Case Narrative</b>	<b>11</b>
<b>Sr: Sample Results</b>	<b>12</b>
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BH-1 (6-7') L1308926-02	13
BH-1 (9-10') L1308926-03	14
BH-2 (2-3') L1308926-04	15
BH-2 (4-5') L1308926-05	16
BH-2 (6-7') L1308926-06	17
BH-2 (9-10') L1308926-07	18
BH-2 (15') L1308926-08	19
BH-3 (2-3') L1308926-09	20
BH-3 (4-5') L1308926-10	21
BH-3 (6-7') L1308926-11	22
BH-3 (9-10') L1308926-12	23
BH-3 (15') L1308926-13	24
BH-3 (20') L1308926-14	25
BH-4 (0-1') L1308926-15	26
BH-4 (2-3') L1308926-16	27
BH-4 (4-5') L1308926-17	28
BH-4 (6-7') L1308926-18	29
BH-5 (0-1') L1308926-19	30
BH-5 (2-3') L1308926-20	31
BH-5 (4-5') L1308926-21	32
BH-6 (0-1') L1308926-22	33
BH-6 (2-3') L1308926-23	34
BH-6 (4-5') L1308926-24	35
BH-7 (0-1') L1308926-25	36
BH-7 (2-3') L1308926-26	37
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BH-8 (0-1') L1308926-28	39
BH-8 (2-3') L1308926-29	40
BH-8 (4-5') L1308926-30	41
BH-9 (0-1') L1308926-31	42
BH-9 (1-1.5') L1308926-32	43
BH-4 (3-4') L1308926-33	44
<b>Qc: Quality Control Summary</b>	<b>45</b>
<b>Total Solids by Method 2540 G-2011</b>	<b>45</b>

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

Wet Chemistry by Method 300.0	49	<sup>1</sup> Cp
Volatile Organic Compounds (GC) by Method 8015D/GRO	54	
Volatile Organic Compounds (GC/MS) by Method 8260B	59	<sup>2</sup> Tc
Semi-Volatile Organic Compounds (GC) by Method 8015	62	
GI: Glossary of Terms	66	<sup>3</sup> Ss
AI: Accreditations & Locations	67	<sup>4</sup> Cn
Sc: Sample Chain of Custody	68	<sup>5</sup> Sr
		<sup>6</sup> Qc
		<sup>7</sup> Gl
		<sup>8</sup> Al
		<sup>9</sup> Sc

BH-1 (4-5') L1308926-01 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 09:30  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611241	1	01/27/21 10:30	01/27/21 10:40	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	10	01/25/21 15:50	01/25/21 17:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612206	1.01	01/22/21 14:56	01/28/21 02:06	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 14:56	01/27/21 09:02	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612505	5.63	01/27/21 14:18	01/27/21 22:49	TJD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612505	56.3	01/27/21 14:18	01/28/21 00:27	TJD	Mt. Juliet, TN



BH-1 (6-7') L1308926-02 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 09:35  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611241	1	01/27/21 10:30	01/27/21 10:40	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 17:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612206	1	01/22/21 14:56	01/28/21 08:32	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 14:56	01/27/21 09:21	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612296	1	01/27/21 15:39	01/28/21 07:54	CAG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612296	2	01/27/21 15:39	01/28/21 13:01	CAG	Mt. Juliet, TN

BH-1 (9-10') L1308926-03 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 09:40  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611241	1	01/27/21 10:30	01/27/21 10:40	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 17:34	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612206	1	01/22/21 14:56	01/28/21 08:54	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1.01	01/22/21 14:56	01/27/21 09:40	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612296	1	01/27/21 15:39	01/28/21 07:15	CAG	Mt. Juliet, TN

BH-2 (2-3') L1308926-04 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 09:50  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611241	1	01/27/21 10:30	01/27/21 10:40	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	10	01/25/21 15:50	01/25/21 17:43	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612206	1	01/22/21 14:56	01/28/21 09:16	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 14:56	01/27/21 09:59	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612296	20	01/27/21 15:39	01/28/21 08:30	CAG	Mt. Juliet, TN

BH-2 (4-5') L1308926-05 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 09:55  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611241	1	01/27/21 10:30	01/27/21 10:40	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	10	01/25/21 15:50	01/25/21 17:53	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612206	1.01	01/22/21 14:56	01/28/21 09:38	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 14:56	01/27/21 10:18	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612296	20	01/27/21 15:39	01/28/21 08:43	CAG	Mt. Juliet, TN

BH-2 (6-7') L1308926-06 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 10:05  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611241	1	01/27/21 10:30	01/27/21 10:40	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 18:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612206	1	01/22/21 14:56	01/28/21 10:03	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 14:56	01/27/21 10:37	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612296	1	01/27/21 15:39	01/28/21 12:48	CAG	Mt. Juliet, TN



BH-2 (9-10') L1308926-07 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 10:10  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611241	1	01/27/21 10:30	01/27/21 10:40	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 18:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612206	1.01	01/22/21 14:56	01/28/21 10:25	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 14:56	01/27/21 13:06	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612296	1	01/27/21 15:39	01/28/21 07:41	CAG	Mt. Juliet, TN

BH-2 (15') L1308926-08 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 10:15  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611241	1	01/27/21 10:30	01/27/21 10:40	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 18:41	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612206	1.01	01/22/21 14:56	01/28/21 10:47	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 14:56	01/27/21 13:25	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612296	1	01/27/21 15:39	01/28/21 07:28	CAG	Mt. Juliet, TN

BH-3 (2-3') L1308926-09 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 10:20  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611242	1	01/27/21 10:18	01/27/21 10:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	10	01/25/21 15:50	01/25/21 18:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612902	1	01/22/21 14:56	01/28/21 16:12	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 14:56	01/27/21 13:44	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612296	20	01/27/21 15:39	01/28/21 08:56	CAG	Mt. Juliet, TN

BH-3 (4-5') L1308926-10 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 10:30  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611242	1	01/27/21 10:18	01/27/21 10:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	10	01/25/21 15:50	01/25/21 19:28	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612902	100	01/22/21 14:56	01/28/21 16:36	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	40	01/22/21 14:56	01/27/21 14:03	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612296	20	01/27/21 15:39	01/28/21 09:22	CAG	Mt. Juliet, TN

BH-3 (6-7') L1308926-11 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 10:35  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611242	1	01/27/21 10:18	01/27/21 10:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	10	01/25/21 15:50	01/25/21 19:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	100	01/22/21 14:56	01/29/21 08:29	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	40	01/22/21 14:56	01/27/21 14:23	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612296	20	01/27/21 15:39	01/28/21 09:09	CAG	Mt. Juliet, TN

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

BH-3 (9-10') L1308926-12 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 10:40  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611242	1	01/27/21 10:18	01/27/21 10:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	10	01/25/21 15:50	01/25/21 19:47	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	100	01/22/21 14:56	01/29/21 08:51	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	40	01/22/21 14:56	01/27/21 14:41	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612296	20	01/27/21 15:39	01/28/21 08:17	CAG	Mt. Juliet, TN

BH-3 (15') L1308926-13 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 10:45  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611242	1	01/27/21 10:18	01/27/21 10:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 19:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1	01/22/21 14:56	01/29/21 02:56	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 14:56	01/27/21 15:00	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	1	01/29/21 01:22	01/29/21 11:22	DMG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	5	01/29/21 01:22	01/30/21 21:56	JN	Mt. Juliet, TN

BH-3 (20') L1308926-14 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 10:50  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611242	1	01/27/21 10:18	01/27/21 10:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 20:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	100	01/22/21 14:56	01/29/21 09:42	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	4	01/22/21 14:56	01/27/21 15:19	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	1	01/29/21 01:22	01/29/21 11:35	DMG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	5	01/29/21 01:22	01/30/21 22:10	JN	Mt. Juliet, TN

BH-4 (0-1') L1308926-15 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 11:05  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611242	1	01/27/21 10:18	01/27/21 10:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 20:35	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1	01/22/21 14:56	01/29/21 03:18	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 14:56	01/27/21 15:38	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	1	01/29/21 01:22	01/30/21 20:35	JN	Mt. Juliet, TN

BH-4 (2-3') L1308926-16 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 11:10  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611242	1	01/27/21 10:18	01/27/21 10:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 20:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1.01	01/22/21 14:56	01/29/21 03:40	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 14:56	01/27/21 15:58	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	1	01/29/21 01:22	01/30/21 20:48	JN	Mt. Juliet, TN

1 Cp  
 2 Tc  
 3 Ss  
 4 Cn

BH-4 (4-5') L1308926-17 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 11:15  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611242	1	01/27/21 10:18	01/27/21 10:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 20:56	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1	01/22/21 14:56	01/29/21 04:02	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 14:56	01/27/21 16:17	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	1	01/29/21 01:22	01/30/21 21:02	JN	Mt. Juliet, TN

5 Sr  
 6 Qc  
 7 Gl  
 8 Al

BH-4 (6-7') L1308926-18 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 11:20  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611242	1	01/27/21 10:18	01/27/21 10:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 21:09	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612071	1	01/22/21 15:08	01/29/21 03:35	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 15:08	01/27/21 16:36	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	1	01/29/21 01:22	01/29/21 12:56	DMG	Mt. Juliet, TN

9 Sc

BH-5 (0-1') L1308926-19 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 11:30  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611243	1	01/27/21 10:08	01/27/21 10:16	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 21:18	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612071	1	01/22/21 15:08	01/29/21 03:56	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 15:08	01/27/21 16:55	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	1	01/29/21 01:22	01/29/21 13:09	DMG	Mt. Juliet, TN

BH-5 (2-3') L1308926-20 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 11:35  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611243	1	01/27/21 10:08	01/27/21 10:16	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609660	1	01/25/21 15:50	01/25/21 21:28	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612071	1	01/22/21 15:08	01/29/21 04:17	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1611866	1	01/22/21 15:08	01/27/21 17:14	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	1	01/29/21 01:22	01/29/21 13:22	DMG	Mt. Juliet, TN

BH-5 (4-5') L1308926-21 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 11:40  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611243	1	01/27/21 10:08	01/27/21 10:16	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609663	1	01/26/21 12:45	01/26/21 19:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612071	1	01/22/21 15:08	01/29/21 04:38	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612070	1	01/22/21 15:08	01/28/21 17:12	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	1	01/29/21 01:22	01/29/21 13:36	DMG	Mt. Juliet, TN

1 Cp  
 2 Tc  
 3 Ss  
 4 Cn

BH-6 (0-1') L1308926-22 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 11:55  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611243	1	01/27/21 10:08	01/27/21 10:16	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609663	1	01/26/21 12:45	01/26/21 19:22	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612071	1	01/22/21 15:08	01/29/21 04:59	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612072	1	01/22/21 15:08	01/27/21 22:14	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	1	01/29/21 01:22	01/29/21 13:49	DMG	Mt. Juliet, TN

5 Sr  
 6 Qc  
 7 Gl  
 8 Al

BH-6 (2-3') L1308926-23 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 12:00  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611243	1	01/27/21 10:08	01/27/21 10:16	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609663	1	01/26/21 12:45	01/26/21 19:32	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612071	1	01/22/21 15:08	01/29/21 05:19	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612072	1	01/22/21 15:08	01/27/21 22:33	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	1	01/29/21 01:22	01/30/21 21:15	JN	Mt. Juliet, TN

9 Sc

BH-6 (4-5') L1308926-24 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 12:30  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611243	1	01/27/21 10:08	01/27/21 10:16	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609663	1	01/26/21 12:45	01/26/21 20:00	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1	01/22/21 15:08	01/29/21 04:24	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612072	1	01/22/21 15:08	01/27/21 22:52	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	10	01/29/21 01:22	01/29/21 14:16	DMG	Mt. Juliet, TN

BH-7 (0-1') L1308926-25 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 12:45  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611243	1	01/27/21 10:08	01/27/21 10:16	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609663	1	01/26/21 12:45	01/26/21 20:10	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1	01/22/21 15:08	01/29/21 04:46	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612072	1	01/22/21 15:08	01/27/21 23:12	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	10	01/29/21 01:22	01/29/21 14:29	DMG	Mt. Juliet, TN

BH-7 (2-3') L1308926-26 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 12:50  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611243	1	01/27/21 10:08	01/27/21 10:16	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609663	1	01/26/21 12:45	01/26/21 20:19	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1	01/22/21 15:08	01/29/21 05:08	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612072	1	01/22/21 15:08	01/27/21 23:30	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	10	01/29/21 01:22	01/29/21 14:43	DMG	Mt. Juliet, TN

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

BH-7 (4-5') L1308926-27 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 12:55  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611243	1	01/27/21 10:08	01/27/21 10:16	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609663	1	01/26/21 12:45	01/26/21 20:29	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1612479	100	01/22/21 15:08	01/28/21 08:26	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612072	8	01/22/21 15:08	01/27/21 23:50	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	50	01/29/21 01:22	01/30/21 21:42	JN	Mt. Juliet, TN

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

BH-8 (0-1') L1308926-28 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 13:10  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611243	1	01/27/21 10:08	01/27/21 10:16	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609663	1	01/26/21 12:45	01/26/21 20:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1	01/22/21 15:08	01/29/21 05:30	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612072	1	01/22/21 15:08	01/28/21 00:08	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	11.2	01/29/21 01:22	01/29/21 15:10	DMG	Mt. Juliet, TN

<sup>9</sup> Sc

BH-8 (2-3') L1308926-29 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 13:15  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611244	1	01/27/21 16:01	01/27/21 16:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609664	1	01/26/21 15:59	01/27/21 02:58	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1	01/22/21 15:08	01/29/21 05:52	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612072	1	01/22/21 15:08	01/28/21 00:27	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	10	01/29/21 01:22	01/29/21 15:23	DMG	Mt. Juliet, TN

BH-8 (4-5') L1308926-30 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 13:20  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611244	1	01/27/21 16:01	01/27/21 16:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609666	1	01/25/21 15:30	01/25/21 17:49	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1	01/22/21 15:08	01/29/21 06:14	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612072	1	01/22/21 15:08	01/28/21 00:46	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	10	01/29/21 01:22	01/29/21 15:36	DMG	Mt. Juliet, TN

BH-9 (0-1') L1308926-31 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 13:35  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611244	1	01/27/21 16:01	01/27/21 16:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609666	1	01/25/21 15:30	01/25/21 18:05	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1	01/22/21 15:08	01/29/21 06:36	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612072	1	01/22/21 15:08	01/28/21 01:05	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	200	01/29/21 01:22	01/29/21 16:03	DMG	Mt. Juliet, TN



BH-9 (1-1.5') L1308926-32 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 13:40  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611244	1	01/27/21 16:01	01/27/21 16:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1609666	1	01/25/21 15:30	01/25/21 18:21	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1	01/22/21 15:08	01/29/21 06:58	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612072	1	01/22/21 15:08	01/28/21 01:24	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1613106	10	01/29/21 01:22	01/29/21 15:50	DMG	Mt. Juliet, TN



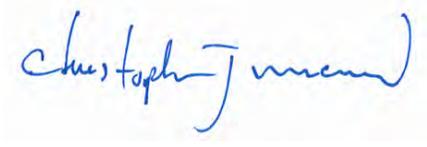
BH-4 (3-4') L1308926-33 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 00:00  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611244	1	01/27/21 16:01	01/27/21 16:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1610464	1	01/23/21 10:11	01/23/21 19:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613028	1	01/22/21 15:08	01/29/21 07:23	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1612072	1	01/22/21 15:08	01/28/21 01:43	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1612302	1	01/28/21 00:29	01/28/21 09:25	CAG	Mt. Juliet, TN



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



Chris McCord  
Project Manager

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

Collected date/time: 01/18/21 09:30

L1308926

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.6		1	01/27/2021 10:40	<a href="#">WG1611241</a>

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

**Wet Chemistry by Method 300.0**

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	4430		97.2	211	10	01/25/2021 17:06	<a href="#">WG1609660</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.973		0.0231	0.107	1.01	01/28/2021 02:06	<a href="#">WG1612206</a>
(S) a,a,a-Trifluorotoluene(FID)	109			77.0-120		01/28/2021 02:06	<a href="#">WG1612206</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		0.000520	0.00111	1	01/27/2021 09:02	<a href="#">WG1611866</a>
Toluene	U		0.00145	0.00557	1	01/27/2021 09:02	<a href="#">WG1611866</a>
Ethylbenzene	0.0959		0.000821	0.00278	1	01/27/2021 09:02	<a href="#">WG1611866</a>
Total Xylenes	0.203		0.000980	0.00724	1	01/27/2021 09:02	<a href="#">WG1611866</a>
(S) Toluene-d8	97.4			75.0-131		01/27/2021 09:02	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	96.6			67.0-138		01/27/2021 09:02	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		01/27/2021 09:02	<a href="#">WG1611866</a>

- 8 Al
- 9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1540		9.57	23.8	5.63	01/27/2021 22:49	<a href="#">WG1612505</a>
C28-C40 Oil Range	1850		16.3	238	56.3	01/28/2021 00:27	<a href="#">WG1612505</a>
(S) o-Terphenyl	94.1	<u>J7</u>		18.0-148		01/28/2021 00:27	<a href="#">WG1612505</a>
(S) o-Terphenyl	73.4			18.0-148		01/27/2021 22:49	<a href="#">WG1612505</a>

Collected date/time: 01/18/21 09:35

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.8		1	01/27/2021 10:40	<a href="#">WG1611241</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	213		9.40	20.4	1	01/25/2021 17:24	<a href="#">WG1609660</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	1.27		0.0222	0.102	1	01/28/2021 08:32	<a href="#">WG1612206</a>
(S) a,a,a-Trifluorotoluene(FID)	110			77.0-120		01/28/2021 08:32	<a href="#">WG1612206</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000488	0.00104	1	01/27/2021 09:21	<a href="#">WG1611866</a>
Toluene	U		0.00136	0.00522	1	01/27/2021 09:21	<a href="#">WG1611866</a>
Ethylbenzene	0.00149	J	0.000770	0.00261	1	01/27/2021 09:21	<a href="#">WG1611866</a>
Total Xylenes	0.00492	J	0.000919	0.00679	1	01/27/2021 09:21	<a href="#">WG1611866</a>
(S) Toluene-d8	99.5			75.0-131		01/27/2021 09:21	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	98.6			67.0-138		01/27/2021 09:21	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	91.5			70.0-130		01/27/2021 09:21	<a href="#">WG1611866</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	273		1.65	4.09	1	01/28/2021 07:54	<a href="#">WG1612296</a>
C28-C40 Oil Range	210		0.560	8.18	2	01/28/2021 13:01	<a href="#">WG1612296</a>
(S) o-Terphenyl	67.1			18.0-148		01/28/2021 07:54	<a href="#">WG1612296</a>
(S) o-Terphenyl	60.9			18.0-148		01/28/2021 13:01	<a href="#">WG1612296</a>

Collected date/time: 01/18/21 09:40

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.0		1	01/27/2021 10:40	<a href="#">WG1611241</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	12.4	J	9.39	20.4	1	01/25/2021 17:34	<a href="#">WG1609660</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0298	J	0.0221	0.102	1	01/28/2021 08:54	<a href="#">WG1612206</a>
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/28/2021 08:54	<a href="#">WG1612206</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000491	0.00105	1.01	01/27/2021 09:40	<a href="#">WG1611866</a>
Toluene	U		0.00136	0.00526	1.01	01/27/2021 09:40	<a href="#">WG1611866</a>
Ethylbenzene	U		0.000775	0.00263	1.01	01/27/2021 09:40	<a href="#">WG1611866</a>
Total Xylenes	U		0.000926	0.00683	1.01	01/27/2021 09:40	<a href="#">WG1611866</a>
(S) Toluene-d8	99.5			75.0-131		01/27/2021 09:40	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	98.3			67.0-138		01/27/2021 09:40	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	92.3			70.0-130		01/27/2021 09:40	<a href="#">WG1611866</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	5.75		1.64	4.08	1	01/28/2021 07:15	<a href="#">WG1612296</a>
C28-C40 Oil Range	6.71		0.280	4.08	1	01/28/2021 07:15	<a href="#">WG1612296</a>
(S) o-Terphenyl	54.1			18.0-148		01/28/2021 07:15	<a href="#">WG1612296</a>

Collected date/time: 01/18/21 09:50

L1308926

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.1		1	01/27/2021 10:40	<a href="#">WG1611241</a>

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

**Wet Chemistry by Method 300.0**

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	2450		96.7	210	10	01/25/2021 17:43	<a href="#">WG1609660</a>

5 Sr

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	1.73		0.0228	0.105	1	01/28/2021 09:16	<a href="#">WG1612206</a>
(S) a,a,a-Trifluorotoluene(FID)	110			77.0-120		01/28/2021 09:16	<a href="#">WG1612206</a>

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000515	0.00110	1	01/27/2021 09:59	<a href="#">WG1611866</a>
Toluene	U		0.00143	0.00551	1	01/27/2021 09:59	<a href="#">WG1611866</a>
Ethylbenzene	0.0562		0.000812	0.00275	1	01/27/2021 09:59	<a href="#">WG1611866</a>
Total Xylenes	0.142		0.000970	0.00716	1	01/27/2021 09:59	<a href="#">WG1611866</a>
(S) Toluene-d8	97.3			75.0-131		01/27/2021 09:59	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	101			67.0-138		01/27/2021 09:59	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	92.8			70.0-130		01/27/2021 09:59	<a href="#">WG1611866</a>

8 Al

9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	930		33.8	84.1	20	01/28/2021 08:30	<a href="#">WG1612296</a>
C28-C40 Oil Range	1040		5.76	84.1	20	01/28/2021 08:30	<a href="#">WG1612296</a>
(S) o-Terphenyl	60.6	<u>J7</u>		18.0-148		01/28/2021 08:30	<a href="#">WG1612296</a>

Collected date/time: 01/18/21 09:55

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.6		1	01/27/2021 10:40	<a href="#">WG1611241</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	3620		98.3	214	10	01/25/2021 17:53	<a href="#">WG1609660</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	2.97		0.0234	0.108	1.01	01/28/2021 09:38	<a href="#">WG1612206</a>
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-120		01/28/2021 09:38	<a href="#">WG1612206</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		0.000530	0.00114	1	01/27/2021 10:18	<a href="#">WG1611866</a>
Toluene	U		0.00148	0.00568	1	01/27/2021 10:18	<a href="#">WG1611866</a>
Ethylbenzene	0.0376		0.000837	0.00284	1	01/27/2021 10:18	<a href="#">WG1611866</a>
Total Xylenes	0.0948		0.000999	0.00738	1	01/27/2021 10:18	<a href="#">WG1611866</a>
(S) Toluene-d8	98.3			75.0-131		01/27/2021 10:18	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	101			67.0-138		01/27/2021 10:18	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	91.8			70.0-130		01/27/2021 10:18	<a href="#">WG1611866</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1520		34.4	85.4	20	01/28/2021 08:43	<a href="#">WG1612296</a>
C28-C40 Oil Range	1420		5.85	85.4	20	01/28/2021 08:43	<a href="#">WG1612296</a>
(S) o-Terphenyl	120	<u>J7</u>		18.0-148		01/28/2021 08:43	<a href="#">WG1612296</a>

Collected date/time: 01/18/21 10:05

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.5		1	01/27/2021 10:40	<a href="#">WG1611241</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	499		9.94	21.6	1	01/25/2021 18:03	<a href="#">WG1609660</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0458	J	0.0235	0.108	1	01/28/2021 10:03	<a href="#">WG1612206</a>
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/28/2021 10:03	<a href="#">WG1612206</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000542	0.00116	1	01/27/2021 10:37	<a href="#">WG1611866</a>
Toluene	U		0.00151	0.00581	1	01/27/2021 10:37	<a href="#">WG1611866</a>
Ethylbenzene	U		0.000856	0.00290	1	01/27/2021 10:37	<a href="#">WG1611866</a>
Total Xylenes	U		0.00102	0.00755	1	01/27/2021 10:37	<a href="#">WG1611866</a>
(S) Toluene-d8	99.2			75.0-131		01/27/2021 10:37	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	96.4			67.0-138		01/27/2021 10:37	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	92.1			70.0-130		01/27/2021 10:37	<a href="#">WG1611866</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	72.6		1.74	4.32	1	01/28/2021 12:48	<a href="#">WG1612296</a>
C28-C40 Oil Range	83.5		0.296	4.32	1	01/28/2021 12:48	<a href="#">WG1612296</a>
(S) o-Terphenyl	42.0			18.0-148		01/28/2021 12:48	<a href="#">WG1612296</a>

Collected date/time: 01/18/21 10:10

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.8		1	01/27/2021 10:40	<a href="#">WG1611241</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	41.8		10.0	21.8	1	01/25/2021 18:12	<a href="#">WG1609660</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0292	J	0.0238	0.110	1.01	01/28/2021 10:25	<a href="#">WG1612206</a>
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/28/2021 10:25	<a href="#">WG1612206</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	0.00151		0.000550	0.00118	1	01/27/2021 13:06	<a href="#">WG1611866</a>
Toluene	U		0.00153	0.00589	1	01/27/2021 13:06	<a href="#">WG1611866</a>
Ethylbenzene	U		0.000868	0.00294	1	01/27/2021 13:06	<a href="#">WG1611866</a>
Total Xylenes	U		0.00104	0.00765	1	01/27/2021 13:06	<a href="#">WG1611866</a>
(S) Toluene-d8	101			75.0-131		01/27/2021 13:06	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	99.2			67.0-138		01/27/2021 13:06	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	95.9			70.0-130		01/27/2021 13:06	<a href="#">WG1611866</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	7.87		1.75	4.36	1	01/28/2021 07:41	<a href="#">WG1612296</a>
C28-C40 Oil Range	8.95		0.298	4.36	1	01/28/2021 07:41	<a href="#">WG1612296</a>
(S) o-Terphenyl	30.2			18.0-148		01/28/2021 07:41	<a href="#">WG1612296</a>

Collected date/time: 01/18/21 10:15

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5		1	01/27/2021 10:40	<a href="#">WG1611241</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	33.9		9.84	21.4	1	01/25/2021 18:41	<a href="#">WG1609660</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0334	J	0.0234	0.108	1.01	01/28/2021 10:47	<a href="#">WG1612206</a>
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/28/2021 10:47	<a href="#">WG1612206</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		0.000532	0.00114	1	01/27/2021 13:25	<a href="#">WG1611866</a>
Toluene	U		0.00148	0.00570	1	01/27/2021 13:25	<a href="#">WG1611866</a>
Ethylbenzene	U		0.000840	0.00285	1	01/27/2021 13:25	<a href="#">WG1611866</a>
Total Xylenes	U		0.00100	0.00741	1	01/27/2021 13:25	<a href="#">WG1611866</a>
(S) Toluene-d8	99.4			75.0-131		01/27/2021 13:25	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	96.2			67.0-138		01/27/2021 13:25	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	90.6			70.0-130		01/27/2021 13:25	<a href="#">WG1611866</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	9.16		1.72	4.28	1	01/28/2021 07:28	<a href="#">WG1612296</a>
C28-C40 Oil Range	9.25		0.293	4.28	1	01/28/2021 07:28	<a href="#">WG1612296</a>
(S) o-Terphenyl	59.5			18.0-148		01/28/2021 07:28	<a href="#">WG1612296</a>

Collected date/time: 01/18/21 10:20

L1308926

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.7		1	01/27/2021 10:29	<a href="#">WG1611242</a>

1 Cp

2 Tc

**Wet Chemistry by Method 300.0**

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	3550		98.2	213	10	01/25/2021 18:50	<a href="#">WG1609660</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	2.22		0.0232	0.107	1	01/28/2021 16:12	<a href="#">WG1612902</a>
(S) a,a,a-Trifluorotoluene(FID)	109			77.0-120		01/28/2021 16:12	<a href="#">WG1612902</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000530	0.00113	1	01/27/2021 13:44	<a href="#">WG1611866</a>
Toluene	U		0.00147	0.00567	1	01/27/2021 13:44	<a href="#">WG1611866</a>
Ethylbenzene	0.00639		0.000836	0.00284	1	01/27/2021 13:44	<a href="#">WG1611866</a>
Total Xylenes	0.0196		0.000998	0.00737	1	01/27/2021 13:44	<a href="#">WG1611866</a>
(S) Toluene-d8	97.6			75.0-131		01/27/2021 13:44	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	98.9			67.0-138		01/27/2021 13:44	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	91.5			70.0-130		01/27/2021 13:44	<a href="#">WG1611866</a>

8 Al

9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	784		34.4	85.4	20	01/28/2021 08:56	<a href="#">WG1612296</a>
C28-C40 Oil Range	649		5.85	85.4	20	01/28/2021 08:56	<a href="#">WG1612296</a>
(S) o-Terphenyl	66.6	<u>J7</u>		18.0-148		01/28/2021 08:56	<a href="#">WG1612296</a>

Collected date/time: 01/18/21 10:30

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	93.2		1	01/27/2021 10:29	<a href="#">WG1611242</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	5070		98.7	215	10	01/25/2021 19:28	<a href="#">WG1609660</a>

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	411		2.49	11.5	100	01/28/2021 16:36	<a href="#">WG1612902</a>
(S) a,a,a-Trifluorotoluene(FID)	112			77.0-120		01/28/2021 16:36	<a href="#">WG1612902</a>

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.0215	0.0459	40	01/27/2021 14:03	<a href="#">WG1611866</a>
Toluene	U		0.0596	0.229	40	01/27/2021 14:03	<a href="#">WG1611866</a>
Ethylbenzene	0.0352	J	0.0338	0.115	40	01/27/2021 14:03	<a href="#">WG1611866</a>
Total Xylenes	0.109	J	0.0404	0.298	40	01/27/2021 14:03	<a href="#">WG1611866</a>
(S) Toluene-d8	97.9			75.0-131		01/27/2021 14:03	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	103			67.0-138		01/27/2021 14:03	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	96.9			70.0-130		01/27/2021 14:03	<a href="#">WG1611866</a>

8 Al

9 Sc

Sample Narrative:

L1308926-10 WG1611866: Non-target compounds too high to run at a lower dilution.

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	3460		34.6	85.9	20	01/28/2021 09:22	<a href="#">WG1612296</a>
C28-C40 Oil Range	1650		5.88	85.9	20	01/28/2021 09:22	<a href="#">WG1612296</a>
(S) o-Terphenyl	348	J7		18.0-148		01/28/2021 09:22	<a href="#">WG1612296</a>

Collected date/time: 01/18/21 10:35

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.4		1	01/27/2021 10:29	<a href="#">WG1611242</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	6370		101	219	10	01/25/2021 19:38	<a href="#">WG1609660</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	633		2.58	11.9	100	01/29/2021 08:29	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	112			77.0-120		01/29/2021 08:29	<a href="#">WG1613028</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		0.0222	0.0475	40	01/27/2021 14:23	<a href="#">WG1611866</a>
Toluene	U		0.0617	0.237	40	01/27/2021 14:23	<a href="#">WG1611866</a>
Ethylbenzene	0.0843	J	0.0350	0.119	40	01/27/2021 14:23	<a href="#">WG1611866</a>
Total Xylenes	0.451		0.0418	0.309	40	01/27/2021 14:23	<a href="#">WG1611866</a>
(S) Toluene-d8	97.6			75.0-131		01/27/2021 14:23	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	103			67.0-138		01/27/2021 14:23	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	96.5			70.0-130		01/27/2021 14:23	<a href="#">WG1611866</a>

- 8 Al
- 9 Sc

Sample Narrative:

L1308926-11 WG1611866: Non-target compounds too high to run at a lower dilution.

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	3210		35.2	87.5	20	01/28/2021 09:09	<a href="#">WG1612296</a>
C28-C40 Oil Range	1450		5.99	87.5	20	01/28/2021 09:09	<a href="#">WG1612296</a>
(S) o-Terphenyl	359	J7		18.0-148		01/28/2021 09:09	<a href="#">WG1612296</a>

Collected date/time: 01/18/21 10:40

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.8		1	01/27/2021 10:29	<a href="#">WG1611242</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	2940		101	220	10	01/25/2021 19:47	<a href="#">WG1609660</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	327		2.61	12.0	100	01/29/2021 08:51	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	112			77.0-120		01/29/2021 08:51	<a href="#">WG1613028</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		0.0225	0.0481	40	01/27/2021 14:41	<a href="#">WG1611866</a>
Toluene	U		0.0625	0.241	40	01/27/2021 14:41	<a href="#">WG1611866</a>
Ethylbenzene	0.0697	J	0.0355	0.120	40	01/27/2021 14:41	<a href="#">WG1611866</a>
Total Xylenes	0.284	J	0.0423	0.313	40	01/27/2021 14:41	<a href="#">WG1611866</a>
(S) Toluene-d8	99.4			75.0-131		01/27/2021 14:41	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	104			67.0-138		01/27/2021 14:41	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	96.8			70.0-130		01/27/2021 14:41	<a href="#">WG1611866</a>

- 8 Al
- 9 Sc

Sample Narrative:

L1308926-12 WG1611866: Non-target compounds too high to run at a lower dilution.

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	2280		35.5	88.1	20	01/28/2021 08:17	<a href="#">WG1612296</a>
C28-C40 Oil Range	1220		6.03	88.1	20	01/28/2021 08:17	<a href="#">WG1612296</a>
(S) o-Terphenyl	269	J7		18.0-148		01/28/2021 08:17	<a href="#">WG1612296</a>

Collected date/time: 01/18/21 10:45

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.2		1	01/27/2021 10:29	<a href="#">WG1611242</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	648		9.77	21.2	1	01/25/2021 19:57	<a href="#">WG1609660</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	2.40		0.0230	0.106	1	01/29/2021 02:56	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	110			77.0-120		01/29/2021 02:56	<a href="#">WG1613028</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		0.000525	0.00112	1	01/27/2021 15:00	<a href="#">WG1611866</a>
Toluene	U		0.00146	0.00562	1	01/27/2021 15:00	<a href="#">WG1611866</a>
Ethylbenzene	0.00208	J	0.000829	0.00281	1	01/27/2021 15:00	<a href="#">WG1611866</a>
Total Xylenes	0.00824		0.000989	0.00731	1	01/27/2021 15:00	<a href="#">WG1611866</a>
(S) Toluene-d8	98.8			75.0-131		01/27/2021 15:00	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	103			67.0-138		01/27/2021 15:00	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	90.2			70.0-130		01/27/2021 15:00	<a href="#">WG1611866</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	337		1.71	4.25	1	01/29/2021 11:22	<a href="#">WG1613106</a>
C28-C40 Oil Range	199		1.46	21.2	5	01/30/2021 21:56	<a href="#">WG1613106</a>
(S) o-Terphenyl	89.9			18.0-148		01/29/2021 11:22	<a href="#">WG1613106</a>
(S) o-Terphenyl	106			18.0-148		01/30/2021 21:56	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 10:50

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.0		1	01/27/2021 10:29	<a href="#">WG1611242</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	811		9.78	21.3	1	01/25/2021 20:06	<a href="#">WG1609660</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	47.4		2.45	11.3	100	01/29/2021 09:42	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	115			77.0-120		01/29/2021 09:42	<a href="#">WG1613028</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		0.00211	0.00451	4	01/27/2021 15:19	<a href="#">WG1611866</a>
Toluene	U		0.00586	0.0225	4	01/27/2021 15:19	<a href="#">WG1611866</a>
Ethylbenzene	0.00349	J	0.00332	0.0113	4	01/27/2021 15:19	<a href="#">WG1611866</a>
Total Xylenes	0.0128	J	0.00397	0.0293	4	01/27/2021 15:19	<a href="#">WG1611866</a>
(S) Toluene-d8	98.1			75.0-131		01/27/2021 15:19	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	100			67.0-138		01/27/2021 15:19	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	94.6			70.0-130		01/27/2021 15:19	<a href="#">WG1611866</a>

- 8 Al
- 9 Sc

Sample Narrative:

L1308926-14 WG1611866: Non-target compounds too high to run at a lower dilution.

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	330		1.71	4.25	1	01/29/2021 11:35	<a href="#">WG1613106</a>
C28-C40 Oil Range	183		1.46	21.3	5	01/30/2021 22:10	<a href="#">WG1613106</a>
(S) o-Terphenyl	92.2			18.0-148		01/29/2021 11:35	<a href="#">WG1613106</a>
(S) o-Terphenyl	120			18.0-148		01/30/2021 22:10	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 11:05

L1308926

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.3		1	01/27/2021 10:29	<a href="#">WG1611242</a>

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

**Wet Chemistry by Method 300.0**

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.75	21.2	1	01/25/2021 20:35	<a href="#">WG1609660</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0528	<b>B J</b>	0.0230	0.106	1	01/29/2021 03:18	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/29/2021 03:18	<a href="#">WG1613028</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		0.000523	0.00112	1	01/27/2021 15:38	<a href="#">WG1611866</a>
Toluene	U		0.00146	0.00560	1	01/27/2021 15:38	<a href="#">WG1611866</a>
Ethylbenzene	0.000840	<b>J</b>	0.000825	0.00280	1	01/27/2021 15:38	<a href="#">WG1611866</a>
Total Xylenes	U		0.000986	0.00728	1	01/27/2021 15:38	<a href="#">WG1611866</a>
(S) Toluene-d8	98.5			75.0-131		01/27/2021 15:38	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	96.9			67.0-138		01/27/2021 15:38	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	90.9			70.0-130		01/27/2021 15:38	<a href="#">WG1611866</a>

- 8 Al
- 9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3.81	<b>J</b>	1.71	4.24	1	01/30/2021 20:35	<a href="#">WG1613106</a>
C28-C40 Oil Range	9.72		0.290	4.24	1	01/30/2021 20:35	<a href="#">WG1613106</a>
(S) o-Terphenyl	63.1			18.0-148		01/30/2021 20:35	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 11:10

L1308926

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.5		1	01/27/2021 10:29	<a href="#">WG1611242</a>

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

**Wet Chemistry by Method 300.0**

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	17.3	J	9.53	20.7	1	01/25/2021 20:44	<a href="#">WG1609660</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.100	B J	0.0227	0.105	1.01	01/29/2021 03:40	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/29/2021 03:40	<a href="#">WG1613028</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		0.000501	0.00107	1	01/27/2021 15:58	<a href="#">WG1611866</a>
Toluene	U		0.00139	0.00536	1	01/27/2021 15:58	<a href="#">WG1611866</a>
Ethylbenzene	0.000912	J	0.000790	0.00268	1	01/27/2021 15:58	<a href="#">WG1611866</a>
Total Xylenes	0.00279	J	0.000944	0.00697	1	01/27/2021 15:58	<a href="#">WG1611866</a>
(S) Toluene-d8	99.6			75.0-131		01/27/2021 15:58	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	96.4			67.0-138		01/27/2021 15:58	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	88.6			70.0-130		01/27/2021 15:58	<a href="#">WG1611866</a>

- 8 Al
- 9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.38	J	1.67	4.14	1	01/30/2021 20:48	<a href="#">WG1613106</a>
C28-C40 Oil Range	5.71		0.284	4.14	1	01/30/2021 20:48	<a href="#">WG1613106</a>
(S) o-Terphenyl	55.1			18.0-148		01/30/2021 20:48	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 11:15

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.4		1	01/27/2021 10:29	<a href="#">WG1611242</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.55	20.8	1	01/25/2021 20:56	<a href="#">WG1609660</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0225	0.104	1	01/29/2021 04:02	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	110			77.0-120		01/29/2021 04:02	<a href="#">WG1613028</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000502	0.00108	1	01/27/2021 16:17	<a href="#">WG1611866</a>
Toluene	U		0.00140	0.00538	1	01/27/2021 16:17	<a href="#">WG1611866</a>
Ethylbenzene	U		0.000792	0.00269	1	01/27/2021 16:17	<a href="#">WG1611866</a>
Total Xylenes	U		0.000946	0.00699	1	01/27/2021 16:17	<a href="#">WG1611866</a>
(S) Toluene-d8	101			75.0-131		01/27/2021 16:17	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	99.6			67.0-138		01/27/2021 16:17	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	89.9			70.0-130		01/27/2021 16:17	<a href="#">WG1611866</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.29	J	1.67	4.15	1	01/30/2021 21:02	<a href="#">WG1613106</a>
C28-C40 Oil Range	3.49	J	0.284	4.15	1	01/30/2021 21:02	<a href="#">WG1613106</a>
(S) o-Terphenyl	62.3			18.0-148		01/30/2021 21:02	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 11:20

L1308926

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.0		1	01/27/2021 10:29	<a href="#">WG1611242</a>

1 Cp

2 Tc

**Wet Chemistry by Method 300.0**

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.49	20.6	1	01/25/2021 21:09	<a href="#">WG1609660</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	01/29/2021 03:35	<a href="#">WG1612071</a>
(S) a,a,a-Trifluorotoluene(FID)	90.8			77.0-120		01/29/2021 03:35	<a href="#">WG1612071</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000496	0.00106	1	01/27/2021 16:36	<a href="#">WG1611866</a>
Toluene	U		0.00138	0.00531	1	01/27/2021 16:36	<a href="#">WG1611866</a>
Ethylbenzene	U		0.000783	0.00266	1	01/27/2021 16:36	<a href="#">WG1611866</a>
Total Xylenes	U		0.000935	0.00691	1	01/27/2021 16:36	<a href="#">WG1611866</a>
(S) Toluene-d8	98.9			75.0-131		01/27/2021 16:36	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	97.7			67.0-138		01/27/2021 16:36	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	91.6			70.0-130		01/27/2021 16:36	<a href="#">WG1611866</a>

8 Al

9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.73	J	1.66	4.12	1	01/29/2021 12:56	<a href="#">WG1613106</a>
C28-C40 Oil Range	12.5		0.283	4.12	1	01/29/2021 12:56	<a href="#">WG1613106</a>
(S) o-Terphenyl	64.3			18.0-148		01/29/2021 12:56	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 11:30

L1308926

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.6		1	01/27/2021 10:16	<a href="#">WG1611243</a>

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

**Wet Chemistry by Method 300.0**

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	13.9	J	9.63	20.9	1	01/25/2021 21:18	<a href="#">WG1609660</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	01/29/2021 03:56	<a href="#">WG1612071</a>
(S) a,a,a-Trifluorotoluene(FID)	91.7			77.0-120		01/29/2021 03:56	<a href="#">WG1612071</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000511	0.00109	1	01/27/2021 16:55	<a href="#">WG1611866</a>
Toluene	U		0.00142	0.00547	1	01/27/2021 16:55	<a href="#">WG1611866</a>
Ethylbenzene	U		0.000806	0.00273	1	01/27/2021 16:55	<a href="#">WG1611866</a>
Total Xylenes	U		0.000962	0.00711	1	01/27/2021 16:55	<a href="#">WG1611866</a>
(S) Toluene-d8	100			75.0-131		01/27/2021 16:55	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	97.8			67.0-138		01/27/2021 16:55	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	90.4			70.0-130		01/27/2021 16:55	<a href="#">WG1611866</a>

- 8 Al
- 9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	8.23		1.68	4.19	1	01/29/2021 13:09	<a href="#">WG1613106</a>
C28-C40 Oil Range	19.7		0.287	4.19	1	01/29/2021 13:09	<a href="#">WG1613106</a>
(S) o-Terphenyl	60.7			18.0-148		01/29/2021 13:09	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 11:35

L1308926

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.7		1	01/27/2021 10:16	<a href="#">WG1611243</a>

1 Cp

2 Tc

**Wet Chemistry by Method 300.0**

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	211		9.61	20.9	1	01/25/2021 21:28	<a href="#">WG1609660</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0227	0.104	1	01/29/2021 04:17	<a href="#">WG1612071</a>
(S) a,a,a-Trifluorotoluene(FID)	90.1			77.0-120		01/29/2021 04:17	<a href="#">WG1612071</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000509	0.00109	1	01/27/2021 17:14	<a href="#">WG1611866</a>
Toluene	U		0.00142	0.00545	1	01/27/2021 17:14	<a href="#">WG1611866</a>
Ethylbenzene	U		0.000803	0.00272	1	01/27/2021 17:14	<a href="#">WG1611866</a>
Total Xylenes	U		0.000959	0.00708	1	01/27/2021 17:14	<a href="#">WG1611866</a>
(S) Toluene-d8	99.2			75.0-131		01/27/2021 17:14	<a href="#">WG1611866</a>
(S) 4-Bromofluorobenzene	96.6			67.0-138		01/27/2021 17:14	<a href="#">WG1611866</a>
(S) 1,2-Dichloroethane-d4	91.4			70.0-130		01/27/2021 17:14	<a href="#">WG1611866</a>

8 Al

9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	19.0		1.68	4.18	1	01/29/2021 13:22	<a href="#">WG1613106</a>
C28-C40 Oil Range	24.7		0.286	4.18	1	01/29/2021 13:22	<a href="#">WG1613106</a>
(S) o-Terphenyl	48.2			18.0-148		01/29/2021 13:22	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 11:40

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.0		1	01/27/2021 10:16	<a href="#">WG1611243</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	48.5		9.49	20.6	1	01/26/2021 19:13	<a href="#">WG1609663</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	01/29/2021 04:38	<a href="#">WG1612071</a>
(S) a,a,a-Trifluorotoluene(FID)	92.2			77.0-120		01/29/2021 04:38	<a href="#">WG1612071</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		0.000496	0.00106	1	01/28/2021 17:12	<a href="#">WG1612070</a>
Toluene	U		0.00138	0.00531	1	01/28/2021 17:12	<a href="#">WG1612070</a>
Ethylbenzene	U		0.000783	0.00266	1	01/28/2021 17:12	<a href="#">WG1612070</a>
Total Xylenes	U		0.000935	0.00691	1	01/28/2021 17:12	<a href="#">WG1612070</a>
(S) Toluene-d8	97.9			75.0-131		01/28/2021 17:12	<a href="#">WG1612070</a>
(S) 4-Bromofluorobenzene	98.6			67.0-138		01/28/2021 17:12	<a href="#">WG1612070</a>
(S) 1,2-Dichloroethane-d4	90.9			70.0-130		01/28/2021 17:12	<a href="#">WG1612070</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	10.3		1.66	4.13	1	01/29/2021 13:36	<a href="#">WG1613106</a>
C28-C40 Oil Range	12.4		0.283	4.13	1	01/29/2021 13:36	<a href="#">WG1613106</a>
(S) o-Terphenyl	52.1			18.0-148		01/29/2021 13:36	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 11:55

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.7		1	01/27/2021 10:16	<a href="#">WG1611243</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	12.5	J	10.1	22.1	1	01/26/2021 19:22	<a href="#">WG1609663</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0715	B J	0.0239	0.110	1	01/29/2021 04:59	<a href="#">WG1612071</a>
(S) a,a,a-Trifluorotoluene(FID)	89.8			77.0-120		01/29/2021 04:59	<a href="#">WG1612071</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	0.000905	B J	0.000563	0.00121	1	01/27/2021 22:14	<a href="#">WG1612072</a>
Toluene	U		0.00157	0.00603	1	01/27/2021 22:14	<a href="#">WG1612072</a>
Ethylbenzene	0.00145	J	0.000889	0.00302	1	01/27/2021 22:14	<a href="#">WG1612072</a>
Total Xylenes	0.00317	J	0.00106	0.00784	1	01/27/2021 22:14	<a href="#">WG1612072</a>
(S) Toluene-d8	101			75.0-131		01/27/2021 22:14	<a href="#">WG1612072</a>
(S) 4-Bromofluorobenzene	93.1			67.0-138		01/27/2021 22:14	<a href="#">WG1612072</a>
(S) 1,2-Dichloroethane-d4	95.5			70.0-130		01/27/2021 22:14	<a href="#">WG1612072</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	12.4		1.78	4.41	1	01/29/2021 13:49	<a href="#">WG1613106</a>
C28-C40 Oil Range	29.7		0.302	4.41	1	01/29/2021 13:49	<a href="#">WG1613106</a>
(S) o-Terphenyl	57.1			18.0-148		01/29/2021 13:49	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 12:00

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.5		1	01/27/2021 10:16	<a href="#">WG1611243</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.53	20.7	1	01/26/2021 19:32	<a href="#">WG1609663</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0225	0.104	1	01/29/2021 05:19	<a href="#">WG1612071</a>
(S) a,a,a-Trifluorotoluene(FID)	91.4			77.0-120		01/29/2021 05:19	<a href="#">WG1612071</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	0.000643	<b>BJ</b>	0.000501	0.00107	1	01/27/2021 22:33	<a href="#">WG1612072</a>
Toluene	U		0.00139	0.00536	1	01/27/2021 22:33	<a href="#">WG1612072</a>
Ethylbenzene	U		0.000790	0.00268	1	01/27/2021 22:33	<a href="#">WG1612072</a>
Total Xylenes	U		0.000944	0.00697	1	01/27/2021 22:33	<a href="#">WG1612072</a>
(S) Toluene-d8	105			75.0-131		01/27/2021 22:33	<a href="#">WG1612072</a>
(S) 4-Bromofluorobenzene	96.1			67.0-138		01/27/2021 22:33	<a href="#">WG1612072</a>
(S) 1,2-Dichloroethane-d4	91.8			70.0-130		01/27/2021 22:33	<a href="#">WG1612072</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.47	<b>J</b>	1.67	4.14	1	01/30/2021 21:15	<a href="#">WG1613106</a>
C28-C40 Oil Range	7.13		0.284	4.14	1	01/30/2021 21:15	<a href="#">WG1613106</a>
(S) o-Terphenyl	62.3			18.0-148		01/30/2021 21:15	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 12:30

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.7		1	01/27/2021 10:16	<a href="#">WG1611243</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	31.6		9.82	21.3	1	01/26/2021 20:00	<a href="#">WG1609663</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0466	<b>B J</b>	0.0232	0.107	1	01/29/2021 04:24	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/29/2021 04:24	<a href="#">WG1613028</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000927	<b>B J</b>	0.000530	0.00113	1	01/27/2021 22:52	<a href="#">WG1612072</a>
Toluene	U		0.00148	0.00567	1	01/27/2021 22:52	<a href="#">WG1612072</a>
Ethylbenzene	0.00259	<b>J</b>	0.000836	0.00284	1	01/27/2021 22:52	<a href="#">WG1612072</a>
Total Xylenes	0.00573	<b>J</b>	0.000999	0.00738	1	01/27/2021 22:52	<a href="#">WG1612072</a>
(S) Toluene-d8	103			75.0-131		01/27/2021 22:52	<a href="#">WG1612072</a>
(S) 4-Bromofluorobenzene	96.9			67.0-138		01/27/2021 22:52	<a href="#">WG1612072</a>
(S) 1,2-Dichloroethane-d4	94.8			70.0-130		01/27/2021 22:52	<a href="#">WG1612072</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	238		17.2	42.7	10	01/29/2021 14:16	<a href="#">WG1613106</a>
C28-C40 Oil Range	742		2.92	42.7	10	01/29/2021 14:16	<a href="#">WG1613106</a>
(S) o-Terphenyl	86.5			18.0-148		01/29/2021 14:16	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 12:45

L1308926

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.8		1	01/27/2021 10:16	<a href="#">WG1611243</a>

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

**Wet Chemistry by Method 300.0**

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	19.5	J	9.92	21.6	1	01/26/2021 20:10	<a href="#">WG1609663</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.770		0.0234	0.108	1	01/29/2021 04:46	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-120		01/29/2021 04:46	<a href="#">WG1613028</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	0.000780	B J	0.000540	0.00116	1	01/27/2021 23:12	<a href="#">WG1612072</a>
Toluene	U		0.00150	0.00578	1	01/27/2021 23:12	<a href="#">WG1612072</a>
Ethylbenzene	0.0475		0.000852	0.00289	1	01/27/2021 23:12	<a href="#">WG1612072</a>
Total Xylenes	0.0896		0.00102	0.00751	1	01/27/2021 23:12	<a href="#">WG1612072</a>
(S) Toluene-d8	101			75.0-131		01/27/2021 23:12	<a href="#">WG1612072</a>
(S) 4-Bromofluorobenzene	97.4			67.0-138		01/27/2021 23:12	<a href="#">WG1612072</a>
(S) 1,2-Dichloroethane-d4	93.2			70.0-130		01/27/2021 23:12	<a href="#">WG1612072</a>

- 8 Al
- 9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	293		17.4	43.1	10	01/29/2021 14:29	<a href="#">WG1613106</a>
C28-C40 Oil Range	869		2.95	43.1	10	01/29/2021 14:29	<a href="#">WG1613106</a>
(S) o-Terphenyl	95.9			18.0-148		01/29/2021 14:29	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 12:50

L1308926

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.1		1	01/27/2021 10:16	<a href="#">WG1611243</a>

1 Cp

2 Tc

**Wet Chemistry by Method 300.0**

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.47	20.6	1	01/26/2021 20:19	<a href="#">WG1609663</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	1.89		0.0223	0.103	1	01/29/2021 05:08	<a href="#">WG1613028</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	110			77.0-120		01/29/2021 05:08	<a href="#">WG1613028</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000576	<b>BJ</b>	0.000495	0.00106	1	01/27/2021 23:30	<a href="#">WG1612072</a>
Toluene	U		0.00138	0.00530	1	01/27/2021 23:30	<a href="#">WG1612072</a>
Ethylbenzene	0.0353		0.000781	0.00265	1	01/27/2021 23:30	<a href="#">WG1612072</a>
Total Xylenes	0.0841		0.000932	0.00689	1	01/27/2021 23:30	<a href="#">WG1612072</a>
(S) <i>Toluene-d8</i>	104			75.0-131		01/27/2021 23:30	<a href="#">WG1612072</a>
(S) <i>4-Bromofluorobenzene</i>	104			67.0-138		01/27/2021 23:30	<a href="#">WG1612072</a>
(S) <i>1,2-Dichloroethane-d4</i>	92.3			70.0-130		01/27/2021 23:30	<a href="#">WG1612072</a>

8 Al

9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	233		16.6	41.2	10	01/29/2021 14:43	<a href="#">WG1613106</a>
C28-C40 Oil Range	586		2.82	41.2	10	01/29/2021 14:43	<a href="#">WG1613106</a>
(S) <i>o</i> -Terphenyl	88.4			18.0-148		01/29/2021 14:43	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 12:55

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.1		1	01/27/2021 10:16	<a href="#">WG1611243</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		9.78	21.3	1	01/26/2021 20:29	<a href="#">WG1609663</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	401		2.44	11.3	100	01/28/2021 08:26	<a href="#">WG1612479</a>
(S) a,a,a-Trifluorotoluene(FID)	96.3			77.0-120		01/28/2021 08:26	<a href="#">WG1612479</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.00421	0.00901	8	01/27/2021 23:50	<a href="#">WG1612072</a>
Toluene	U		0.0117	0.0451	8	01/27/2021 23:50	<a href="#">WG1612072</a>
Ethylbenzene	0.205		0.00665	0.0225	8	01/27/2021 23:50	<a href="#">WG1612072</a>
Total Xylenes	0.497		0.00793	0.0586	8	01/27/2021 23:50	<a href="#">WG1612072</a>
(S) Toluene-d8	104			75.0-131		01/27/2021 23:50	<a href="#">WG1612072</a>
(S) 4-Bromofluorobenzene	105			67.0-138		01/27/2021 23:50	<a href="#">WG1612072</a>
(S) 1,2-Dichloroethane-d4	93.1			70.0-130		01/27/2021 23:50	<a href="#">WG1612072</a>

- 8 Al
- 9 Sc

Sample Narrative:

L1308926-27 WG1612072: Non-target compounds too high to run at a lower dilution.

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	3980		85.6	213	50	01/30/2021 21:42	<a href="#">WG1613106</a>
C28-C40 Oil Range	2090		14.6	213	50	01/30/2021 21:42	<a href="#">WG1613106</a>
(S) o-Terphenyl	733	<u>J7</u>		18.0-148		01/30/2021 21:42	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 13:10

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.0		1	01/27/2021 10:16	<a href="#">WG1611243</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	17.1	J	9.68	21.0	1	01/26/2021 20:38	<a href="#">WG1609663</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.985		0.0228	0.105	1	01/29/2021 05:30	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	109			77.0-120		01/29/2021 05:30	<a href="#">WG1613028</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000746	B J	0.000516	0.00110	1	01/28/2021 00:08	<a href="#">WG1612072</a>
Toluene	U		0.00144	0.00552	1	01/28/2021 00:08	<a href="#">WG1612072</a>
Ethylbenzene	0.0278		0.000814	0.00276	1	01/28/2021 00:08	<a href="#">WG1612072</a>
Total Xylenes	0.0564		0.000972	0.00718	1	01/28/2021 00:08	<a href="#">WG1612072</a>
(S) Toluene-d8	106			75.0-131		01/28/2021 00:08	<a href="#">WG1612072</a>
(S) 4-Bromofluorobenzene	99.3			67.0-138		01/28/2021 00:08	<a href="#">WG1612072</a>
(S) 1,2-Dichloroethane-d4	89.6			70.0-130		01/28/2021 00:08	<a href="#">WG1612072</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	314		18.9	47.1	11.2	01/29/2021 15:10	<a href="#">WG1613106</a>
C28-C40 Oil Range	820		3.23	47.1	11.2	01/29/2021 15:10	<a href="#">WG1613106</a>
(S) o-Terphenyl	101			18.0-148		01/29/2021 15:10	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 13:15

L1308926

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.2		1	01/27/2021 16:09	<a href="#">WG1611244</a>

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

**Wet Chemistry by Method 300.0**

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	14.9	J	9.37	20.4	1	01/27/2021 02:58	<a href="#">WG1609664</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.915		0.0221	0.102	1	01/29/2021 05:52	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	110			77.0-120		01/29/2021 05:52	<a href="#">WG1613028</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	0.000778	B J	0.000485	0.00104	1	01/28/2021 00:27	<a href="#">WG1612072</a>
Toluene	U		0.00135	0.00519	1	01/28/2021 00:27	<a href="#">WG1612072</a>
Ethylbenzene	0.00288		0.000765	0.00259	1	01/28/2021 00:27	<a href="#">WG1612072</a>
Total Xylenes	0.00875		0.000913	0.00674	1	01/28/2021 00:27	<a href="#">WG1612072</a>
(S) Toluene-d8	100			75.0-131		01/28/2021 00:27	<a href="#">WG1612072</a>
(S) 4-Bromofluorobenzene	101			67.0-138		01/28/2021 00:27	<a href="#">WG1612072</a>
(S) 1,2-Dichloroethane-d4	87.7			70.0-130		01/28/2021 00:27	<a href="#">WG1612072</a>

- 8 Al
- 9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	921		16.4	40.7	10	01/29/2021 15:23	<a href="#">WG1613106</a>
C28-C40 Oil Range	1330		2.79	40.7	10	01/29/2021 15:23	<a href="#">WG1613106</a>
(S) o-Terphenyl	145			18.0-148		01/29/2021 15:23	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 13:20

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.1		1	01/27/2021 16:09	<a href="#">WG1611244</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	U		9.38	20.4	1	01/25/2021 17:49	<a href="#">WG1609666</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	0.0843	<b>B J</b>	0.0221	0.102	1	01/29/2021 06:14	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/29/2021 06:14	<a href="#">WG1613028</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	0.000488	<b>B J</b>	0.000485	0.00104	1	01/28/2021 00:46	<a href="#">WG1612072</a>
Toluene	U		0.00135	0.00519	1	01/28/2021 00:46	<a href="#">WG1612072</a>
Ethylbenzene	U		0.000766	0.00260	1	01/28/2021 00:46	<a href="#">WG1612072</a>
Total Xylenes	0.00164	<b>J</b>	0.000914	0.00675	1	01/28/2021 00:46	<a href="#">WG1612072</a>
(S) Toluene-d8	106			75.0-131		01/28/2021 00:46	<a href="#">WG1612072</a>
(S) 4-Bromofluorobenzene	97.0			67.0-138		01/28/2021 00:46	<a href="#">WG1612072</a>
(S) 1,2-Dichloroethane-d4	92.1			70.0-130		01/28/2021 00:46	<a href="#">WG1612072</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	320		16.4	40.8	10	01/29/2021 15:36	<a href="#">WG1613106</a>
C28-C40 Oil Range	612		2.79	40.8	10	01/29/2021 15:36	<a href="#">WG1613106</a>
(S) o-Terphenyl	88.1			18.0-148		01/29/2021 15:36	<a href="#">WG1613106</a>

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

Collected date/time: 01/18/21 13:35

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.2		1	01/27/2021 16:09	<a href="#">WG1611244</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	16.7	J	9.77	21.2	1	01/25/2021 18:05	<a href="#">WG1609666</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.338		0.0230	0.106	1	01/29/2021 06:36	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		01/29/2021 06:36	<a href="#">WG1613028</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		0.000525	0.00112	1	01/28/2021 01:05	<a href="#">WG1612072</a>
Toluene	U		0.00146	0.00562	1	01/28/2021 01:05	<a href="#">WG1612072</a>
Ethylbenzene	0.00227	J	0.000828	0.00281	1	01/28/2021 01:05	<a href="#">WG1612072</a>
Total Xylenes	0.0126		0.000989	0.00730	1	01/28/2021 01:05	<a href="#">WG1612072</a>
(S) Toluene-d8	104			75.0-131		01/28/2021 01:05	<a href="#">WG1612072</a>
(S) 4-Bromofluorobenzene	94.3			67.0-138		01/28/2021 01:05	<a href="#">WG1612072</a>
(S) 1,2-Dichloroethane-d4	91.7			70.0-130		01/28/2021 01:05	<a href="#">WG1612072</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1260		342	849	200	01/29/2021 16:03	<a href="#">WG1613106</a>
C28-C40 Oil Range	5100		58.2	849	200	01/29/2021 16:03	<a href="#">WG1613106</a>
(S) o-Terphenyl	180	J7		18.0-148		01/29/2021 16:03	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 13:40

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.1		1	01/27/2021 16:09	<a href="#">WG1611244</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.48	20.6	1	01/25/2021 18:21	<a href="#">WG1609666</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.173	<b>B</b>	0.0224	0.103	1	01/29/2021 06:58	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	109			77.0-120		01/29/2021 06:58	<a href="#">WG1613028</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	0.000663	<b>B J</b>	0.000495	0.00106	1	01/28/2021 01:24	<a href="#">WG1612072</a>
Toluene	U		0.00138	0.00530	1	01/28/2021 01:24	<a href="#">WG1612072</a>
Ethylbenzene	0.00313		0.000782	0.00265	1	01/28/2021 01:24	<a href="#">WG1612072</a>
Total Xylenes	0.00822		0.000933	0.00689	1	01/28/2021 01:24	<a href="#">WG1612072</a>
(S) Toluene-d8	105			75.0-131		01/28/2021 01:24	<a href="#">WG1612072</a>
(S) 4-Bromofluorobenzene	97.0			67.0-138		01/28/2021 01:24	<a href="#">WG1612072</a>
(S) 1,2-Dichloroethane-d4	86.7			70.0-130		01/28/2021 01:24	<a href="#">WG1612072</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	520		16.6	41.2	10	01/29/2021 15:50	<a href="#">WG1613106</a>
C28-C40 Oil Range	1150		2.82	41.2	10	01/29/2021 15:50	<a href="#">WG1613106</a>
(S) o-Terphenyl	81.8			18.0-148		01/29/2021 15:50	<a href="#">WG1613106</a>

Collected date/time: 01/18/21 00:00

L1308926

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.2		1	01/27/2021 16:09	<a href="#">WG1611244</a>

1 Cp

2 Tc

**Wet Chemistry by Method 300.0**

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.46	20.6	1	01/23/2021 19:12	<a href="#">WG1610464</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	01/29/2021 07:23	<a href="#">WG1613028</a>
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/29/2021 07:23	<a href="#">WG1613028</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000493	0.00106	1	01/28/2021 01:43	<a href="#">WG1612072</a>
Toluene	U		0.00137	0.00528	1	01/28/2021 01:43	<a href="#">WG1612072</a>
Ethylbenzene	U		0.000779	0.00264	1	01/28/2021 01:43	<a href="#">WG1612072</a>
Total Xylenes	U		0.000930	0.00687	1	01/28/2021 01:43	<a href="#">WG1612072</a>
(S) Toluene-d8	102			75.0-131		01/28/2021 01:43	<a href="#">WG1612072</a>
(S) 4-Bromofluorobenzene	96.8			67.0-138		01/28/2021 01:43	<a href="#">WG1612072</a>
(S) 1,2-Dichloroethane-d4	91.4			70.0-130		01/28/2021 01:43	<a href="#">WG1612072</a>

8 Al

9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.66	4.11	1	01/28/2021 09:25	<a href="#">WG1612302</a>
C28-C40 Oil Range	1.32	J	0.282	4.11	1	01/28/2021 09:25	<a href="#">WG1612302</a>
(S) o-Terphenyl	70.7			18.0-148		01/28/2021 09:25	<a href="#">WG1612302</a>

Total Solids by Method 2540 G-2011

[L1308926-01,02,03,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3616885-1 01/27/21 10:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00200			

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1308920-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1308920-01 01/27/21 10:40 • (DUP) R3616885-3 01/27/21 10:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	93.7	93.4	1	0.286		10

Laboratory Control Sample (LCS)

(LCS) R3616885-2 01/27/21 10:40

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

Total Solids by Method 2540 G-2011

[L1308926-09,10,11,12,13,14,15,16,17,18](#)

Method Blank (MB)

(MB) R3616884-1 01/27/21 10:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00200			

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1308926-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1308926-09 01/27/21 10:29 • (DUP) R3616884-3 01/27/21 10:29

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	93.7	93.2	1	0.549		10

Laboratory Control Sample (LCS)

(LCS) R3616884-2 01/27/21 10:29

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

W01611243  
Total Solids by Method 2540 G-2011

[L1308926-19,20,21,22,23,24,25,26,27,28](#)

Method Blank (MB)

(MB) R3616881-1 01/27/21 10:16

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1308926-19 Original Sample (OS) • Duplicate (DUP)

(OS) L1308926-19 01/27/21 10:16 • (DUP) R3616881-3 01/27/21 10:16

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Total Solids	95.6	95.9	1	0.390		10

Laboratory Control Sample (LCS)

(LCS) R3616881-2 01/27/21 10:16

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

WG1611244  
Total Solids by Method 2540 G-2011

[L1308926-29,30,31,32,33](#)

Method Blank (MB)

(MB) R3616933-1 01/27/21 16:09

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1308927-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1308927-05 01/27/21 16:09 • (DUP) R3616933-3 01/27/21 16:09

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	82.5	85.0	1	2.95		10

Laboratory Control Sample (LCS)

(LCS) R3616933-2 01/27/21 16:09

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

Wet Chemistry by Method 300.0

L1308926-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) R3616125-1 01/25/21 16:38

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1308926-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1308926-01 01/25/21 17:06 • (DUP) R3616125-3 01/25/21 17:15

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	4430	4640	10	4.52		20

L1308926-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1308926-20 01/25/21 21:28 • (DUP) R3616125-6 01/25/21 21:37

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	211	192	1	9.46		20

Laboratory Control Sample (LCS)

(LCS) R3616125-2 01/25/21 16:47

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	195	97.3	90.0-110	

L1308926-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1308926-10 01/25/21 19:00 • (MS) R3616125-4 01/25/21 19:09 • (MSD) R3616125-5 01/25/21 19:19

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	537	4920	5340	5250	78.1	61.1	1	80.0-120	<u>E V</u>	<u>E V</u>	1.72	20

Wet Chemistry by Method 300.0

[L1308926-21,22,23,24,25,26,27,28](#)

Method Blank (MB)

(MB) R3616562-1 01/26/21 16:09

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1308878-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1308878-01 01/26/21 16:31 • (DUP) R3616562-3 01/26/21 16:40

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	163	161	1	1.21		20

L1308926-28 Original Sample (OS) • Duplicate (DUP)

(OS) L1308926-28 01/26/21 20:38 • (DUP) R3616562-6 01/26/21 20:48

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	17.1	16.1	1	5.98	↓	20

Laboratory Control Sample (LCS)

(LCS) R3616562-2 01/26/21 16:19

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	191	95.6	90.0-110	

L1308878-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1308878-02 01/26/21 16:50 • (MS) R3616562-4 01/26/21 16:59 • (MSD) R3616562-5 01/26/21 17:09

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	569	544	1010	1060	81.3	90.8	1	80.0-120			5.21	20

Wet Chemistry by Method 300.0

[L1308926-29](#)

Method Blank (MB)

(MB) R3616563-1 01/26/21 22:11

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

<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

L1308904-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1308904-01 01/26/21 22:30 • (DUP) R3616563-3 01/26/21 22:39

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	4330	4740	10	9.00		20

L1308904-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1308904-15 01/27/21 02:11 • (DUP) R3616563-7 01/27/21 02:20

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	12.9	10.6	1	19.7	↓	20

Laboratory Control Sample (LCS)

(LCS) R3616563-4 01/26/21 23:10

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	190	94.9	90.0-110	

L1308904-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1308904-04 01/26/21 23:19 • (MS) R3616563-5 01/26/21 23:29 • (MSD) R3616563-6 01/26/21 23:38

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	528	U	443	466	83.9	88.4	1	80.0-120			5.20	20

Wet Chemistry by Method 300.0

[L1308926-30,31,32](#)

Method Blank (MB)

(MB) R3616129-3 01/25/21 17:33

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

<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

L1308927-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1308927-02 01/25/21 18:53 • (DUP) R3616129-4 01/25/21 19:09

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

L1308997-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1308997-02 01/26/21 00:59 • (DUP) R3616129-7 01/26/21 01:15

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

Laboratory Control Sample (LCS)

(LCS) R3616129-2 01/25/21 16:55

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	203	102	90.0-110	

L1308928-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1308928-03 01/25/21 21:32 • (MS) R3616129-5 01/25/21 21:48 • (MSD) R3616129-6 01/25/21 22:04

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	593	U	614	615	104	104	1	80.0-120			0.130	20

Wet Chemistry by Method 300.0

[L1308926-33](#)

Method Blank (MB)

(MB) R3615640-1 01/23/21 17:39

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1307381-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1307381-01 01/23/21 18:15 • (DUP) R3615640-3 01/23/21 18:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	U	U	1	0.000		20

L1309378-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1309378-10 01/23/21 21:06 • (DUP) R3615640-6 01/23/21 21:16

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	225	229	1	1.76		20

Laboratory Control Sample (LCS)

(LCS) R3615640-2 01/23/21 17:48

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

L1307381-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1307381-02 01/23/21 18:34 • (MS) R3615640-4 01/23/21 18:43 • (MSD) R3615640-5 01/23/21 18:53

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	500	U	499	502	99.8	100	1	80.0-120			0.543	20

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

[L1308926-18,19,20,21,22,23](#)

Method Blank (MB)

(MB) R3617325-2 01/28/21 22:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	93.5			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3617325-1 01/28/21 21:25

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
TPH (GC/FID) Low Fraction	5.50	5.90	107	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			103	77.0-120	

L1310278-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1310278-08 01/28/21 23:04 • (MS) R3617325-3 01/29/21 05:40 • (MSD) R3617325-4 01/29/21 06:01

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
TPH (GC/FID) Low Fraction	109	2.46	122	124	110	112	25	10.0-151			1.63	28
(S) a,a,a-Trifluorotoluene(FID)					111	111		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

[L1308926-01,02,03,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3617045-2 01/28/21 00:14

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3617045-1 01/27/21 23:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.32	115	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			104	77.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1308926-27](#)

Method Blank (MB)

(MB) R3617039-2 01/27/21 23:24

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0527	↓	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.8			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

Laboratory Control Sample (LCS)

(LCS) R3617039-1 01/27/21 22:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.34	97.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			102	77.0-120	

5 Sr

6 Qc

7 Gl

L1308926-27 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1308926-27 01/28/21 08:26 • (MS) R3617039-3 01/28/21 09:31 • (MSD) R3617039-4 01/28/21 09:52

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	614	401	749	943	56.7	88.3	100	10.0-151			22.9	28
(S) a,a,a-Trifluorotoluene(FID)					97.4	98.9		77.0-120				

8 Al

9 Sc

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

[L1308926-09,10](#)

Method Blank (MB)

(MB) R3617321-3 01/28/21 14:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	113			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3617321-2 01/28/21 13:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.34	97.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			101	77.0-120	

L1310369-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1310369-06 01/28/21 19:54 • (MS) R3617321-4 01/28/21 22:13 • (MSD) R3617321-5 01/28/21 22:35

Analyte	Spike Amount (dry) mg/kg	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	97.9	18.1	170	150	100	87.0	25	10.0-151			12.7	28
(S) a,a,a-Trifluorotoluene(FID)					110	108		77.0-120				

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

[L1308926-11,12,13,14,15,16,17,24,25,26,28,29,30,31,32,33](#)

Method Blank (MB)

(MB) R3617399-2 01/29/21 02:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0238	↓	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3617399-1 01/29/21 01:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.84	106	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			107	77.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1308926-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20](#)

Method Blank (MB)

(MB) R3616790-2 01/27/21 08:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	100			75.0-131
(S) 4-Bromofluorobenzene	98.4			67.0-138
(S) 1,2-Dichloroethane-d4	90.1			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3616790-1 01/27/21 07:46

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.126	101	70.0-123	
Ethylbenzene	0.125	0.119	95.2	74.0-126	
Toluene	0.125	0.118	94.4	75.0-121	
Xylenes, Total	0.375	0.364	97.1	72.0-127	
(S) Toluene-d8			97.3	75.0-131	
(S) 4-Bromofluorobenzene			101	67.0-138	
(S) 1,2-Dichloroethane-d4			99.6	70.0-130	

L1308926-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1308926-01 01/27/21 09:02 • (MS) R3616790-3 01/27/21 17:33 • (MSD) R3616790-4 01/27/21 17:52

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.139	U	0.143	0.137	102	98.4	1	10.0-149			3.98	37
Ethylbenzene	0.139	0.0959	0.216	0.204	86.3	77.5	1	10.0-160			5.84	38
Toluene	0.139	U	0.131	0.130	94.4	93.6	1	10.0-156			0.851	38
Xylenes, Total	0.417	0.203	0.598	0.543	94.7	81.6	1	10.0-160			9.56	38
(S) Toluene-d8					98.8	96.5		75.0-131				
(S) 4-Bromofluorobenzene					101	99.8		67.0-138				
(S) 1,2-Dichloroethane-d4					92.4	95.4		70.0-130				

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

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

L1308926-21

Method Blank (MB)

(MB) R3617193-3 01/28/21 10:52

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	99.0			75.0-131
(S) 4-Bromofluorobenzene	96.9			67.0-138
(S) 1,2-Dichloroethane-d4	90.4			70.0-130

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

(LCS) R3617193-1 01/28/21 09:36 • (LCSD) R3617193-2 01/28/21 09:55

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.113	0.116	90.4	92.8	70.0-123			2.62	20
Ethylbenzene	0.125	0.106	0.110	84.8	88.0	74.0-126			3.70	20
Toluene	0.125	0.111	0.115	88.8	92.0	75.0-121			3.54	20
Xylenes, Total	0.375	0.323	0.339	86.1	90.4	72.0-127			4.83	20
(S) Toluene-d8				97.6	97.1	75.0-131				
(S) 4-Bromofluorobenzene				101	102	67.0-138				
(S) 1,2-Dichloroethane-d4				99.9	97.6	70.0-130				

L1308904-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1308904-18 01/28/21 14:03 • (MS) R3617193-4 01/28/21 17:32 • (MSD) R3617193-5 01/28/21 17:51

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.130	0.000493	0.0542	0.0852	41.2	65.1	1	10.0-149		J3	44.6	37
Ethylbenzene	0.130	U	0.0517	0.0813	39.7	62.4	1	10.0-160		J3	44.5	38
Toluene	0.130	U	0.0552	0.0862	42.4	66.2	1	10.0-156		J3	43.8	38
Xylenes, Total	0.391	U	0.167	0.235	42.7	60.2	1	10.0-160			33.9	38
(S) Toluene-d8					99.3	97.3		75.0-131				
(S) 4-Bromofluorobenzene					97.8	96.1		67.0-138				
(S) 1,2-Dichloroethane-d4					93.9	92.4		70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1308926-22,23,24,25,26,27,28,29,30,31,32,33](#)

Method Blank (MB)

(MB) R3617071-3 01/27/21 21:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	0.000600	↓	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	102			75.0-131
(S) 4-Bromofluorobenzene	94.5			67.0-138
(S) 1,2-Dichloroethane-d4	93.9			70.0-130

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

(LCS) R3617071-1 01/27/21 20:40 • (LCSD) R3617071-2 01/27/21 20:59

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.129	0.122	103	97.6	70.0-123			5.58	20
Ethylbenzene	0.125	0.121	0.119	96.8	95.2	74.0-126			1.67	20
Toluene	0.125	0.124	0.122	99.2	97.6	75.0-121			1.63	20
Xylenes, Total	0.375	0.362	0.352	96.5	93.9	72.0-127			2.80	20
(S) Toluene-d8				101	98.3	75.0-131				
(S) 4-Bromofluorobenzene				96.4	101	67.0-138				
(S) 1,2-Dichloroethane-d4				107	106	70.0-130				

L1309011-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1309011-09 01/28/21 03:37 • (MS) R3617071-4 01/28/21 04:34 • (MSD) R3617071-5 01/28/21 04:53

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.151	U	0.100	0.103	66.7	68.4	1	10.0-149			2.63	37
Ethylbenzene	0.151	U	0.101	0.0986	66.9	65.4	1	10.0-160			2.18	38
Toluene	0.151	U	0.102	0.107	67.7	71.0	1	10.0-156			4.81	38
Xylenes, Total	0.452	U	0.295	0.305	65.2	67.4	1	10.0-160			3.35	38
(S) Toluene-d8					99.1	101		75.0-131				
(S) 4-Bromofluorobenzene					93.2	94.4		67.0-138				
(S) 1,2-Dichloroethane-d4					95.2	93.1		70.0-130				

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

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1308926-02,03,04,05,06,07,08,09,10,11,12](#)

Method Blank (MB)

(MB) R3616817-1 01/27/21 23:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	55.1			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3616817-2 01/27/21 23:18

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	32.4	64.8	50.0-150	
(S) o-Terphenyl			45.6	18.0-148	

L1310470-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1310470-05 01/28/21 01:48 • (MS) R3616817-3 01/28/21 02:01 • (MSD) R3616817-4 01/28/21 02:14

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	53.0	118	106	96.2	0.000	0.000	1	50.0-150	J6	J6	9.86	20
(S) o-Terphenyl					32.5	29.5		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

[L1308926-33](#)

Method Blank (MB)

(MB) R3617096-1 01/28/21 08:58

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	80.3			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3617096-2 01/28/21 09:11

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	39.3	78.6	50.0-150	
(S) o-Terphenyl			107	18.0-148	

L1309383-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1309383-01 01/28/21 09:38 • (MS) R3617096-3 01/28/21 09:52 • (MSD) R3617096-4 01/28/21 10:05

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	50.0	2.73	40.0	39.6	74.5	73.7	1	50.0-150			1.01	20
(S) o-Terphenyl					105	103		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

L1308926-01

Method Blank (MB)

(MB) R3616804-1 01/27/21 21:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	0.413	J	0.274	4.00
(S) o-Terphenyl	57.7			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3616804-2 01/27/21 21:15

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	32.6	65.2	50.0-150	
(S) o-Terphenyl			80.9	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

[L1308926-13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32](#)

Method Blank (MB)

(MB) R3617498-1 01/29/21 10:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	68.9			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3617498-2 01/29/21 11:08

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	36.2	72.4	50.0-150	
(S) o-Terphenyl			74.5	18.0-148	

L1308926-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1308926-14 01/29/21 11:35 • (MS) R3617498-3 01/29/21 11:48 • (MSD) R3617498-4 01/29/21 12:02

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	53.2	330	396	408	124	148	1	50.0-150	E	E	3.17	20
(S) o-Terphenyl					82.3	83.5		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
V	The sample concentration is too high to evaluate accurate spike recoveries.



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	AZLA
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













L1308926 COPTETRA NCF TD

R5

Time estimate: 0h

Time spent: 0h

Members



Troy Dunlap (responsible)



Christopher McCord

- Login Clarification needed
- Chain of custody is incomplete
- Please specify Metals requested
- Please specify TCLP requested
- Received additional samples not listed on COC
- Sample IDs on containers do not match IDs on COC
- Client did not "X" analysis
- Chain of Custody is missing
- If no COC: Received by: \_\_\_\_\_
- If no COC: Date/Time: \_\_\_\_\_
- If no COC: Temp./Cont.Rec./pH: \_\_\_\_\_
- If no COC: Carrier: \_\_\_\_\_
- If no COC: Tracking #: \_\_\_\_\_
- Client informed by call
- Client informed by Email
- Client informed by Voicemail
- Date/Time: 1/21/21 15:56
- PM initials: CM
- Client Contact: Christian Lull

Comments

- Troy Dunlap* 21 January 2021 3:38 PM

Received BH-4 (3-4') not listed on the COC.
- Christopher McCord* 21 January 2021 4:29 PM

Log for V8260BTEX, CHLORIDE-300, GRO, DRORIA, TS.



# ANALYTICAL REPORT

February 05, 2021

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

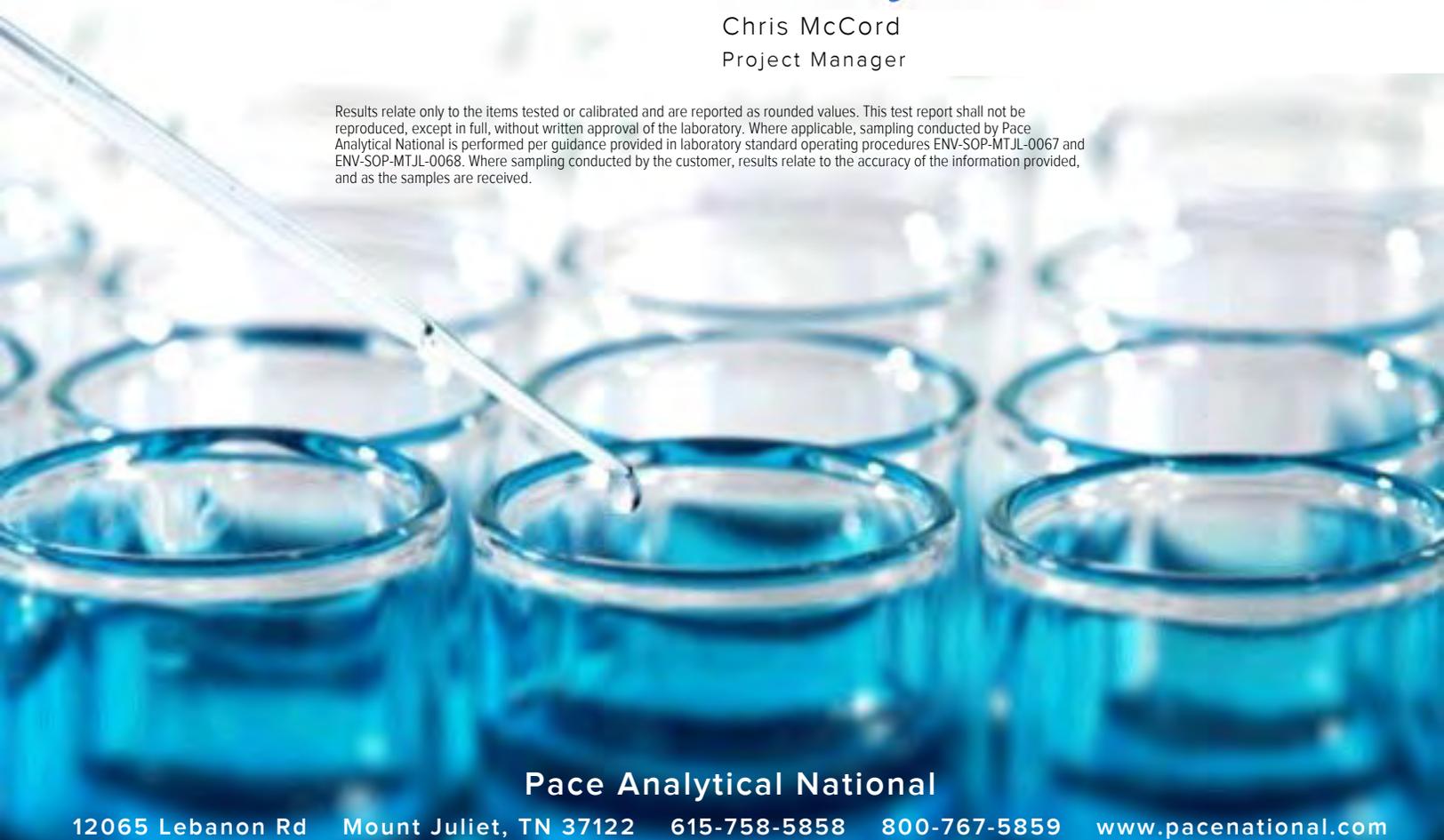
## ConocoPhillips - Tetra Tech

Sample Delivery Group: L1311641  
 Samples Received: 01/21/2021  
 Project Number: 212-MD-02305  
 Description: VGEU 02-20 West  
 Site: LEA COUNTY, NM  
 Report To: Christian Lull  
 901 West Wall  
 Suite 100  
 Midland, TX 79701

Entire Report Reviewed By:

Chris McCord  
Project Manager

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



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 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>
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BH-3 (25') L1311641-02	8
BH-3 (30') L1311641-03	9
BH-4 (9-10') L1311641-04	10
BH-5 (6-7') L1311641-05	11
BH-5 (9-10') L1311641-06	12
BH-6 (6-7') L1311641-07	13
BH-6 (9-10') L1311641-08	14
BH-7 (6-7') L1311641-09	15
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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

BH-1 (15') L1311641-01 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 09:45  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1615131	1	02/03/21 13:16	02/03/21 13:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1615163	1	02/02/21 15:58	02/02/21 23:48	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613977	1	01/30/21 08:58	01/31/21 14:29	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1613926	1	01/30/21 08:58	01/30/21 13:41	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1614200	1	01/31/21 17:32	02/01/21 10:56	TJD	Mt. Juliet, TN



BH-3 (25') L1311641-02 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 10:55  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1615131	1	02/03/21 13:16	02/03/21 13:29	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1615163	1	02/02/21 15:58	02/03/21 00:42	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1614454	1	01/30/21 08:58	02/01/21 10:29	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1613926	1	01/30/21 08:58	01/30/21 14:01	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1615796	1	02/04/21 07:52	02/04/21 14:07	DMG	Mt. Juliet, TN

BH-3 (30') L1311641-03 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 11:00  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1615133	1	02/03/21 17:01	02/03/21 17:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1615163	1	02/02/21 15:58	02/03/21 01:00	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613977	1	01/30/21 08:58	01/31/21 15:10	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1613926	1	01/30/21 08:58	01/30/21 14:20	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1614200	1	01/31/21 17:32	02/01/21 11:48	TJD	Mt. Juliet, TN

BH-4 (9-10') L1311641-04 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 11:25  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1615133	1	02/03/21 17:01	02/03/21 17:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1615163	1	02/02/21 15:58	02/03/21 01:18	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613977	1	01/30/21 08:58	01/31/21 15:30	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1613926	1	01/30/21 08:58	01/30/21 14:39	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1614200	10	01/31/21 17:32	02/01/21 15:30	JN	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1614200	20	01/31/21 17:32	02/02/21 16:57	WCR	Mt. Juliet, TN

BH-5 (6-7') L1311641-05 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 11:45  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1615133	1	02/03/21 17:01	02/03/21 17:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1615163	1	02/02/21 15:58	02/03/21 02:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613977	1	01/30/21 08:58	01/31/21 15:51	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1613926	1	01/30/21 08:58	01/30/21 14:58	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1614200	1	01/31/21 17:32	02/01/21 12:01	TJD	Mt. Juliet, TN

BH-5 (9-10') L1311641-06 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 11:50  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1615133	1	02/03/21 17:01	02/03/21 17:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1615163	1	02/02/21 15:58	02/03/21 02:30	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613977	1	01/30/21 08:58	01/31/21 16:12	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1613926	1	01/30/21 08:58	01/30/21 15:17	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1614200	1	01/31/21 17:32	02/01/21 12:14	TJD	Mt. Juliet, TN

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

BH-6 (6-7') L1311641-07 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 12:35  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1615133	1	02/03/21 17:01	02/03/21 17:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1615163	1	02/02/21 15:58	02/03/21 02:47	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1614454	25	01/30/21 08:58	02/01/21 10:50	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1614108	1	01/30/21 08:58	01/31/21 12:06	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1614200	1	01/31/21 17:32	02/01/21 12:27	TJD	Mt. Juliet, TN

BH-6 (9-10') L1311641-08 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 12:40  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1615133	1	02/03/21 17:01	02/03/21 17:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1615163	1	02/02/21 15:58	02/03/21 03:05	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613977	1	01/30/21 08:58	01/31/21 16:33	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1613926	1	01/30/21 08:58	01/30/21 15:54	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1614200	1	01/31/21 17:32	02/01/21 12:40	TJD	Mt. Juliet, TN

BH-7 (6-7') L1311641-09 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 13:00  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1615133	1	02/03/21 17:01	02/03/21 17:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1615163	1	02/02/21 15:58	02/03/21 03:23	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1614454	100	01/30/21 08:58	02/01/21 11:11	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1613926	8	01/30/21 08:58	01/30/21 16:13	GLN	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1614200	20	01/31/21 17:32	02/01/21 23:05	TJD	Mt. Juliet, TN

BH-7 (9-10') L1311641-10 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 13:05  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1615133	1	02/03/21 17:01	02/03/21 17:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1615163	1	02/02/21 15:58	02/03/21 03:41	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613977	1	01/30/21 08:58	01/31/21 16:53	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1613926	1	01/30/21 08:58	01/30/21 16:32	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1614200	1	01/31/21 17:32	02/01/21 22:41	TJD	Mt. Juliet, TN

BH-8 (6-7') L1311641-11 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 13:25  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1615133	1	02/03/21 17:01	02/03/21 17:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1615163	1	02/02/21 15:58	02/03/21 03:59	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613977	1	01/30/21 08:58	01/31/21 17:14	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1613926	1	01/30/21 08:58	01/30/21 16:51	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1614200	1	01/31/21 17:32	02/01/21 22:16	TJD	Mt. Juliet, TN

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

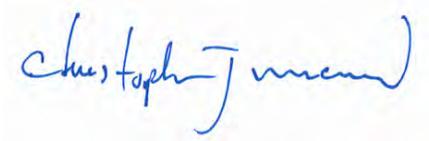
BH-8 (9-10') L1311641-12 Solid

Collected by John Thurston  
 Collected date/time 01/18/21 13:30  
 Received date/time 01/21/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1615133	1	02/03/21 17:01	02/03/21 17:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1615163	1	02/02/21 15:58	02/03/21 04:17	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1613977	1	01/30/21 08:58	01/31/21 17:35	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1613926	1	01/30/21 08:58	01/30/21 17:10	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1614200	1	01/31/21 17:32	02/01/21 13:32	TJD	Mt. Juliet, TN

- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

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



Chris McCord  
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: 01/18/21 09:45

L1311641

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.8		1	02/03/2021 13:29	<a href="#">WG1615131</a>

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

**Wet Chemistry by Method 300.0**

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.50	20.7	1	02/02/2021 23:48	<a href="#">WG1615163</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	01/31/2021 14:29	<a href="#">WG1613977</a>
(S) a,a,a-Trifluorotoluene(FID)	83.3			77.0-120		01/31/2021 14:29	<a href="#">WG1613977</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		0.000498	0.00107	1	01/30/2021 13:41	<a href="#">WG1613926</a>
Toluene	U		0.00139	0.00533	1	01/30/2021 13:41	<a href="#">WG1613926</a>
Ethylbenzene	U		0.000786	0.00266	1	01/30/2021 13:41	<a href="#">WG1613926</a>
Total Xylenes	0.00114	J	0.000938	0.00693	1	01/30/2021 13:41	<a href="#">WG1613926</a>
(S) Toluene-d8	101			75.0-131		01/30/2021 13:41	<a href="#">WG1613926</a>
(S) 4-Bromofluorobenzene	103			67.0-138		01/30/2021 13:41	<a href="#">WG1613926</a>
(S) 1,2-Dichloroethane-d4	93.1			70.0-130		01/30/2021 13:41	<a href="#">WG1613926</a>

- 8 Al
- 9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	9.02		1.66	4.13	1	02/01/2021 10:56	<a href="#">WG1614200</a>
C28-C40 Oil Range	8.98		0.283	4.13	1	02/01/2021 10:56	<a href="#">WG1614200</a>
(S) o-Terphenyl	47.7			18.0-148		02/01/2021 10:56	<a href="#">WG1614200</a>

Collected date/time: 01/18/21 10:55

L1311641

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.0		1	02/03/2021 13:29	<a href="#">WG1615131</a>

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

**Wet Chemistry by Method 300.0**

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	45.6		9.89	21.5	1	02/03/2021 00:42	<a href="#">WG1615163</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0305	J	0.0233	0.108	1	02/01/2021 10:29	<a href="#">WG1614454</a>
(S) a,a,a-Trifluorotoluene(FID)	90.6			77.0-120		02/01/2021 10:29	<a href="#">WG1614454</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		0.000537	0.00115	1	01/30/2021 14:01	<a href="#">WG1613926</a>
Toluene	U		0.00150	0.00575	1	01/30/2021 14:01	<a href="#">WG1613926</a>
Ethylbenzene	U		0.000848	0.00288	1	01/30/2021 14:01	<a href="#">WG1613926</a>
Total Xylenes	U		0.00101	0.00748	1	01/30/2021 14:01	<a href="#">WG1613926</a>
(S) Toluene-d8	103			75.0-131		01/30/2021 14:01	<a href="#">WG1613926</a>
(S) 4-Bromofluorobenzene	96.4			67.0-138		01/30/2021 14:01	<a href="#">WG1613926</a>
(S) 1,2-Dichloroethane-d4	91.8			70.0-130		01/30/2021 14:01	<a href="#">WG1613926</a>

- 8 Al
- 9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	19.5	T8	1.73	4.30	1	02/04/2021 14:07	<a href="#">WG1615796</a>
C28-C40 Oil Range	18.5	T8	0.295	4.30	1	02/04/2021 14:07	<a href="#">WG1615796</a>
(S) o-Terphenyl	73.2			18.0-148		02/04/2021 14:07	<a href="#">WG1615796</a>

Collected date/time: 01/18/21 11:00

L1311641

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.3		1	02/03/2021 17:08	<a href="#">WG1615133</a>

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

**Wet Chemistry by Method 300.0**

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	27.8		9.76	21.2	1	02/03/2021 01:00	<a href="#">WG1615163</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	01/31/2021 15:10	<a href="#">WG1613977</a>
(S) a,a,a-Trifluorotoluene(FID)	91.0			77.0-120		01/31/2021 15:10	<a href="#">WG1613977</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000523	0.00112	1	01/30/2021 14:20	<a href="#">WG1613926</a>
Toluene	U		0.00146	0.00560	1	01/30/2021 14:20	<a href="#">WG1613926</a>
Ethylbenzene	U		0.000826	0.00280	1	01/30/2021 14:20	<a href="#">WG1613926</a>
Total Xylenes	U		0.000986	0.00729	1	01/30/2021 14:20	<a href="#">WG1613926</a>
(S) Toluene-d8	104			75.0-131		01/30/2021 14:20	<a href="#">WG1613926</a>
(S) 4-Bromofluorobenzene	98.4			67.0-138		01/30/2021 14:20	<a href="#">WG1613926</a>
(S) 1,2-Dichloroethane-d4	94.5			70.0-130		01/30/2021 14:20	<a href="#">WG1613926</a>

- 8 Al
- 9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	19.6		1.71	4.24	1	02/01/2021 11:48	<a href="#">WG1614200</a>
C28-C40 Oil Range	13.6		0.291	4.24	1	02/01/2021 11:48	<a href="#">WG1614200</a>
(S) o-Terphenyl	50.6			18.0-148		02/01/2021 11:48	<a href="#">WG1614200</a>

Collected date/time: 01/18/21 11:25

L1311641

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.0		1	02/03/2021 17:08	<a href="#">WG1615133</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.58	20.8	1	02/03/2021 01:18	<a href="#">WG1615163</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0226	0.104	1	01/31/2021 15:30	<a href="#">WG1613977</a>
(S) a,a,a-Trifluorotoluene(FID)	91.8			77.0-120		01/31/2021 15:30	<a href="#">WG1613977</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		0.000506	0.00108	1	01/30/2021 14:39	<a href="#">WG1613926</a>
Toluene	U		0.00141	0.00542	1	01/30/2021 14:39	<a href="#">WG1613926</a>
Ethylbenzene	U		0.000798	0.00271	1	01/30/2021 14:39	<a href="#">WG1613926</a>
Total Xylenes	U		0.000953	0.00704	1	01/30/2021 14:39	<a href="#">WG1613926</a>
(S) Toluene-d8	104			75.0-131		01/30/2021 14:39	<a href="#">WG1613926</a>
(S) 4-Bromofluorobenzene	98.1			67.0-138		01/30/2021 14:39	<a href="#">WG1613926</a>
(S) 1,2-Dichloroethane-d4	90.7			70.0-130		01/30/2021 14:39	<a href="#">WG1613926</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1410		16.8	41.7	10	02/01/2021 15:30	<a href="#">WG1614200</a>
C28-C40 Oil Range	1980		5.71	83.3	20	02/02/2021 16:57	<a href="#">WG1614200</a>
(S) o-Terphenyl	0.000	J7		18.0-148		02/02/2021 16:57	<a href="#">WG1614200</a>

Collected date/time: 01/18/21 11:45

L1311641

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.6		1	02/03/2021 17:08	<a href="#">WG1615133</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.62	20.9	1	02/03/2021 02:12	<a href="#">WG1615163</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	01/31/2021 15:51	<a href="#">WG1613977</a>
(S) a,a,a-Trifluorotoluene(FID)	90.8			77.0-120		01/31/2021 15:51	<a href="#">WG1613977</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		0.000510	0.00109	1	01/30/2021 14:58	<a href="#">WG1613926</a>
Toluene	U		0.00142	0.00546	1	01/30/2021 14:58	<a href="#">WG1613926</a>
Ethylbenzene	U		0.000805	0.00273	1	01/30/2021 14:58	<a href="#">WG1613926</a>
Total Xylenes	U		0.000961	0.00710	1	01/30/2021 14:58	<a href="#">WG1613926</a>
(S) Toluene-d8	101			75.0-131		01/30/2021 14:58	<a href="#">WG1613926</a>
(S) 4-Bromofluorobenzene	103			67.0-138		01/30/2021 14:58	<a href="#">WG1613926</a>
(S) 1,2-Dichloroethane-d4	93.5			70.0-130		01/30/2021 14:58	<a href="#">WG1613926</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	8.91		1.68	4.18	1	02/01/2021 12:01	<a href="#">WG1614200</a>
C28-C40 Oil Range	9.22		0.287	4.18	1	02/01/2021 12:01	<a href="#">WG1614200</a>
(S) o-Terphenyl	56.6			18.0-148		02/01/2021 12:01	<a href="#">WG1614200</a>

Collected date/time: 01/18/21 11:50

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Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.8		1	02/03/2021 17:08	<a href="#">WG1615133</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	10.9	J	9.60	20.9	1	02/03/2021 02:30	<a href="#">WG1615163</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0226	0.104	1	01/31/2021 16:12	<a href="#">WG1613977</a>
(S) a,a,a-Trifluorotoluene(FID)	87.8			77.0-120		01/31/2021 16:12	<a href="#">WG1613977</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		0.000508	0.00109	1	01/30/2021 15:17	<a href="#">WG1613926</a>
Toluene	U		0.00141	0.00544	1	01/30/2021 15:17	<a href="#">WG1613926</a>
Ethylbenzene	U		0.000801	0.00272	1	01/30/2021 15:17	<a href="#">WG1613926</a>
Total Xylenes	U		0.000957	0.00707	1	01/30/2021 15:17	<a href="#">WG1613926</a>
(S) Toluene-d8	101			75.0-131		01/30/2021 15:17	<a href="#">WG1613926</a>
(S) 4-Bromofluorobenzene	101			67.0-138		01/30/2021 15:17	<a href="#">WG1613926</a>
(S) 1,2-Dichloroethane-d4	92.6			70.0-130		01/30/2021 15:17	<a href="#">WG1613926</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.72		1.68	4.17	1	02/01/2021 12:14	<a href="#">WG1614200</a>
C28-C40 Oil Range	5.18		0.286	4.17	1	02/01/2021 12:14	<a href="#">WG1614200</a>
(S) o-Terphenyl	64.2			18.0-148		02/01/2021 12:14	<a href="#">WG1614200</a>

Collected date/time: 01/18/21 12:35

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Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.9		1	02/03/2021 17:08	<a href="#">WG1615133</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.90	21.5	1	02/03/2021 02:47	<a href="#">WG1615163</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	7.68		0.626	2.88	25	02/01/2021 10:50	<a href="#">WG1614454</a>
(S) a,a,a-Trifluorotoluene(FID)	95.0			77.0-120		02/01/2021 10:50	<a href="#">WG1614454</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	0.000720	J	0.000538	0.00115	1	01/31/2021 12:06	<a href="#">WG1614108</a>
Toluene	0.00738		0.00150	0.00576	1	01/31/2021 12:06	<a href="#">WG1614108</a>
Ethylbenzene	0.00461		0.000850	0.00288	1	01/31/2021 12:06	<a href="#">WG1614108</a>
Total Xylenes	0.0270		0.00101	0.00749	1	01/31/2021 12:06	<a href="#">WG1614108</a>
(S) Toluene-d8	115			75.0-131		01/31/2021 12:06	<a href="#">WG1614108</a>
(S) 4-Bromofluorobenzene	110			67.0-138		01/31/2021 12:06	<a href="#">WG1614108</a>
(S) 1,2-Dichloroethane-d4	86.7			70.0-130		01/31/2021 12:06	<a href="#">WG1614108</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.20	J	1.73	4.31	1	02/01/2021 12:27	<a href="#">WG1614200</a>
C28-C40 Oil Range	2.28	J	0.295	4.31	1	02/01/2021 12:27	<a href="#">WG1614200</a>
(S) o-Terphenyl	72.9			18.0-148		02/01/2021 12:27	<a href="#">WG1614200</a>

Collected date/time: 01/18/21 12:40

L1311641

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.8		1	02/03/2021 17:08	<a href="#">WG1615133</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.60	20.9	1	02/03/2021 03:05	<a href="#">WG1615163</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0574	J	0.0226	0.104	1	01/31/2021 16:33	<a href="#">WG1613977</a>
(S) a,a,a-Trifluorotoluene(FID)	90.6			77.0-120		01/31/2021 16:33	<a href="#">WG1613977</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		0.000508	0.00109	1	01/30/2021 15:54	<a href="#">WG1613926</a>
Toluene	U		0.00141	0.00544	1	01/30/2021 15:54	<a href="#">WG1613926</a>
Ethylbenzene	U		0.000802	0.00272	1	01/30/2021 15:54	<a href="#">WG1613926</a>
Total Xylenes	U		0.000957	0.00707	1	01/30/2021 15:54	<a href="#">WG1613926</a>
(S) Toluene-d8	105			75.0-131		01/30/2021 15:54	<a href="#">WG1613926</a>
(S) 4-Bromofluorobenzene	96.8			67.0-138		01/30/2021 15:54	<a href="#">WG1613926</a>
(S) 1,2-Dichloroethane-d4	93.9			70.0-130		01/30/2021 15:54	<a href="#">WG1613926</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	80.8		1.68	4.17	1	02/01/2021 12:40	<a href="#">WG1614200</a>
C28-C40 Oil Range	137		0.286	4.17	1	02/01/2021 12:40	<a href="#">WG1614200</a>
(S) o-Terphenyl	50.2			18.0-148		02/01/2021 12:40	<a href="#">WG1614200</a>

Collected date/time: 01/18/21 13:00

L1311641

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.4		1	02/03/2021 17:08	<a href="#">WG1615133</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.85	21.4	1	02/03/2021 03:23	<a href="#">WG1615163</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	111		2.48	11.4	100	02/01/2021 11:11	<a href="#">WG1614454</a>
(S) a,a,a-Trifluorotoluene(FID)	94.1			77.0-120		02/01/2021 11:11	<a href="#">WG1614454</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		0.00427	0.00913	8	01/30/2021 16:13	<a href="#">WG1613926</a>
Toluene	U		0.0119	0.0457	8	01/30/2021 16:13	<a href="#">WG1613926</a>
Ethylbenzene	0.0404		0.00674	0.0228	8	01/30/2021 16:13	<a href="#">WG1613926</a>
Total Xylenes	0.116		0.00804	0.0594	8	01/30/2021 16:13	<a href="#">WG1613926</a>
(S) Toluene-d8	103			75.0-131		01/30/2021 16:13	<a href="#">WG1613926</a>
(S) 4-Bromofluorobenzene	102			67.0-138		01/30/2021 16:13	<a href="#">WG1613926</a>
(S) 1,2-Dichloroethane-d4	92.6			70.0-130		01/30/2021 16:13	<a href="#">WG1613926</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2320		34.5	85.7	20	02/01/2021 23:05	<a href="#">WG1614200</a>
C28-C40 Oil Range	1130		5.87	85.7	20	02/01/2021 23:05	<a href="#">WG1614200</a>
(S) o-Terphenyl	0.000	J7		18.0-148		02/01/2021 23:05	<a href="#">WG1614200</a>

Collected date/time: 01/18/21 13:05

L1311641

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.3		1	02/03/2021 17:08	<a href="#">WG1615133</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		10.1	21.9	1	02/03/2021 03:41	<a href="#">WG1615163</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.386		0.0238	0.109	1	01/31/2021 16:53	<a href="#">WG1613977</a>
(S) a,a,a-Trifluorotoluene(FID)	89.8			77.0-120		01/31/2021 16:53	<a href="#">WG1613977</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000555	0.00119	1	01/30/2021 16:32	<a href="#">WG1613926</a>
Toluene	U		0.00155	0.00595	1	01/30/2021 16:32	<a href="#">WG1613926</a>
Ethylbenzene	U		0.000877	0.00297	1	01/30/2021 16:32	<a href="#">WG1613926</a>
Total Xylenes	U		0.00105	0.00773	1	01/30/2021 16:32	<a href="#">WG1613926</a>
(S) Toluene-d8	99.8			75.0-131		01/30/2021 16:32	<a href="#">WG1613926</a>
(S) 4-Bromofluorobenzene	103			67.0-138		01/30/2021 16:32	<a href="#">WG1613926</a>
(S) 1,2-Dichloroethane-d4	94.3			70.0-130		01/30/2021 16:32	<a href="#">WG1613926</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	84.6		1.76	4.38	1	02/01/2021 22:41	<a href="#">WG1614200</a>
C28-C40 Oil Range	52.3		0.300	4.38	1	02/01/2021 22:41	<a href="#">WG1614200</a>
(S) o-Terphenyl	57.2			18.0-148		02/01/2021 22:41	<a href="#">WG1614200</a>

Collected date/time: 01/18/21 13:25

L1311641

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.8		1	02/03/2021 17:08	<a href="#">WG1615133</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	12.6	J	9.50	20.7	1	02/03/2021 03:59	<a href="#">WG1615163</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	01/31/2021 17:14	<a href="#">WG1613977</a>
(S) a,a,a-Trifluorotoluene(FID)	89.8			77.0-120		01/31/2021 17:14	<a href="#">WG1613977</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		0.000498	0.00107	1	01/30/2021 16:51	<a href="#">WG1613926</a>
Toluene	U		0.00139	0.00533	1	01/30/2021 16:51	<a href="#">WG1613926</a>
Ethylbenzene	U		0.000786	0.00267	1	01/30/2021 16:51	<a href="#">WG1613926</a>
Total Xylenes	U		0.000938	0.00693	1	01/30/2021 16:51	<a href="#">WG1613926</a>
(S) Toluene-d8	102			75.0-131		01/30/2021 16:51	<a href="#">WG1613926</a>
(S) 4-Bromofluorobenzene	97.8			67.0-138		01/30/2021 16:51	<a href="#">WG1613926</a>
(S) 1,2-Dichloroethane-d4	95.8			70.0-130		01/30/2021 16:51	<a href="#">WG1613926</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	13.0		1.66	4.13	1	02/01/2021 22:16	<a href="#">WG1614200</a>
C28-C40 Oil Range	22.2		0.283	4.13	1	02/01/2021 22:16	<a href="#">WG1614200</a>
(S) o-Terphenyl	51.1			18.0-148		02/01/2021 22:16	<a href="#">WG1614200</a>

Collected date/time: 01/18/21 13:30

L1311641

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.4		1	02/03/2021 17:08	<a href="#">WG1615133</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	214		9.64	21.0	1	02/03/2021 04:17	<a href="#">WG1615163</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.629		0.0227	0.105	1	01/31/2021 17:35	<a href="#">WG1613977</a>
(S) a,a,a-Trifluorotoluene(FID)	88.7			77.0-120		01/31/2021 17:35	<a href="#">WG1613977</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		0.000512	0.00110	1	01/30/2021 17:10	<a href="#">WG1613926</a>
Toluene	U		0.00143	0.00548	1	01/30/2021 17:10	<a href="#">WG1613926</a>
Ethylbenzene	U		0.000808	0.00274	1	01/30/2021 17:10	<a href="#">WG1613926</a>
Total Xylenes	0.00195	J	0.000965	0.00713	1	01/30/2021 17:10	<a href="#">WG1613926</a>
(S) Toluene-d8	103			75.0-131		01/30/2021 17:10	<a href="#">WG1613926</a>
(S) 4-Bromofluorobenzene	99.2			67.0-138		01/30/2021 17:10	<a href="#">WG1613926</a>
(S) 1,2-Dichloroethane-d4	96.7			70.0-130		01/30/2021 17:10	<a href="#">WG1613926</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	242		1.69	4.19	1	02/01/2021 13:32	<a href="#">WG1614200</a>
C28-C40 Oil Range	143		0.287	4.19	1	02/01/2021 13:32	<a href="#">WG1614200</a>
(S) o-Terphenyl	111			18.0-148		02/01/2021 13:32	<a href="#">WG1614200</a>

Total Solids by Method 2540 G-2011

[L1311641-01.02](#)

Method Blank (MB)

(MB) R3619354-1 02/03/21 13:29

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1310751-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1310751-04 02/03/21 13:29 • (DUP) R3619354-3 02/03/21 13:29

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	84.9	83.7	1	1.41		10

Laboratory Control Sample (LCS)

(LCS) R3619354-2 02/03/21 13:29

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.1	100	85.0-115	

Total Solids by Method 2540 G-2011

[L1311641-03.04.05.06.07.08.09.10.11.12](#)

### Method Blank (MB)

(MB) R3619327-1 02/03/21 17:08

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

### L1311641-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1311641-03 02/03/21 17:08 • (DUP) R3619327-3 02/03/21 17:08

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Total Solids	94.3	93.5	1	0.888		10

### Laboratory Control Sample (LCS)

(LCS) R3619327-2 02/03/21 17:08

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

Wet Chemistry by Method 300.0

[L1311641-01,02,03,04,05,06,07,08,09,10,11,12](#)

Method Blank (MB)

(MB) R3618848-1 02/02/21 22:37

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

<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

L1311844-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1311844-07 02/03/21 06:58 • (DUP) R3618848-6 02/03/21 07:16

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1770	1800	5	1.70		20

Laboratory Control Sample (LCS)

(LCS) R3618848-2 02/02/21 22:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	193	96.5	90.0-110	

L1311641-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1311641-01 02/02/21 23:48 • (MS) R3618848-4 02/03/21 00:06 • (MSD) R3618848-5 02/03/21 00:24

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	516	U	503	502	97.4	97.2	1	80.0-120			0.161	20

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

[L1311641-01,03,04,05,06,08,10,11,12](#)

Method Blank (MB)

(MB) R3618053-2 01/31/21 11:39

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3618053-1 01/31/21 10:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.08	92.4	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			102	77.0-120	

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

[L1311641-02.07.09](#)

Method Blank (MB)

(MB) R3618124-2 02/01/21 01:37

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)	93.6			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3618124-1 02/01/21 00:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.00	109	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			108	77.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1311641-01,02,03,04,05,06,08,09,10,11,12](#)

Method Blank (MB)

(MB) R3617853-3 01/30/21 12:58

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	105			75.0-131
(S) 4-Bromofluorobenzene	96.6			67.0-138
(S) 1,2-Dichloroethane-d4	84.6			70.0-130

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

(LCS) R3617853-1 01/30/21 11:42 • (LCSD) R3617853-2 01/30/21 12:01

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.137	0.135	110	108	70.0-123			1.47	20
Ethylbenzene	0.125	0.141	0.144	113	115	74.0-126			2.11	20
Toluene	0.125	0.136	0.133	109	106	75.0-121			2.23	20
Xylenes, Total	0.375	0.425	0.431	113	115	72.0-127			1.40	20
(S) Toluene-d8				98.1	98.4	75.0-131				
(S) 4-Bromofluorobenzene				100	108	67.0-138				
(S) 1,2-Dichloroethane-d4				98.5	98.3	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1311641-07](#)

Method Blank (MB)

(MB) R3618040-3 01/31/21 06:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	114			75.0-131
(S) 4-Bromofluorobenzene	110			67.0-138
(S) 1,2-Dichloroethane-d4	86.3			70.0-130

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

(LCS) R3618040-1 01/31/21 05:17 • (LCSD) R3618040-2 01/31/21 05:36

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.119	0.120	95.2	96.0	70.0-123			0.837	20
Ethylbenzene	0.125	0.126	0.129	101	103	74.0-126			2.35	20
Toluene	0.125	0.125	0.126	100	101	75.0-121			0.797	20
Xylenes, Total	0.375	0.389	0.391	104	104	72.0-127			0.513	20
(S) Toluene-d8				110	110	75.0-131				
(S) 4-Bromofluorobenzene				110	113	67.0-138				
(S) 1,2-Dichloroethane-d4				84.1	86.3	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1311641-01.03.04.05.06.07.08.09.10.11.12](#)

Method Blank (MB)

(MB) R3618035-1 02/01/21 04:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	67.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3618035-2 02/01/21 05:20

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	46.5	93.0	50.0-150	
(S) o-Terphenyl			61.1	18.0-148	

L1311641-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1311641-01 02/01/21 10:56 • (MS) R3618035-3 02/01/21 11:09 • (MSD) R3618035-4 02/01/21 11:22

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	50.6	9.02	53.5	50.3	87.9	81.6	1	50.0-150			6.17	20
(S) o-Terphenyl					50.0	46.2		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1311641-02](#)

Method Blank (MB)

(MB) R3619808-1 02/04/21 11:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	69.8			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3619808-2 02/04/21 11:38

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	39.5	79.0	50.0-150	
(S) o-Terphenyl			93.5	18.0-148	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Guide to Reading and Understanding Your Laboratory Report

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

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

### Abbreviations and Definitions

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

### Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
T8	Sample(s) received past/too close to holding time expiration.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

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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	AZLA
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		

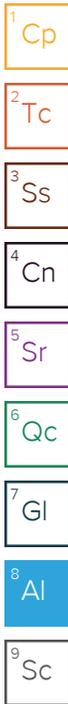
Pace Analytical National 6000 South Eastern Avenue Ste 9A Las Vegas, NV, 89119

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



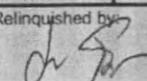
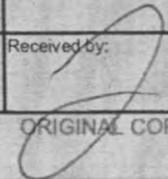






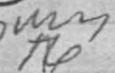


Analysis Request of Chain of Custody Record

 <b>Tetra Tech, Inc.</b>		901 West Wall Street, Suite 100 Midland, Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946		67308926 L1311641																												
Client Name: Conoco Phillips		Site Manager: Christian Llull		<b>ANALYSIS REQUEST</b> (Circle or Specify Method No.)																												
Project Name: VGEU 02-20 WEST		Contact Info: Email: christian.llull@tetratech.com Phone: (512) 338-1667																														
Project Location: (county, state) Lea County, New Mexico		Project #: 212C-MD-02305																														
Invoice to: Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701																																
Receiving Laboratory: Pace Analytical		Sampler Signature: John Thurston																														
Comments: COPTETRA Acctnum																																
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8280B	TPH TX1005 (Ext to C35)	TPH 8015M (ORO - 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	TCAP Serm Volatiles	RCI	GCMS Vol. 8260B / 624	GCMS Seml. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8016R	HOLD		
		YEAR: 2021		WATER	SOIL	HCL	HNO <sub>3</sub>	ICE																							NONE	
		DATE	TIME																													
	BH-8 (6-7')	1/18/2021	13:25	X			X		1	N	X	X													X						X	-09 11
	BH-8 (9-10')	1/18/2021	13:30	X			X		1	N	X	X													X						X	-10 12
	BH-9 (0-1')	1/18/2021	13:35	X			X		1	N	X	X													X						X	-31
	BH-9 (1-1.5')	1/18/2021	13:40	X			X		1	N	X	X													X						X	-32
Relinquished by: 		Date: 1/20/21 Time: 1500		Received by: 		Date: 1/21 Time: 0900				<b>LAB USE ONLY</b>  REMARKS: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr. <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report		Sample Temperature																				
Relinquished by:		Date: Time:		Received by:		Date: Time:																										
Relinquished by:		Date: Time:		Received by:		Date: Time:																										

ORIGINAL COPY

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

1.7±0=1.7 

R1/R2

**L1308926 \*COPTETRA\* goes OOH Monday, 2/1 - 01-145**

Please log all hold samples for V8260BTEX, GRO, DRORLA, CHLORIDE-300, TS. Log as R5 due 2/5. Refer to 01-145 for hold samples.

Adjust RUSH multiplier for V8260BTEX, GRO to 2x for analysis hold time expiring on Monday, 2/1. Adjust RUSH multiplier for DRORLA to 1.75x for extraction hold time expiring on Monday, 2/1.

Thanks,  
Chris

From: Dickerson, Ryan <Ryan.Dickerson@tetratech.com>  
Sent: Friday, January 29, 2021 1:11 PM  
To: Chris McCord <Chris.McCord@pacelabs.com>  
Cc: Llull, Christian <Christian.Llull@tetratech.com>; Furse, Nik <Nik.Furse@tetratech.com>  
Subject: L1308926 - Run all HOLD samples

**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.

Chris,  
Can you run the 11 hold samples for L1308926 too? Also, Can you change the project name from "VGEU 02-20 East" to "VGEU 02-20 West".

Thanks,

Ryan Dickerson | Senior Staff Geologist  
Direct +1 (512) 338-2889 | Main +1 (512) 338-1667 | Cell +1 (512) 217-7254 |  
ryan.dickerson@tetratech.com<mailto:ryan.dickerson@tetratech.com>  
Tetra Tech | Leading with Science(r) | OGA  
8911 N. Capital of TX Hwy. | Bldg. 2, Ste 2310 | Austin, TX 78759 | tetratech.com

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P Please consider the environment before printing this email

**Time estimate:** oh      **Time spent:** oh

**Members**

 Christopher McCord (responsible)



# ANALYTICAL REPORT

June 02, 2021

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

## ConocoPhillips - Tetra Tech

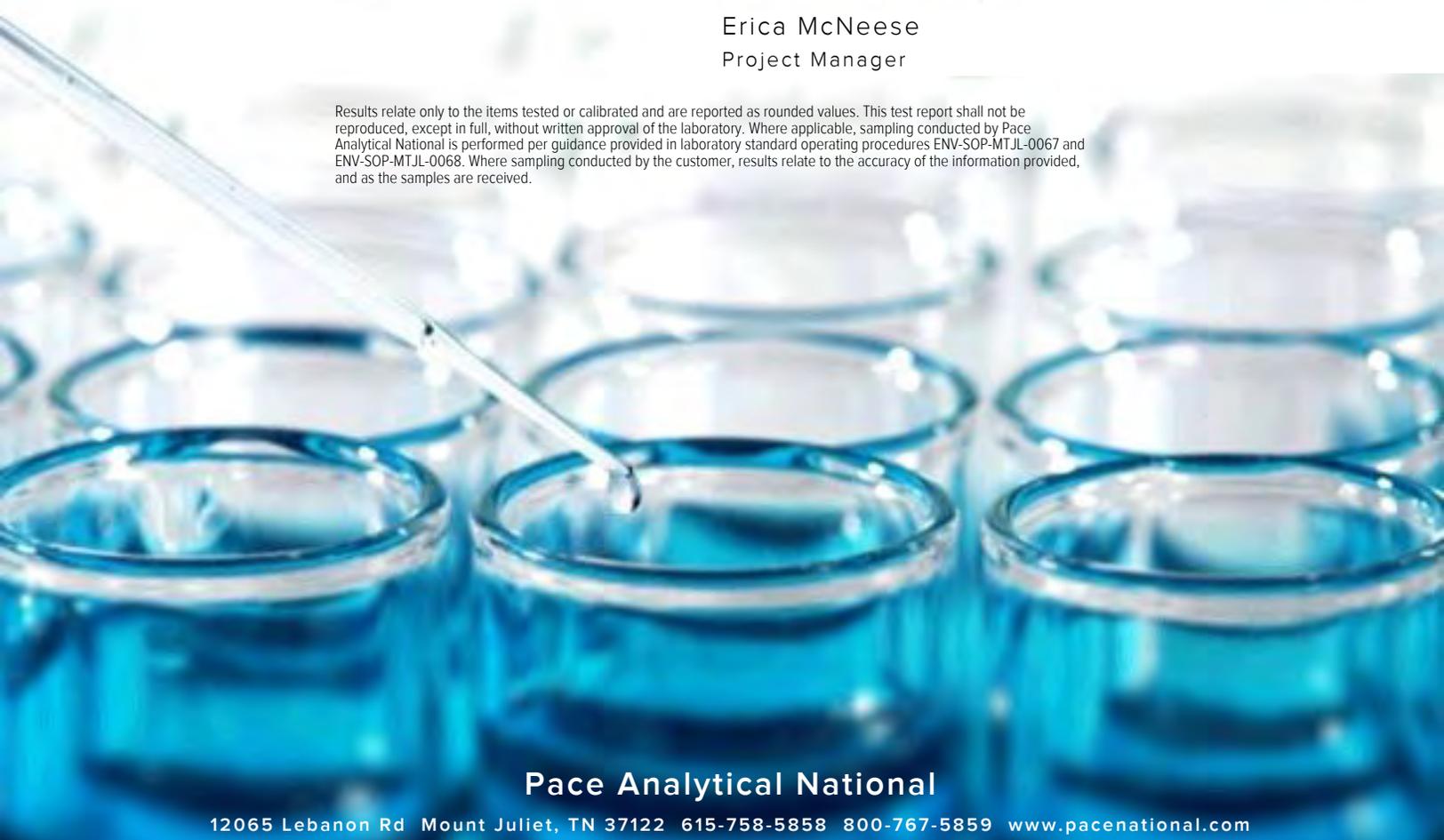
Sample Delivery Group: L1355917  
 Samples Received: 05/20/2021  
 Project Number: 212C-MD-02305  
 Description: VGEU 02-20 West Release

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

Entire Report Reviewed By:

Erica McNeese  
Project Manager

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



Pace Analytical National

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

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BH-10 (0-1) L1355917-01 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677024	1	05/25/21 19:32	05/25/21 19:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 03:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	1	05/25/21 19:26	05/28/21 14:35	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	1	05/25/21 19:26	05/26/21 23:58	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 07:08	CAG	Mt. Juliet, TN

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

BH-10 (2-3) L1355917-02 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677024	1	05/25/21 19:32	05/25/21 19:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 04:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	1	05/25/21 19:26	05/28/21 14:58	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	1	05/25/21 19:26	05/27/21 00:17	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 03:59	CAG	Mt. Juliet, TN

BH-10 (3-4) L1355917-03 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677026	1	05/26/21 11:51	05/26/21 11:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 04:11	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	1	05/25/21 19:26	05/28/21 15:22	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	1	05/25/21 19:26	05/27/21 00:36	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 04:13	CAG	Mt. Juliet, TN

BH-11 (0-1) L1355917-04 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677026	1	05/26/21 11:51	05/26/21 11:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 04:21	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	1	05/25/21 19:26	05/28/21 15:46	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	1	05/25/21 19:26	05/27/21 00:55	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 06:55	CAG	Mt. Juliet, TN

BH-11 (3-4) L1355917-05 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677026	1	05/26/21 11:51	05/26/21 11:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 04:30	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	1	05/25/21 19:26	05/28/21 16:10	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	1	05/25/21 19:26	05/27/21 01:14	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 07:22	CAG	Mt. Juliet, TN

BH-11 (4-5) L1355917-06 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677026	1	05/26/21 11:51	05/26/21 11:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 04:59	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	1	05/25/21 19:26	05/28/21 16:34	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	1	05/25/21 19:26	05/27/21 01:33	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	5	05/26/21 15:43	05/27/21 15:30	CAG	Mt. Juliet, TN

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

BH-11 (9-10) L1355917-07 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677026	1	05/26/21 11:51	05/26/21 11:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 05:08	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	100	05/25/21 19:26	05/28/21 19:20	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	8	05/25/21 19:26	05/27/21 03:47	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	10	05/26/21 15:43	05/27/21 15:43	CAG	Mt. Juliet, TN

BH-12 (0-1) L1355917-08 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677026	1	05/26/21 11:51	05/26/21 11:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 05:18	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	1	05/25/21 19:26	05/28/21 16:58	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	1	05/25/21 19:26	05/27/21 01:52	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 15:16	CAG	Mt. Juliet, TN

BH-12 (2-3) L1355917-09 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677026	1	05/26/21 11:51	05/26/21 11:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 05:27	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	1	05/25/21 19:26	05/28/21 17:22	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	1	05/25/21 19:26	05/27/21 02:11	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 04:26	CAG	Mt. Juliet, TN

BH-12 (4-5) L1355917-10 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677026	1	05/26/21 11:51	05/26/21 11:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 05:37	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	1	05/25/21 19:26	05/28/21 17:45	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	1	05/25/21 19:26	05/27/21 02:30	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 04:40	CAG	Mt. Juliet, TN

BH-12 (9-10) L1355917-11 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677026	1	05/26/21 11:51	05/26/21 11:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 05:56	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	1	05/25/21 19:26	05/28/21 18:09	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	1	05/25/21 19:26	05/27/21 02:49	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 04:53	CAG	Mt. Juliet, TN

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

BH-13 (0-1) L1355917-12 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677026	1	05/26/21 11:51	05/26/21 11:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 06:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	1	05/25/21 19:26	05/28/21 18:33	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	1	05/25/21 19:26	05/27/21 03:08	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 06:14	CAG	Mt. Juliet, TN

BH-13 (2-3) L1355917-13 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677027	1	05/26/21 11:44	05/26/21 11:50	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 06:15	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1678821	1	05/25/21 19:26	05/28/21 18:57	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677689	1	05/25/21 19:26	05/27/21 03:27	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 05:07	CAG	Mt. Juliet, TN

BH-13 (3-4) L1355917-14 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677027	1	05/26/21 11:44	05/26/21 11:50	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 06:25	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1677712	1	05/25/21 19:26	05/27/21 01:13	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677778	1	05/25/21 19:26	05/26/21 12:35	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 05:20	CAG	Mt. Juliet, TN

BH-13 (4-5) L1355917-15 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677027	1	05/26/21 11:44	05/26/21 11:50	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	5	06/01/21 23:15	06/02/21 06:53	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1677712	1	05/25/21 19:26	05/27/21 01:35	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677778	1	05/25/21 19:26	05/26/21 12:54	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 05:34	CAG	Mt. Juliet, TN

BH-14 (0-1) L1355917-16 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677027	1	05/26/21 11:44	05/26/21 11:50	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 07:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1677712	1	05/25/21 19:26	05/27/21 01:57	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677778	1	05/25/21 19:26	05/26/21 13:13	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 06:28	CAG	Mt. Juliet, TN

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

BH-14 (2-3) L1355917-17 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677027	1	05/26/21 11:44	05/26/21 11:50	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 07:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1677712	1	05/25/21 19:26	05/27/21 02:19	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677778	1	05/25/21 19:26	05/26/21 13:32	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 05:47	CAG	Mt. Juliet, TN

BH-14 (3-4) L1355917-18 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677027	1	05/26/21 11:44	05/26/21 11:50	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 07:22	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1677712	1	05/25/21 19:26	05/27/21 02:41	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677778	1	05/25/21 19:26	05/26/21 13:51	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677870	1	05/26/21 15:43	05/27/21 06:01	CAG	Mt. Juliet, TN

BH-14 (9-10) L1355917-19 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677027	1	05/26/21 11:44	05/26/21 11:50	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 07:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1677712	1	05/25/21 19:26	05/27/21 03:04	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677778	1	05/25/21 19:26	05/26/21 14:10	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677874	1	05/26/21 20:47	05/27/21 05:53	CAG	Mt. Juliet, TN

BH-16 (0-1) L1355917-20 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677027	1	05/26/21 11:44	05/26/21 11:50	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680544	1	06/01/21 23:15	06/02/21 07:41	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1677712	1	05/25/21 19:26	05/27/21 03:26	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677778	1	05/25/21 19:26	05/26/21 14:29	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677874	1	05/26/21 20:47	05/27/21 19:12	CAG	Mt. Juliet, TN

BH-16 (9-10) L1355917-21 Solid

Collected by Devin Dominguez  
 Collected date/time 05/14/21 00:00  
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1677027	1	05/26/21 11:44	05/26/21 11:50	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1678508	1	05/27/21 15:18	05/28/21 00:15	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1677712	1	05/25/21 19:26	05/27/21 03:48	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677778	1	05/25/21 19:26	05/26/21 14:47	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677874	20	05/26/21 20:47	05/29/21 04:01	CAG	Mt. Juliet, TN

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

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

Erica McNeese  
Project Manager

- <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: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	93.8		1	05/25/2021 19:42	<a href="#">WG1677024</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	10.3	J	9.81	21.3	1	06/02/2021 03:24	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0231	0.107	1	05/28/2021 14:35	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	94.6			77.0-120		05/28/2021 14:35	<a href="#">WG1678821</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000529	0.00113	1	05/26/2021 23:58	<a href="#">WG1677689</a>
Toluene	U		0.00147	0.00567	1	05/26/2021 23:58	<a href="#">WG1677689</a>
Ethylbenzene	U		0.000835	0.00283	1	05/26/2021 23:58	<a href="#">WG1677689</a>
Total Xylenes	0.00113	J	0.000997	0.00737	1	05/26/2021 23:58	<a href="#">WG1677689</a>
(S) Toluene-d8	105			75.0-131		05/26/2021 23:58	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	91.1			67.0-138		05/26/2021 23:58	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	69.8	J2		70.0-130		05/26/2021 23:58	<a href="#">WG1677689</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	14.7		1.72	4.27	1	05/27/2021 07:08	<a href="#">WG1677870</a>
C28-C40 Oil Range	30.9		0.292	4.27	1	05/27/2021 07:08	<a href="#">WG1677870</a>
(S) o-Terphenyl	64.6			18.0-148		05/27/2021 07:08	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.2		1	05/25/2021 19:42	<a href="#">WG1677024</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	19.7	J	9.57	20.8	1	06/02/2021 04:02	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0226	0.104	1	05/28/2021 14:58	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	93.4			77.0-120		05/28/2021 14:58	<a href="#">WG1678821</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000504	0.00108	1	05/27/2021 00:17	<a href="#">WG1677689</a>
Toluene	U		0.00140	0.00540	1	05/27/2021 00:17	<a href="#">WG1677689</a>
Ethylbenzene	U		0.000796	0.00270	1	05/27/2021 00:17	<a href="#">WG1677689</a>
Total Xylenes	U		0.000951	0.00702	1	05/27/2021 00:17	<a href="#">WG1677689</a>
(S) Toluene-d8	106			75.0-131		05/27/2021 00:17	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	89.9			67.0-138		05/27/2021 00:17	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	68.4	J2		70.0-130		05/27/2021 00:17	<a href="#">WG1677689</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1.70	J	1.67	4.16	1	05/27/2021 03:59	<a href="#">WG1677870</a>
C28-C40 Oil Range	3.79	J	0.285	4.16	1	05/27/2021 03:59	<a href="#">WG1677870</a>
(S) o-Terphenyl	69.6			18.0-148		05/27/2021 03:59	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.5		1	05/26/2021 11:57	<a href="#">WG1677026</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	13.6	J	9.34	20.3	1	06/02/2021 04:11	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0441	J	0.0220	0.102	1	05/28/2021 15:22	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	96.0			77.0-120		05/28/2021 15:22	<a href="#">WG1678821</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000481	0.00103	1	05/27/2021 00:36	<a href="#">WG1677689</a>
Toluene	U		0.00134	0.00515	1	05/27/2021 00:36	<a href="#">WG1677689</a>
Ethylbenzene	U		0.000759	0.00258	1	05/27/2021 00:36	<a href="#">WG1677689</a>
Total Xylenes	U		0.000907	0.00670	1	05/27/2021 00:36	<a href="#">WG1677689</a>
(S) Toluene-d8	109			75.0-131		05/27/2021 00:36	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	91.4			67.0-138		05/27/2021 00:36	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	69.8	J2		70.0-130		05/27/2021 00:36	<a href="#">WG1677689</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.63	4.06	1	05/27/2021 04:13	<a href="#">WG1677870</a>
C28-C40 Oil Range	1.58	J	0.278	4.06	1	05/27/2021 04:13	<a href="#">WG1677870</a>
(S) o-Terphenyl	74.5			18.0-148		05/27/2021 04:13	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.4		1	05/26/2021 11:57	<a href="#">WG1677026</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.65	21.0	1	06/02/2021 04:21	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0228	0.105	1	05/28/2021 15:46	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	95.7			77.0-120		05/28/2021 15:46	<a href="#">WG1678821</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000512	0.00110	1	05/27/2021 00:55	<a href="#">WG1677689</a>
Toluene	U		0.00143	0.00549	1	05/27/2021 00:55	<a href="#">WG1677689</a>
Ethylbenzene	U		0.000809	0.00274	1	05/27/2021 00:55	<a href="#">WG1677689</a>
Total Xylenes	U		0.000966	0.00713	1	05/27/2021 00:55	<a href="#">WG1677689</a>
(S) Toluene-d8	108			75.0-131		05/27/2021 00:55	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	87.8			67.0-138		05/27/2021 00:55	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	70.3			70.0-130		05/27/2021 00:55	<a href="#">WG1677689</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	21.4		1.69	4.19	1	05/27/2021 06:55	<a href="#">WG1677870</a>
C28-C40 Oil Range	29.8		0.287	4.19	1	05/27/2021 06:55	<a href="#">WG1677870</a>
(S) o-Terphenyl	59.0			18.0-148		05/27/2021 06:55	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	98.0		1	05/26/2021 11:57	<a href="#">WG1677026</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		9.39	20.4	1	06/02/2021 04:30	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	05/28/2021 16:10	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	94.3			77.0-120		05/28/2021 16:10	<a href="#">WG1678821</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000487	0.00104	1	05/27/2021 01:14	<a href="#">WG1677689</a>
Toluene	U		0.00135	0.00521	1	05/27/2021 01:14	<a href="#">WG1677689</a>
Ethylbenzene	U		0.000768	0.00260	1	05/27/2021 01:14	<a href="#">WG1677689</a>
Total Xylenes	U		0.000917	0.00677	1	05/27/2021 01:14	<a href="#">WG1677689</a>
(S) Toluene-d8	109			75.0-131		05/27/2021 01:14	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	91.0			67.0-138		05/27/2021 01:14	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	78.9			70.0-130		05/27/2021 01:14	<a href="#">WG1677689</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	14.0		1.64	4.08	1	05/27/2021 07:22	<a href="#">WG1677870</a>
C28-C40 Oil Range	35.6		0.280	4.08	1	05/27/2021 07:22	<a href="#">WG1677870</a>
(S) o-Terphenyl	70.1			18.0-148		05/27/2021 07:22	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	97.4		1	05/26/2021 11:57	<a href="#">WG1677026</a>

1 Cp

2 Tc

**Wet Chemistry by Method 300.0**

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		9.44	20.5	1	06/02/2021 04:59	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.119		0.0223	0.103	1	05/28/2021 16:34	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	93.9			77.0-120		05/28/2021 16:34	<a href="#">WG1678821</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000492	0.00105	1	05/27/2021 01:33	<a href="#">WG1677689</a>
Toluene	U		0.00137	0.00527	1	05/27/2021 01:33	<a href="#">WG1677689</a>
Ethylbenzene	U		0.000776	0.00263	1	05/27/2021 01:33	<a href="#">WG1677689</a>
Total Xylenes	0.00276	J	0.000927	0.00685	1	05/27/2021 01:33	<a href="#">WG1677689</a>
(S) Toluene-d8	106			75.0-131		05/27/2021 01:33	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	88.8			67.0-138		05/27/2021 01:33	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	73.0			70.0-130		05/27/2021 01:33	<a href="#">WG1677689</a>

8 Al

9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	188		8.26	20.5	5	05/27/2021 15:30	<a href="#">WG1677870</a>
C28-C40 Oil Range	438		1.41	20.5	5	05/27/2021 15:30	<a href="#">WG1677870</a>
(S) o-Terphenyl	67.2			18.0-148		05/27/2021 15:30	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.6		1	05/26/2021 11:57	<a href="#">WG1677026</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.53	20.7	1	06/02/2021 05:08	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	94.6		2.32	10.7	100	05/28/2021 19:20	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		05/28/2021 19:20	<a href="#">WG1678821</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U	J3	0.00401	0.00857	8	05/27/2021 03:47	<a href="#">WG1677689</a>
Toluene	U	J3	0.0111	0.0428	8	05/27/2021 03:47	<a href="#">WG1677689</a>
Ethylbenzene	0.0450	J3	0.00632	0.0214	8	05/27/2021 03:47	<a href="#">WG1677689</a>
Total Xylenes	0.703	J3	0.00754	0.0557	8	05/27/2021 03:47	<a href="#">WG1677689</a>
(S) Toluene-d8	107			75.0-131		05/27/2021 03:47	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	97.0			67.0-138		05/27/2021 03:47	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	80.1			70.0-130		05/27/2021 03:47	<a href="#">WG1677689</a>

8 Al

9 Sc

Sample Narrative:

L1355917-07 WG1677689: Non-target compounds too high to run at a lower dilution.

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	2170		16.7	41.4	10	05/27/2021 15:43	<a href="#">WG1677870</a>
C28-C40 Oil Range	1240		2.84	41.4	10	05/27/2021 15:43	<a href="#">WG1677870</a>
(S) o-Terphenyl	248	J1		18.0-148		05/27/2021 15:43	<a href="#">WG1677870</a>

Sample Narrative:

L1355917-07 WG1677870: Surrogate failure due to matrix interference

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.0		1	05/26/2021 11:57	<a href="#">WG1677026</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	104		9.89	21.5	1	06/02/2021 05:18	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0233	0.107	1	05/28/2021 16:58	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120		05/28/2021 16:58	<a href="#">WG1678821</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000537	0.00115	1	05/27/2021 01:52	<a href="#">WG1677689</a>
Toluene	U		0.00150	0.00575	1	05/27/2021 01:52	<a href="#">WG1677689</a>
Ethylbenzene	U		0.000848	0.00288	1	05/27/2021 01:52	<a href="#">WG1677689</a>
Total Xylenes	U		0.00101	0.00748	1	05/27/2021 01:52	<a href="#">WG1677689</a>
(S) Toluene-d8	107			75.0-131		05/27/2021 01:52	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	89.5			67.0-138		05/27/2021 01:52	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	78.7			70.0-130		05/27/2021 01:52	<a href="#">WG1677689</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.91	J	1.73	4.30	1	05/27/2021 15:16	<a href="#">WG1677870</a>
C28-C40 Oil Range	16.6		0.295	4.30	1	05/27/2021 15:16	<a href="#">WG1677870</a>
(S) o-Terphenyl	53.1			18.0-148		05/27/2021 15:16	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.9		1	05/26/2021 11:57	<a href="#">WG1677026</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	58.4		9.50	20.6	1	06/02/2021 05:27	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	05/28/2021 17:22	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	94.9			77.0-120		05/28/2021 17:22	<a href="#">WG1678821</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000497	0.00106	1	05/27/2021 02:11	<a href="#">WG1677689</a>
Toluene	U		0.00138	0.00532	1	05/27/2021 02:11	<a href="#">WG1677689</a>
Ethylbenzene	U		0.000785	0.00266	1	05/27/2021 02:11	<a href="#">WG1677689</a>
Total Xylenes	U		0.000937	0.00692	1	05/27/2021 02:11	<a href="#">WG1677689</a>
(S) Toluene-d8	107			75.0-131		05/27/2021 02:11	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	90.9			67.0-138		05/27/2021 02:11	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	68.2	<u>J2</u>		70.0-130		05/27/2021 02:11	<a href="#">WG1677689</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.66	4.13	1	05/27/2021 04:26	<a href="#">WG1677870</a>
C28-C40 Oil Range	2.56	<u>J</u>	0.283	4.13	1	05/27/2021 04:26	<a href="#">WG1677870</a>
(S) o-Terphenyl	71.8			18.0-148		05/27/2021 04:26	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	97.8		1	05/26/2021 11:57	<a href="#">WG1677026</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	17.0	J	9.41	20.5	1	06/02/2021 05:37	<a href="#">WG1680544</a>

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	05/28/2021 17:45	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	95.5			77.0-120		05/28/2021 17:45	<a href="#">WG1678821</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000488	0.00105	1	05/27/2021 02:30	<a href="#">WG1677689</a>
Toluene	U		0.00136	0.00523	1	05/27/2021 02:30	<a href="#">WG1677689</a>
Ethylbenzene	U		0.000771	0.00261	1	05/27/2021 02:30	<a href="#">WG1677689</a>
Total Xylenes	U		0.000920	0.00680	1	05/27/2021 02:30	<a href="#">WG1677689</a>
(S) Toluene-d8	108			75.0-131		05/27/2021 02:30	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	87.4			67.0-138		05/27/2021 02:30	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	73.4			70.0-130		05/27/2021 02:30	<a href="#">WG1677689</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.65	4.09	1	05/27/2021 04:40	<a href="#">WG1677870</a>
C28-C40 Oil Range	0.908	J	0.280	4.09	1	05/27/2021 04:40	<a href="#">WG1677870</a>
(S) o-Terphenyl	71.3			18.0-148		05/27/2021 04:40	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.6		1	05/26/2021 11:57	<a href="#">WG1677026</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	13.4	J	9.63	20.9	1	06/02/2021 05:56	<a href="#">WG1680544</a>

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	05/28/2021 18:09	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	95.0			77.0-120		05/28/2021 18:09	<a href="#">WG1678821</a>

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000511	0.00109	1	05/27/2021 02:49	<a href="#">WG1677689</a>
Toluene	U		0.00142	0.00547	1	05/27/2021 02:49	<a href="#">WG1677689</a>
Ethylbenzene	U		0.000806	0.00273	1	05/27/2021 02:49	<a href="#">WG1677689</a>
Total Xylenes	U		0.000962	0.00711	1	05/27/2021 02:49	<a href="#">WG1677689</a>
(S) Toluene-d8	109			75.0-131		05/27/2021 02:49	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	89.4			67.0-138		05/27/2021 02:49	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	76.8			70.0-130		05/27/2021 02:49	<a href="#">WG1677689</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.68	4.19	1	05/27/2021 04:53	<a href="#">WG1677870</a>
C28-C40 Oil Range	0.458	J	0.287	4.19	1	05/27/2021 04:53	<a href="#">WG1677870</a>
(S) o-Terphenyl	71.9			18.0-148		05/27/2021 04:53	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	92.5		1	05/26/2021 11:57	<a href="#">WG1677026</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	592		9.94	21.6	1	06/02/2021 06:06	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0235	0.108	1	05/28/2021 18:33	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	92.8			77.0-120		05/28/2021 18:33	<a href="#">WG1678821</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000542	0.00116	1	05/27/2021 03:08	<a href="#">WG1677689</a>
Toluene	U		0.00151	0.00581	1	05/27/2021 03:08	<a href="#">WG1677689</a>
Ethylbenzene	U		0.000856	0.00290	1	05/27/2021 03:08	<a href="#">WG1677689</a>
Total Xylenes	U		0.00102	0.00755	1	05/27/2021 03:08	<a href="#">WG1677689</a>
(S) Toluene-d8	107			75.0-131		05/27/2021 03:08	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	86.8			67.0-138		05/27/2021 03:08	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	77.2			70.0-130		05/27/2021 03:08	<a href="#">WG1677689</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	3.78	J	1.74	4.32	1	05/27/2021 06:14	<a href="#">WG1677870</a>
C28-C40 Oil Range	15.3		0.296	4.32	1	05/27/2021 06:14	<a href="#">WG1677870</a>
(S) o-Terphenyl	58.2			18.0-148		05/27/2021 06:14	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.7		1	05/26/2021 11:50	<a href="#">WG1677027</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	397		9.61	20.9	1	06/02/2021 06:15	<a href="#">WG1680544</a>

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0227	0.104	1	05/28/2021 18:57	<a href="#">WG1678821</a>
(S) a,a,a-Trifluorotoluene(FID)	97.0			77.0-120		05/28/2021 18:57	<a href="#">WG1678821</a>

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000509	0.00109	1	05/27/2021 03:27	<a href="#">WG1677689</a>
Toluene	U		0.00142	0.00545	1	05/27/2021 03:27	<a href="#">WG1677689</a>
Ethylbenzene	U		0.000803	0.00272	1	05/27/2021 03:27	<a href="#">WG1677689</a>
Total Xylenes	U		0.000959	0.00708	1	05/27/2021 03:27	<a href="#">WG1677689</a>
(S) Toluene-d8	108			75.0-131		05/27/2021 03:27	<a href="#">WG1677689</a>
(S) 4-Bromofluorobenzene	89.0			67.0-138		05/27/2021 03:27	<a href="#">WG1677689</a>
(S) 1,2-Dichloroethane-d4	74.9			70.0-130		05/27/2021 03:27	<a href="#">WG1677689</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.68	4.18	1	05/27/2021 05:07	<a href="#">WG1677870</a>
C28-C40 Oil Range	1.92	J	0.286	4.18	1	05/27/2021 05:07	<a href="#">WG1677870</a>
(S) o-Terphenyl	68.5			18.0-148		05/27/2021 05:07	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	96.4		1	05/26/2021 11:50	<a href="#">WG1677027</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	495		9.54	20.7	1	06/02/2021 06:25	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0225	0.104	1	05/27/2021 01:13	<a href="#">WG1677712</a>
(S) a,a,a-Trifluorotoluene(FID)	94.2			77.0-120		05/27/2021 01:13	<a href="#">WG1677712</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000502	0.00107	1	05/26/2021 12:35	<a href="#">WG1677778</a>
Toluene	U		0.00140	0.00537	1	05/26/2021 12:35	<a href="#">WG1677778</a>
Ethylbenzene	U		0.000792	0.00269	1	05/26/2021 12:35	<a href="#">WG1677778</a>
Total Xylenes	U		0.000946	0.00699	1	05/26/2021 12:35	<a href="#">WG1677778</a>
(S) Toluene-d8	105			75.0-131		05/26/2021 12:35	<a href="#">WG1677778</a>
(S) 4-Bromofluorobenzene	102			67.0-138		05/26/2021 12:35	<a href="#">WG1677778</a>
(S) 1,2-Dichloroethane-d4	79.3			70.0-130		05/26/2021 12:35	<a href="#">WG1677778</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.67	4.15	1	05/27/2021 05:20	<a href="#">WG1677870</a>
C28-C40 Oil Range	0.786	J	0.284	4.15	1	05/27/2021 05:20	<a href="#">WG1677870</a>
(S) o-Terphenyl	70.1			18.0-148		05/27/2021 05:20	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.1		1	05/26/2021 11:50	<a href="#">WG1677027</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	847		48.9	106	5	06/02/2021 06:53	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0231	0.106	1	05/27/2021 01:35	<a href="#">WG1677712</a>
(S) a,a,a-Trifluorotoluene(FID)	93.9			77.0-120		05/27/2021 01:35	<a href="#">WG1677712</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000526	0.00113	1	05/26/2021 12:54	<a href="#">WG1677778</a>
Toluene	U		0.00146	0.00563	1	05/26/2021 12:54	<a href="#">WG1677778</a>
Ethylbenzene	U		0.000830	0.00282	1	05/26/2021 12:54	<a href="#">WG1677778</a>
Total Xylenes	U		0.000991	0.00732	1	05/26/2021 12:54	<a href="#">WG1677778</a>
(S) Toluene-d8	104			75.0-131		05/26/2021 12:54	<a href="#">WG1677778</a>
(S) 4-Bromofluorobenzene	102			67.0-138		05/26/2021 12:54	<a href="#">WG1677778</a>
(S) 1,2-Dichloroethane-d4	76.0			70.0-130		05/26/2021 12:54	<a href="#">WG1677778</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.71	4.25	1	05/27/2021 05:34	<a href="#">WG1677870</a>
C28-C40 Oil Range	0.340	J	0.291	4.25	1	05/27/2021 05:34	<a href="#">WG1677870</a>
(S) o-Terphenyl	66.7			18.0-148		05/27/2021 05:34	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.0		1	05/26/2021 11:50	<a href="#">WG1677027</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	14.2	J	9.68	21.1	1	06/02/2021 07:03	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0228	0.105	1	05/27/2021 01:57	<a href="#">WG1677712</a>
(S) a,a,a-Trifluorotoluene(FID)	95.0			77.0-120		05/27/2021 01:57	<a href="#">WG1677712</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000516	0.00111	1	05/26/2021 13:13	<a href="#">WG1677778</a>
Toluene	U		0.00144	0.00553	1	05/26/2021 13:13	<a href="#">WG1677778</a>
Ethylbenzene	U		0.000815	0.00276	1	05/26/2021 13:13	<a href="#">WG1677778</a>
Total Xylenes	U		0.000973	0.00719	1	05/26/2021 13:13	<a href="#">WG1677778</a>
(S) Toluene-d8	98.6			75.0-131		05/26/2021 13:13	<a href="#">WG1677778</a>
(S) 4-Bromofluorobenzene	101			67.0-138		05/26/2021 13:13	<a href="#">WG1677778</a>
(S) 1,2-Dichloroethane-d4	70.6			70.0-130		05/26/2021 13:13	<a href="#">WG1677778</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	15.4		1.69	4.21	1	05/27/2021 06:28	<a href="#">WG1677870</a>
C28-C40 Oil Range	31.9		0.288	4.21	1	05/27/2021 06:28	<a href="#">WG1677870</a>
(S) o-Terphenyl	59.0			18.0-148		05/27/2021 06:28	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.3		1	05/26/2021 11:50	<a href="#">WG1677027</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	19.0	J	9.55	20.8	1	06/02/2021 07:12	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0225	0.104	1	05/27/2021 02:19	<a href="#">WG1677712</a>
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120		05/27/2021 02:19	<a href="#">WG1677712</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000503	0.00108	1	05/26/2021 13:32	<a href="#">WG1677778</a>
Toluene	U		0.00140	0.00538	1	05/26/2021 13:32	<a href="#">WG1677778</a>
Ethylbenzene	U		0.000794	0.00269	1	05/26/2021 13:32	<a href="#">WG1677778</a>
Total Xylenes	U		0.000948	0.00700	1	05/26/2021 13:32	<a href="#">WG1677778</a>
(S) Toluene-d8	103			75.0-131		05/26/2021 13:32	<a href="#">WG1677778</a>
(S) 4-Bromofluorobenzene	101			67.0-138		05/26/2021 13:32	<a href="#">WG1677778</a>
(S) 1,2-Dichloroethane-d4	71.9			70.0-130		05/26/2021 13:32	<a href="#">WG1677778</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.67	J	1.67	4.15	1	05/27/2021 05:47	<a href="#">WG1677870</a>
C28-C40 Oil Range	4.95		0.284	4.15	1	05/27/2021 05:47	<a href="#">WG1677870</a>
(S) o-Terphenyl	66.1			18.0-148		05/27/2021 05:47	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	97.0		1	05/26/2021 11:50	<a href="#">WG1677027</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	15.1	J	9.48	20.6	1	06/02/2021 07:22	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	05/27/2021 02:41	<a href="#">WG1677712</a>
(S) a,a,a-Trifluorotoluene(FID)	94.1			77.0-120		05/27/2021 02:41	<a href="#">WG1677712</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000495	0.00106	1	05/26/2021 13:51	<a href="#">WG1677778</a>
Toluene	U		0.00138	0.00530	1	05/26/2021 13:51	<a href="#">WG1677778</a>
Ethylbenzene	U		0.000782	0.00265	1	05/26/2021 13:51	<a href="#">WG1677778</a>
Total Xylenes	U		0.000934	0.00690	1	05/26/2021 13:51	<a href="#">WG1677778</a>
(S) Toluene-d8	102			75.0-131		05/26/2021 13:51	<a href="#">WG1677778</a>
(S) 4-Bromofluorobenzene	103			67.0-138		05/26/2021 13:51	<a href="#">WG1677778</a>
(S) 1,2-Dichloroethane-d4	67.6	J2		70.0-130		05/26/2021 13:51	<a href="#">WG1677778</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	2.35	J	1.66	4.12	1	05/27/2021 06:01	<a href="#">WG1677870</a>
C28-C40 Oil Range	3.37	J	0.282	4.12	1	05/27/2021 06:01	<a href="#">WG1677870</a>
(S) o-Terphenyl	71.1			18.0-148		05/27/2021 06:01	<a href="#">WG1677870</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	97.0		1	05/26/2021 11:50	<a href="#">WG1677027</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		9.48	20.6	1	06/02/2021 07:31	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	05/27/2021 03:04	<a href="#">WG1677712</a>
(S) a,a,a-Trifluorotoluene(FID)	93.9			77.0-120		05/27/2021 03:04	<a href="#">WG1677712</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000496	0.00106	1	05/26/2021 14:10	<a href="#">WG1677778</a>
Toluene	U		0.00138	0.00531	1	05/26/2021 14:10	<a href="#">WG1677778</a>
Ethylbenzene	U		0.000782	0.00265	1	05/26/2021 14:10	<a href="#">WG1677778</a>
Total Xylenes	U		0.000934	0.00690	1	05/26/2021 14:10	<a href="#">WG1677778</a>
(S) Toluene-d8	98.5			75.0-131		05/26/2021 14:10	<a href="#">WG1677778</a>
(S) 4-Bromofluorobenzene	102			67.0-138		05/26/2021 14:10	<a href="#">WG1677778</a>
(S) 1,2-Dichloroethane-d4	72.7			70.0-130		05/26/2021 14:10	<a href="#">WG1677778</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.66	4.12	1	05/27/2021 05:53	<a href="#">WG1677874</a>
C28-C40 Oil Range	U		0.282	4.12	1	05/27/2021 05:53	<a href="#">WG1677874</a>
(S) o-Terphenyl	67.3			18.0-148		05/27/2021 05:53	<a href="#">WG1677874</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	93.4		1	05/26/2021 11:50	<a href="#">WG1677027</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	107		9.85	21.4	1	06/02/2021 07:41	<a href="#">WG1680544</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	05/27/2021 03:26	<a href="#">WG1677712</a>
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120		05/27/2021 03:26	<a href="#">WG1677712</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000533	0.00114	1	05/26/2021 14:29	<a href="#">WG1677778</a>
Toluene	U		0.00148	0.00571	1	05/26/2021 14:29	<a href="#">WG1677778</a>
Ethylbenzene	U		0.000842	0.00286	1	05/26/2021 14:29	<a href="#">WG1677778</a>
Total Xylenes	U		0.00101	0.00742	1	05/26/2021 14:29	<a href="#">WG1677778</a>
(S) Toluene-d8	100			75.0-131		05/26/2021 14:29	<a href="#">WG1677778</a>
(S) 4-Bromofluorobenzene	103			67.0-138		05/26/2021 14:29	<a href="#">WG1677778</a>
(S) 1,2-Dichloroethane-d4	71.0			70.0-130		05/26/2021 14:29	<a href="#">WG1677778</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	4.54		1.72	4.28	1	05/27/2021 19:12	<a href="#">WG1677874</a>
C28-C40 Oil Range	15.7		0.293	4.28	1	05/27/2021 19:12	<a href="#">WG1677874</a>
(S) o-Terphenyl	69.1			18.0-148		05/27/2021 19:12	<a href="#">WG1677874</a>

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.4		1	05/26/2021 11:50	<a href="#">WG1677027</a>

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.74	21.2	1	05/28/2021 00:15	<a href="#">WG1678508</a>

- 5 Sr

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.488		0.0230	0.106	1	05/27/2021 03:48	<a href="#">WG1677712</a>
(S) a,a,a-Trifluorotoluene(FID)	93.0			77.0-120		05/27/2021 03:48	<a href="#">WG1677712</a>

- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U	<a href="#">J3</a>	0.000522	0.00112	1	05/26/2021 14:47	<a href="#">WG1677778</a>
Toluene	U	<a href="#">J3</a>	0.00145	0.00559	1	05/26/2021 14:47	<a href="#">WG1677778</a>
Ethylbenzene	U	<a href="#">J3</a>	0.000824	0.00280	1	05/26/2021 14:47	<a href="#">WG1677778</a>
Total Xylenes	U	<a href="#">J3</a>	0.000984	0.00727	1	05/26/2021 14:47	<a href="#">WG1677778</a>
(S) Toluene-d8	106			75.0-131		05/26/2021 14:47	<a href="#">WG1677778</a>
(S) 4-Bromofluorobenzene	104			67.0-138		05/26/2021 14:47	<a href="#">WG1677778</a>
(S) 1,2-Dichloroethane-d4	83.3			70.0-130		05/26/2021 14:47	<a href="#">WG1677778</a>

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1960		34.1	84.7	20	05/29/2021 04:01	<a href="#">WG1677874</a>
C28-C40 Oil Range	2260		5.80	84.7	20	05/29/2021 04:01	<a href="#">WG1677874</a>
(S) o-Terphenyl	0.000	<a href="#">J7</a>		18.0-148		05/29/2021 04:01	<a href="#">WG1677874</a>

W01677024  
Total Solids by Method 2540 G-2011

[L1355917-01,02](#)

Method Blank (MB)

(MB) R3659332-1 05/25/21 19:42

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

1 Cp

2 Tc

3 Ss

L1355900-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1355900-22 05/25/21 19:42 • (DUP) R3659332-3 05/25/21 19:42

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	%	%		%		%
Total Solids	98.6	98.5	1	0.164		10

4 Cn

5 Sr

Laboratory Control Sample (LCS)

(LCS) R3659332-2 05/25/21 19:42

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

6 Qc

7 Gl

8 Al

9 Sc

Total Solids by Method 2540 G-2011

[L1355917-03,04,05,06,07,08,09,10,11,12](#)

Method Blank (MB)

(MB) R3659778-1 05/26/21 11:57

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	%		%	%
Total Solids	0.000			

1 Cp

2 Tc

3 Ss

L1355917-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1355917-11 05/26/21 11:57 • (DUP) R3659778-3 05/26/21 11:57

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	%	%		%		%
Total Solids	95.6	95.3	1	0.285		10

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS)

(LCS) R3659778-2 05/26/21 11:57

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

7 Gl

8 Al

9 Sc

Total Solids by Method 2540 G-2011

[L1355917-13,14,15,16,17,18,19,20,21](#)

Method Blank (MB)

(MB) R3659775-1 05/26/21 11:50

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

1 Cp

2 Tc

3 Ss

L1355917-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1355917-13 05/26/21 11:50 • (DUP) R3659775-3 05/26/21 11:50

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	95.7	95.8	1	0.0797		10

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS)

(LCS) R3659775-2 05/26/21 11:50

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

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

[L1355917-21](#)

Method Blank (MB)

(MB) R3660951-1 05/27/21 20:58

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

<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

L1355648-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1355648-02 05/27/21 21:26 • (DUP) R3660951-3 05/27/21 21:35

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

L1356319-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1356319-03 05/28/21 00:44 • (DUP) R3660951-6 05/28/21 00:53

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	2610	2400	5	8.48		20

Laboratory Control Sample (LCS)

(LCS) R3660951-2 05/27/21 21:07

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	193	96.5	90.0-110	

L1355648-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1355648-04 05/27/21 21:54 • (MS) R3660951-4 05/27/21 22:04 • (MSD) R3660951-5 05/27/21 22:13

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	597	U	551	650	92.3	109	1	80.0-120			16.4	20

Wet Chemistry by Method 300.0

[L1355917-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20](#)

Method Blank (MB)

(MB) R3662059-1 06/02/21 02:53

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1355917-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1355917-01 06/02/21 03:24 • (DUP) R3662059-3 06/02/21 03:33

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	10.3	11.2	1	9.04	↓	20

L1355917-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1355917-10 06/02/21 05:37 • (DUP) R3662059-6 06/02/21 05:46

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	17.0	14.7	1	14.3	↓	20

Laboratory Control Sample (LCS)

(LCS) R3662059-2 06/02/21 03:02

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

L1355917-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1355917-01 06/02/21 03:24 • (MS) R3662059-4 06/02/21 03:43 • (MSD) R3662059-5 06/02/21 03:52

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	533	10.3	561	539	103	99.2	1	80.0-120			3.89	20

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

[L1355917-14,15,16,17,18,19,20,21](#)

Method Blank (MB)

(MB) R3660542-2 05/26/21 23:58

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	98.4			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3660542-1 05/26/21 23:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.09	92.5	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			100	77.0-120	

L1356406-31 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1356406-31 05/27/21 07:04 • (MS) R3660542-3 05/27/21 08:31 • (MSD) R3660542-4 05/27/21 08:54

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	254	260	387	376	50.0	45.7	25	10.0-151			2.87	28
(S) a,a,a-Trifluorotoluene(FID)					109	108		77.0-120				

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

[L1355917-01,02,03,04,05,06,07,08,09,10,11,12,13](#)

Method Blank (MB)

(MB) R3661588-2 05/28/21 13:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	99.2			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3661588-1 05/28/21 12:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.00	90.9	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			111	77.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1355917-01,02,03,04,05,06,07,08,09,10,11,12,13](#)

Method Blank (MB)

(MB) R3660053-2 05/26/21 21:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	105			75.0-131
(S) 4-Bromofluorobenzene	88.1			67.0-138
(S) 1,2-Dichloroethane-d4	76.6			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3660053-1 05/26/21 20:28

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.119	95.2	70.0-123	
Ethylbenzene	0.125	0.119	95.2	74.0-126	
Toluene	0.125	0.124	99.2	75.0-121	
Xylenes, Total	0.375	0.343	91.5	72.0-127	
(S) Toluene-d8			103	75.0-131	
(S) 4-Bromofluorobenzene			92.4	67.0-138	
(S) 1,2-Dichloroethane-d4			89.7	70.0-130	

L1355917-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1355917-07 05/27/21 03:47 • (MS) R3660053-3 05/27/21 04:06 • (MSD) R3660053-4 05/27/21 04:25

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	1.06	U	0.509	1.01	48.0	95.1	8	10.0-149		J3	65.8	37
Ethylbenzene	1.06	0.0450	0.562	1.05	48.8	94.3	8	10.0-160		J3	60.1	38
Toluene	1.06	U	0.539	1.04	50.8	98.3	8	10.0-156		J3	63.7	38
Xylenes, Total	3.18	0.703	2.55	3.97	58.0	103	8	10.0-160		J3	43.7	38
(S) Toluene-d8					107	103		75.0-131				
(S) 4-Bromofluorobenzene					95.4	94.4		67.0-138				
(S) 1,2-Dichloroethane-d4					87.1	84.0		70.0-130				

Sample Narrative:

OS: Non-target compounds too high to run at a lower dilution.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1355917-14,15,16,17,18,19,20,21](#)

Method Blank (MB)

(MB) R3660445-3 05/26/21 09:39

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	98.6			75.0-131
(S) 4-Bromofluorobenzene	103			67.0-138
(S) 1,2-Dichloroethane-d4	86.8			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

(LCS) R3660445-1 05/26/21 08:42 • (LCSD) R3660445-2 05/26/21 09:01

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.132	0.121	106	96.8	70.0-123			8.70	20
Ethylbenzene	0.125	0.136	0.126	109	101	74.0-126			7.63	20
Toluene	0.125	0.136	0.121	109	96.8	75.0-121			11.7	20
Xylenes, Total	0.375	0.404	0.376	108	100	72.0-127			7.18	20
(S) Toluene-d8				103	99.1	75.0-131				
(S) 4-Bromofluorobenzene				102	102	67.0-138				
(S) 1,2-Dichloroethane-d4				83.6	87.1	70.0-130				

L1355917-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1355917-21 05/26/21 14:47 • (MS) R3660445-4 05/26/21 18:54 • (MSD) R3660445-5 05/26/21 19:13

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.140	U	0.136	0.0651	97.6	46.6	1	10.0-149		J3	70.8	37
Ethylbenzene	0.140	U	0.138	0.0673	98.4	48.2	1	10.0-160		J3	68.6	38
Toluene	0.140	U	0.138	0.0690	98.4	49.4	1	10.0-156		J3	66.4	38
Xylenes, Total	0.419	U	0.405	0.183	96.5	43.7	1	10.0-160		J3	75.3	38
(S) Toluene-d8					101	105		75.0-131				
(S) 4-Bromofluorobenzene					113	105		67.0-138				
(S) 1,2-Dichloroethane-d4					92.1	86.0		70.0-130				

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1355917-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18](#)

Method Blank (MB)

(MB) R3659822-1 05/27/21 03:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	76.3			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3659822-2 05/27/21 03:19

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	44.0	88.0	50.0-150	
(S) o-Terphenyl			94.7	18.0-148	

L1355917-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1355917-05 05/27/21 07:22 • (MS) R3659822-3 05/27/21 07:35 • (MSD) R3659822-4 05/27/21 07:49

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	50.7	14.0	57.6	51.8	85.9	76.1	1	50.0-150			10.6	20
(S) o-Terphenyl					77.5	71.6		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1355917-19,20,21](#)

Method Blank (MB)

(MB) R3660009-1 05/27/21 01:59

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	76.0			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3660009-2 05/27/21 02:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	45.1	90.2	50.0-150	
(S) o-Terphenyl			77.6	18.0-148	

<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

## 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.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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	LA000356
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		

<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

\* 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 Analytical.

<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











# ANALYTICAL REPORT

June 09, 2021

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

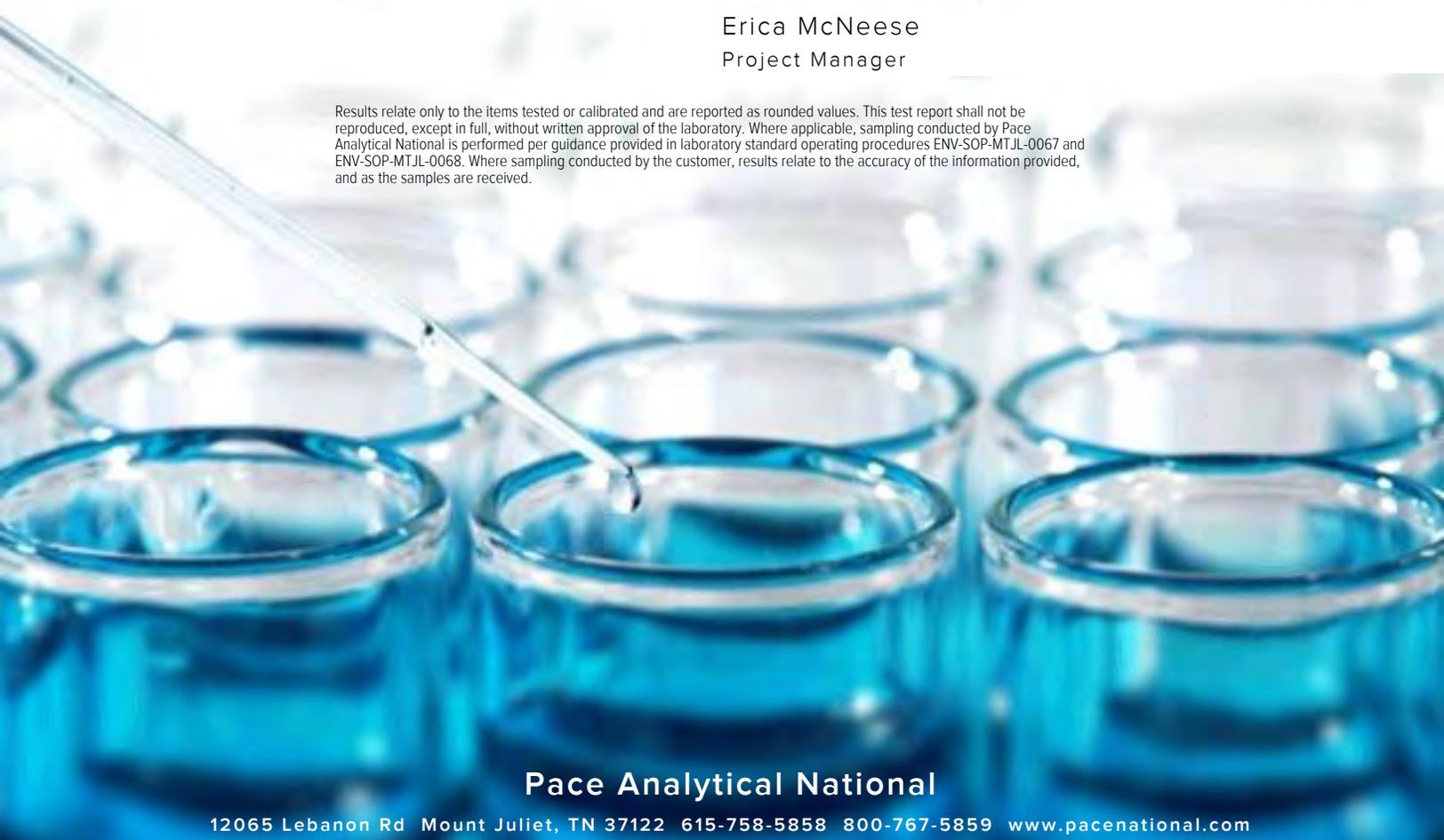
## ConocoPhillips - Tetra Tech

Sample Delivery Group: L1358911  
 Samples Received: 05/27/2021  
 Project Number: 212-MD-02305  
 Description: VGEU 02-20 West Flowline Release  
 Site: LEA COUNTY, NM  
 Report To: Christian Lull  
 901 West Wall  
 Suite 100  
 Midland, TX 79701

Entire Report Reviewed By:

Erica McNeese  
Project Manager

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



Pace Analytical National

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AH-4 (0-1) L1358911-04	9
AH-5 (0-1) L1358911-05	10
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AH-6 (1-2) L1358911-07	12
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<b>Al: Accreditations &amp; Locations</b>	<b>23</b>
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AH-1 (0-1) L1358911-01 Solid

Collected by Andrew Garcia  
 Collected date/time 05/25/21 10:00  
 Received date/time 05/27/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1680775	1	06/01/21 14:21	06/01/21 14:27	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1682565	1	06/04/21 00:40	06/04/21 05:46	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1680332	1	05/29/21 16:45	05/31/21 22:58	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1680224	1	05/29/21 16:45	05/30/21 22:35	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1680017	1	05/30/21 01:29	06/03/21 16:06	TJD	Mt. Juliet, TN

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

AH-2 (0-1) L1358911-02 Solid

Collected by Andrew Garcia  
 Collected date/time 05/25/21 10:30  
 Received date/time 05/27/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1680776	1	06/02/21 09:13	06/02/21 09:20	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1682565	1	06/04/21 00:40	06/04/21 05:55	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1680332	1	05/29/21 16:45	05/31/21 23:20	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1680224	1	05/29/21 16:45	05/30/21 22:54	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1680017	20	05/30/21 01:29	06/03/21 18:36	TJD	Mt. Juliet, TN

AH-3 (0-1) L1358911-03 Solid

Collected by Andrew Garcia  
 Collected date/time 05/25/21 11:00  
 Received date/time 05/27/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1680776	1	06/02/21 09:13	06/02/21 09:20	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1682565	1	06/04/21 00:40	06/04/21 06:05	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1680332	1	05/29/21 16:45	05/31/21 23:42	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1680328	1	05/29/21 16:45	05/31/21 08:14	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1680017	1	05/30/21 01:29	06/03/21 15:25	TJD	Mt. Juliet, TN

AH-4 (0-1) L1358911-04 Solid

Collected by Andrew Garcia  
 Collected date/time 05/25/21 11:30  
 Received date/time 05/27/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1680776	1	06/02/21 09:13	06/02/21 09:20	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1682565	1	06/04/21 00:40	06/04/21 06:14	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1680332	1	05/29/21 16:45	06/01/21 00:04	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1680328	1	05/29/21 16:45	05/31/21 08:33	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1680017	1	05/30/21 01:29	06/03/21 15:39	TJD	Mt. Juliet, TN

AH-5 (0-1) L1358911-05 Solid

Collected by Andrew Garcia  
 Collected date/time 05/25/21 12:00  
 Received date/time 05/27/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1680776	1	06/02/21 09:13	06/02/21 09:20	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1682565	1	06/04/21 00:40	06/04/21 06:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1680332	1	05/29/21 16:45	06/01/21 00:26	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1680328	1	05/29/21 16:45	05/31/21 08:52	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1680017	1	05/30/21 01:29	06/03/21 16:20	TJD	Mt. Juliet, TN

AH-6 (0-1) L1358911-06 Solid

Collected by Andrew Garcia  
 Collected date/time 05/25/21 12:30  
 Received date/time 05/27/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1680776	1	06/02/21 09:13	06/02/21 09:20	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1682565	1	06/04/21 00:40	06/04/21 06:33	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1680332	1	05/29/21 16:45	06/01/21 00:48	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1680328	1	05/29/21 16:45	05/31/21 09:12	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1680017	1	05/30/21 01:29	06/03/21 15:53	TJD	Mt. Juliet, TN



AH-6 (1-2) L1358911-07 Solid

Collected by Andrew Garcia  
 Collected date/time 05/25/21 13:00  
 Received date/time 05/27/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1680776	1	06/02/21 09:13	06/02/21 09:20	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1682565	1	06/04/21 00:40	06/04/21 07:11	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1680332	1	05/29/21 16:45	06/01/21 01:09	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1680328	1	05/29/21 16:45	05/31/21 09:31	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1680017	1	05/30/21 01:29	06/03/21 15:12	TJD	Mt. Juliet, TN

AH-7 (0-1) L1358911-08 Solid

Collected by Andrew Garcia  
 Collected date/time 05/25/21 13:30  
 Received date/time 05/27/21 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1680776	1	06/02/21 09:13	06/02/21 09:20	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1682615	1	06/05/21 17:23	06/06/21 01:59	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1680332	1	05/29/21 16:45	06/01/21 01:31	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1680328	1	05/29/21 16:45	05/31/21 09:50	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1680017	1	05/30/21 01:29	06/03/21 14:58	TJD	Mt. Juliet, TN

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

Erica McNeese  
Project Manager

- <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: 05/25/21 10:00

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.6		1	06/01/2021 14:27	<a href="#">WG1680775</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.83	21.4	1	06/04/2021 05:46	<a href="#">WG1682565</a>

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	05/31/2021 22:58	<a href="#">WG1680332</a>
(S) a,a,a-Trifluorotoluene(FID)	90.9			77.0-120		05/31/2021 22:58	<a href="#">WG1680332</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.000824	<a href="#">B J</a>	0.000531	0.00114	1	05/30/2021 22:35	<a href="#">WG1680224</a>
Toluene	0.00219	<a href="#">J</a>	0.00148	0.00568	1	05/30/2021 22:35	<a href="#">WG1680224</a>
Ethylbenzene	0.00171	<a href="#">J</a>	0.000838	0.00284	1	05/30/2021 22:35	<a href="#">WG1680224</a>
Total Xylenes	0.00418	<a href="#">J</a>	0.00100	0.00739	1	05/30/2021 22:35	<a href="#">WG1680224</a>
(S) Toluene-d8	109			75.0-131		05/30/2021 22:35	<a href="#">WG1680224</a>
(S) 4-Bromofluorobenzene	88.0			67.0-138		05/30/2021 22:35	<a href="#">WG1680224</a>
(S) 1,2-Dichloroethane-d4	78.9			70.0-130		05/30/2021 22:35	<a href="#">WG1680224</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	9.48		1.72	4.27	1	06/03/2021 16:06	<a href="#">WG1680017</a>
C28-C40 Oil Range	28.7		0.293	4.27	1	06/03/2021 16:06	<a href="#">WG1680017</a>
(S) o-Terphenyl	65.6			18.0-148		06/03/2021 16:06	<a href="#">WG1680017</a>

Collected date/time: 05/25/21 10:30

L1358911

**Total Solids by Method 2540 G-2011**

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.8		1	06/02/2021 09:20	<a href="#">WG1680776</a>

1 Cp

2 Tc

**Wet Chemistry by Method 300.0**

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		10.0	21.8	1	06/04/2021 05:55	<a href="#">WG1682565</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0236	0.109	1	05/31/2021 23:20	<a href="#">WG1680332</a>
(S) a,a,a-Trifluorotoluene(FID)	93.0			77.0-120		05/31/2021 23:20	<a href="#">WG1680332</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000551	0.00118	1	05/30/2021 22:54	<a href="#">WG1680224</a>
Toluene	U		0.00153	0.00590	1	05/30/2021 22:54	<a href="#">WG1680224</a>
Ethylbenzene	U		0.000869	0.00295	1	05/30/2021 22:54	<a href="#">WG1680224</a>
Total Xylenes	U		0.00104	0.00767	1	05/30/2021 22:54	<a href="#">WG1680224</a>
(S) Toluene-d8	107			75.0-131		05/30/2021 22:54	<a href="#">WG1680224</a>
(S) 4-Bromofluorobenzene	91.6			67.0-138		05/30/2021 22:54	<a href="#">WG1680224</a>
(S) 1,2-Dichloroethane-d4	93.3			70.0-130		05/30/2021 22:54	<a href="#">WG1680224</a>

8 Al

9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	293		35.1	87.2	20	06/03/2021 18:36	<a href="#">WG1680017</a>
C28-C40 Oil Range	908		5.97	87.2	20	06/03/2021 18:36	<a href="#">WG1680017</a>
(S) o-Terphenyl	0.000	<a href="#">J7</a>		18.0-148		06/03/2021 18:36	<a href="#">WG1680017</a>

Collected date/time: 05/25/21 11:00

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	87.7		1	06/02/2021 09:20	<a href="#">WG1680776</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		10.5	22.8	1	06/04/2021 06:05	<a href="#">WG1682565</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0247	0.114	1	05/31/2021 23:42	<a href="#">WG1680332</a>
(S) a,a,a-Trifluorotoluene(FID)	93.2			77.0-120		05/31/2021 23:42	<a href="#">WG1680332</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	0.000825	J	0.000598	0.00128	1	05/31/2021 08:14	<a href="#">WG1680328</a>
Toluene	0.00333	J	0.00166	0.00640	1	05/31/2021 08:14	<a href="#">WG1680328</a>
Ethylbenzene	0.00127	J	0.000944	0.00320	1	05/31/2021 08:14	<a href="#">WG1680328</a>
Total Xylenes	0.00615	J	0.00113	0.00832	1	05/31/2021 08:14	<a href="#">WG1680328</a>
(S) Toluene-d8	107			75.0-131		05/31/2021 08:14	<a href="#">WG1680328</a>
(S) 4-Bromofluorobenzene	86.9			67.0-138		05/31/2021 08:14	<a href="#">WG1680328</a>
(S) 1,2-Dichloroethane-d4	76.5			70.0-130		05/31/2021 08:14	<a href="#">WG1680328</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	3.45	J	1.83	4.56	1	06/03/2021 15:25	<a href="#">WG1680017</a>
C28-C40 Oil Range	8.82		0.312	4.56	1	06/03/2021 15:25	<a href="#">WG1680017</a>
(S) o-Terphenyl	57.3			18.0-148		06/03/2021 15:25	<a href="#">WG1680017</a>

Collected date/time: 05/25/21 11:30

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	92.8		1	06/02/2021 09:20	<a href="#">WG1680776</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		9.92	21.6	1	06/04/2021 06:14	<a href="#">WG1682565</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0234	0.108	1	06/01/2021 00:04	<a href="#">WG1680332</a>
(S) a,a,a-Trifluorotoluene(FID)	93.6			77.0-120		06/01/2021 00:04	<a href="#">WG1680332</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000540	0.00116	1	05/31/2021 08:33	<a href="#">WG1680328</a>
Toluene	0.00163	J	0.00150	0.00578	1	05/31/2021 08:33	<a href="#">WG1680328</a>
Ethylbenzene	U		0.000853	0.00289	1	05/31/2021 08:33	<a href="#">WG1680328</a>
Total Xylenes	0.00198	J	0.00102	0.00752	1	05/31/2021 08:33	<a href="#">WG1680328</a>
(S) Toluene-d8	106			75.0-131		05/31/2021 08:33	<a href="#">WG1680328</a>
(S) 4-Bromofluorobenzene	88.1			67.0-138		05/31/2021 08:33	<a href="#">WG1680328</a>
(S) 1,2-Dichloroethane-d4	73.7			70.0-130		05/31/2021 08:33	<a href="#">WG1680328</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	6.78		1.74	4.31	1	06/03/2021 15:39	<a href="#">WG1680017</a>
C28-C40 Oil Range	15.0		0.295	4.31	1	06/03/2021 15:39	<a href="#">WG1680017</a>
(S) o-Terphenyl	62.3			18.0-148		06/03/2021 15:39	<a href="#">WG1680017</a>

Collected date/time: 05/25/21 12:00

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.1		1	06/02/2021 09:20	<a href="#">WG1680776</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	10.5	J	9.88	21.5	1	06/04/2021 06:24	<a href="#">WG1682565</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0233	0.107	1	06/01/2021 00:26	<a href="#">WG1680332</a>
(S) a,a,a-Trifluorotoluene(FID)	92.9			77.0-120		06/01/2021 00:26	<a href="#">WG1680332</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000536	0.00115	1	05/31/2021 08:52	<a href="#">WG1680328</a>
Toluene	0.00168	J	0.00149	0.00574	1	05/31/2021 08:52	<a href="#">WG1680328</a>
Ethylbenzene	U		0.000847	0.00287	1	05/31/2021 08:52	<a href="#">WG1680328</a>
Total Xylenes	0.00247	J	0.00101	0.00747	1	05/31/2021 08:52	<a href="#">WG1680328</a>
(S) Toluene-d8	104			75.0-131		05/31/2021 08:52	<a href="#">WG1680328</a>
(S) 4-Bromofluorobenzene	94.1			67.0-138		05/31/2021 08:52	<a href="#">WG1680328</a>
(S) 1,2-Dichloroethane-d4	91.0			70.0-130		05/31/2021 08:52	<a href="#">WG1680328</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	13.2		1.73	4.30	1	06/03/2021 16:20	<a href="#">WG1680017</a>
C28-C40 Oil Range	33.2		0.294	4.30	1	06/03/2021 16:20	<a href="#">WG1680017</a>
(S) o-Terphenyl	72.4			18.0-148		06/03/2021 16:20	<a href="#">WG1680017</a>

Collected date/time: 05/25/21 12:30

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	86.1		1	06/02/2021 09:20	<a href="#">WG1680776</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		10.7	23.2	1	06/04/2021 06:33	<a href="#">WG1682565</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0252	0.116	1	06/01/2021 00:48	<a href="#">WG1680332</a>
(S) a,a,a-Trifluorotoluene(FID)	92.9			77.0-120		06/01/2021 00:48	<a href="#">WG1680332</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000619	0.00132	1	05/31/2021 09:12	<a href="#">WG1680328</a>
Toluene	0.00225	J	0.00172	0.00662	1	05/31/2021 09:12	<a href="#">WG1680328</a>
Ethylbenzene	U		0.000976	0.00331	1	05/31/2021 09:12	<a href="#">WG1680328</a>
Total Xylenes	0.00278	J	0.00117	0.00861	1	05/31/2021 09:12	<a href="#">WG1680328</a>
(S) Toluene-d8	107			75.0-131		05/31/2021 09:12	<a href="#">WG1680328</a>
(S) 4-Bromofluorobenzene	90.1			67.0-138		05/31/2021 09:12	<a href="#">WG1680328</a>
(S) 1,2-Dichloroethane-d4	86.0			70.0-130		05/31/2021 09:12	<a href="#">WG1680328</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	6.33		1.87	4.65	1	06/03/2021 15:53	<a href="#">WG1680017</a>
C28-C40 Oil Range	20.0		0.318	4.65	1	06/03/2021 15:53	<a href="#">WG1680017</a>
(S) o-Terphenyl	77.6			18.0-148		06/03/2021 15:53	<a href="#">WG1680017</a>

Collected date/time: 05/25/21 13:00

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.6		1	06/02/2021 09:20	<a href="#">WG1680776</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		10.2	22.1	1	06/04/2021 07:11	<a href="#">WG1682565</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0240	0.110	1	06/01/2021 01:09	<a href="#">WG1680332</a>
(S) a,a,a-Trifluorotoluene(FID)	92.9			77.0-120		06/01/2021 01:09	<a href="#">WG1680332</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000565	0.00121	1	05/31/2021 09:31	<a href="#">WG1680328</a>
Toluene	0.00191	J	0.00157	0.00605	1	05/31/2021 09:31	<a href="#">WG1680328</a>
Ethylbenzene	U		0.000891	0.00302	1	05/31/2021 09:31	<a href="#">WG1680328</a>
Total Xylenes	0.00276	J	0.00106	0.00786	1	05/31/2021 09:31	<a href="#">WG1680328</a>
(S) Toluene-d8	109			75.0-131		05/31/2021 09:31	<a href="#">WG1680328</a>
(S) 4-Bromofluorobenzene	87.9			67.0-138		05/31/2021 09:31	<a href="#">WG1680328</a>
(S) 1,2-Dichloroethane-d4	82.8			70.0-130		05/31/2021 09:31	<a href="#">WG1680328</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.65	J	1.78	4.42	1	06/03/2021 15:12	<a href="#">WG1680017</a>
C28-C40 Oil Range	5.63	B	0.303	4.42	1	06/03/2021 15:12	<a href="#">WG1680017</a>
(S) o-Terphenyl	66.0			18.0-148		06/03/2021 15:12	<a href="#">WG1680017</a>

Collected date/time: 05/25/21 13:30

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	87.4		1	06/02/2021 09:20	<a href="#">WG1680776</a>

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		10.5	22.9	1	06/06/2021 01:59	<a href="#">WG1682615</a>

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0248	0.114	1	06/01/2021 01:31	<a href="#">WG1680332</a>
(S) a,a,a-Trifluorotoluene(FID)	93.5			77.0-120		06/01/2021 01:31	<a href="#">WG1680332</a>

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000602	0.00129	1	05/31/2021 09:50	<a href="#">WG1680328</a>
Toluene	0.00367	J	0.00168	0.00645	1	05/31/2021 09:50	<a href="#">WG1680328</a>
Ethylbenzene	U		0.000950	0.00322	1	05/31/2021 09:50	<a href="#">WG1680328</a>
Total Xylenes	0.00338	J	0.00113	0.00838	1	05/31/2021 09:50	<a href="#">WG1680328</a>
(S) Toluene-d8	108			75.0-131		05/31/2021 09:50	<a href="#">WG1680328</a>
(S) 4-Bromofluorobenzene	87.9			67.0-138		05/31/2021 09:50	<a href="#">WG1680328</a>
(S) 1,2-Dichloroethane-d4	76.8			70.0-130		05/31/2021 09:50	<a href="#">WG1680328</a>

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	4.99		1.84	4.58	1	06/03/2021 14:58	<a href="#">WG1680017</a>
C28-C40 Oil Range	8.02		0.313	4.58	1	06/03/2021 14:58	<a href="#">WG1680017</a>
(S) o-Terphenyl	62.0			18.0-148		06/03/2021 14:58	<a href="#">WG1680017</a>

Total Solids by Method 2540 G-2011

[L1358911-01](#)

Method Blank (MB)

(MB) R3662015-1 06/01/21 14:27

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

1 Cp

2 Tc

3 Ss

L1358889-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1358889-01 06/01/21 14:27 • (DUP) R3662015-3 06/01/21 14:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	84.3	84.9	1	0.616		10

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS)

(LCS) R3662015-2 06/01/21 14:27

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

7 Gl

8 Al

9 Sc

Total Solids by Method 2540 G-2011

[L1358911-02,03,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3662583-1 06/02/21 09:20

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

1 Cp

2 Tc

3 Ss

L1358911-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1358911-02 06/02/21 09:20 • (DUP) R3662583-3 06/02/21 09:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	91.8	91.7	1	0.0475		10

4 Cn

5 Sr

Laboratory Control Sample (LCS)

(LCS) R3662583-2 06/02/21 09:20

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

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

[L1358911-01,02,03,04,05,06,07](#)

Method Blank (MB)

(MB) R3663266-1 06/04/21 03:23

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

<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

L1358029-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1358029-03 06/04/21 04:01 • (DUP) R3663266-3 06/04/21 04:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	71.0	80.9	1	13.0		20

L1358911-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1358911-06 06/04/21 06:33 • (DUP) R3663266-6 06/04/21 06:43

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

Laboratory Control Sample (LCS)

(LCS) R3663266-2 06/04/21 03:32

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	181	90.3	90.0-110	

L1358029-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1358029-03 06/04/21 04:01 • (MS) R3663266-4 06/04/21 04:20 • (MSD) R3663266-5 06/04/21 04:29

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	500	71.0	575	589	101	104	1	80.0-120			2.42	20

Wet Chemistry by Method 300.0

[L1358911-08](#)

Method Blank (MB)

(MB) R3663690-1 06/05/21 20:40

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

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

L1356477-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1356477-05 06/05/21 23:50 • (DUP) R3663690-3 06/06/21 00:08

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Chloride	430	355	1	19.2		20

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1359549-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1359549-01 06/06/21 04:08 • (DUP) R3663690-4 06/06/21 04:26

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Chloride	349	342	1	2.18		20

Laboratory Control Sample (LCS)

(LCS) R3663690-2 06/05/21 20:58

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

L1359549-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1359549-01 06/06/21 04:08 • (MS) R3663690-5 06/06/21 04:45 • (MSD) R3663690-6 06/06/21 05:03

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
Chloride	625	349	980	975	101	100	1	80.0-120			0.587	20

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

[L1358911-01,02,03,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3663330-2 05/31/21 19:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	97.6			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3663330-1 05/31/21 18:34

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.41	117	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			115	77.0-120	

L1358531-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1358531-01 05/31/21 20:24 • (MS) R3663330-3 06/01/21 03:21 • (MSD) R3663330-4 06/01/21 03:43

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TPH (GC/FID) Low Fraction	162	U	134	147	82.6	90.9	25	10.0-151			9.61	28
(S) a,a,a-Trifluorotoluene(FID)					107	108		77.0-120				

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

[L1358911-01.02](#)

Method Blank (MB)

(MB) R3664369-3 05/30/21 15:38

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	0.000525	U	0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	110			75.0-131
(S) 4-Bromofluorobenzene	84.0			67.0-138
(S) 1,2-Dichloroethane-d4	77.8			70.0-130

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

(LCS) R3664369-1 05/30/21 14:22 • (LCSD) R3664369-2 05/30/21 14:41

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	0.111	0.0995	88.8	79.6	70.0-123			10.9	20
Ethylbenzene	0.125	0.110	0.110	88.0	88.0	74.0-126			0.000	20
Toluene	0.125	0.113	0.113	90.4	90.4	75.0-121			0.000	20
Xylenes, Total	0.375	0.320	0.323	85.3	86.1	72.0-127			0.933	20
(S) Toluene-d8				102	102	75.0-131				
(S) 4-Bromofluorobenzene				94.0	88.8	67.0-138				
(S) 1,2-Dichloroethane-d4				91.3	98.1	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1358911-03,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3664466-3 05/31/21 01:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	111			75.0-131
(S) 4-Bromofluorobenzene	87.9			67.0-138
(S) 1,2-Dichloroethane-d4	78.6			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

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

(LCS) R3664466-1 05/31/21 00:30 • (LCSD) R3664466-2 05/31/21 00:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.106	0.114	84.8	91.2	70.0-123			7.27	20
Ethylbenzene	0.125	0.102	0.111	81.6	88.8	74.0-126			8.45	20
Toluene	0.125	0.106	0.119	84.8	95.2	75.0-121			11.6	20
Xylenes, Total	0.375	0.317	0.332	84.5	88.5	72.0-127			4.62	20
(S) Toluene-d8				102	105	75.0-131				
(S) 4-Bromofluorobenzene				95.5	90.6	67.0-138				
(S) 1,2-Dichloroethane-d4				95.1	92.4	70.0-130				

7 Gl

8 Al

9 Sc

L1358911-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1358911-08 05/31/21 09:50 • (MS) R3664466-4 05/31/21 12:42 • (MSD) R3664466-5 05/31/21 13:01

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.160	U	0.111	0.150	69.3	93.5	1	10.0-149			29.8	37
Ethylbenzene	0.160	U	0.144	0.157	90.3	98.4	1	10.0-160			8.55	38
Toluene	0.160	0.00367	0.130	0.174	79.2	107	1	10.0-156			28.8	38
Xylenes, Total	0.480	0.00338	0.380	0.398	78.6	82.4	1	10.0-160			4.64	38
(S) Toluene-d8					103	106		75.0-131				
(S) 4-Bromofluorobenzene					91.2	87.9		67.0-138				
(S) 1,2-Dichloroethane-d4					93.1	102		70.0-130				

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1358911-01,02,03,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3663063-1 06/03/21 13:22

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	0.652	J	0.274	4.00
(S) o-Terphenyl	61.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3663063-2 06/03/21 13:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	38.6	77.2	50.0-150	
(S) o-Terphenyl			85.7	18.0-148	

L1358914-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1358914-04 06/03/21 16:34 • (MS) R3663063-3 06/03/21 16:47 • (MSD) R3663063-4 06/03/21 17:01

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg				%	%		%			%	%
C10-C28 Diesel Range	50.0	5.64	54.3	49.8	76.3	69.6	1	50.0-150			8.57	20
(S) o-Terphenyl					71.5	71.8		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.

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

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

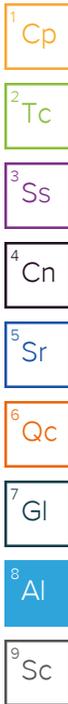
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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	LA000356
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		

<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

\* 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 Analytical.





Pace Analytical National Center for Testing & Innovation Cooler Receipt Form			
Client:	CORTEYRA	U1358911	
Cooler Received/Opened On:	5/27/21	Temperature:	0.2
Received By:	Olivia Turner		
Signature:	<i>Olivia Turner</i>		
Receipt Check List			
	NP	Yes	No
COC Seal Present / Intact?	/		
COC Signed / Accurate?		/	
Bottles arrive intact?		/	
Correct bottles used?		/	
Sufficient volume sent?		/	
If Applicable		/	
VOA Zero headspace?			
Preservation Correct / Checked?			



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

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February 26, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: VGEU 02-20 FLOWLINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 02/21/22 12:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	02/21/2022	Sampling Date:	02/18/2022
Reported:	02/26/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02305	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 17 ( 6-7 ) (H220656-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/24/2022	ND	2.25	113	2.00	0.275	
Toluene*	<0.050	0.050	02/24/2022	ND	2.34	117	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/24/2022	ND	2.29	115	2.00	1.40	
Total Xylenes*	<0.150	0.150	02/24/2022	ND	7.12	119	6.00	1.17	
Total BTEX	<0.300	0.300	02/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/23/2022	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2022	ND	210	105	200	3.13	
DRO >C10-C28*	<10.0	10.0	02/23/2022	ND	213	106	200	1.86	
EXT DRO >C28-C36	<10.0	10.0	02/23/2022	ND					

Surrogate: 1-Chlorooctane 96.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 97.5 % 59.5-142

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	02/21/2022	Sampling Date:	02/18/2022
Reported:	02/26/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02305	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 17 ( 8-9 ) (H220656-02)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/24/2022	ND	2.25	113	2.00	0.275	
Toluene*	<0.050	0.050	02/24/2022	ND	2.34	117	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/24/2022	ND	2.29	115	2.00	1.40	
Total Xylenes*	<0.150	0.150	02/24/2022	ND	7.12	119	6.00	1.17	
Total BTEX	<0.300	0.300	02/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	02/23/2022	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2022	ND	210	105	200	3.13	
<b>DRO &gt;C10-C28*</b>	<b>158</b>	10.0	02/23/2022	ND	213	106	200	1.86	
<b>EXT DRO &gt;C28-C36</b>	<b>120</b>	10.0	02/23/2022	ND					

Surrogate: 1-Chlorooctane 92.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 99.5 % 59.5-142

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	02/21/2022	Sampling Date:	02/18/2022
Reported:	02/26/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02305	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 17 ( 10-11 ) (H220656-03)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/24/2022	ND	2.25	113	2.00	0.275	
Toluene*	<0.050	0.050	02/24/2022	ND	2.34	117	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/24/2022	ND	2.29	115	2.00	1.40	
Total Xylenes*	<0.150	0.150	02/24/2022	ND	7.12	119	6.00	1.17	
Total BTEX	<0.300	0.300	02/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/23/2022	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<b>18.3</b>	10.0	02/23/2022	ND	210	105	200	3.13	
DRO >C10-C28*	<b>1200</b>	10.0	02/23/2022	ND	213	106	200	1.86	
EXT DRO >C28-C36	<b>355</b>	10.0	02/23/2022	ND					

Surrogate: 1-Chlorooctane 103 % 66.9-136

Surrogate: 1-Chlorooctadecane 117 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	02/21/2022	Sampling Date:	02/18/2022
Reported:	02/26/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02305	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 17 ( 12-13 ) (H220656-04)**

BTEX 8021B		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/24/2022	ND	2.25	113	2.00	0.275		
Toluene*	<0.050	0.050	02/24/2022	ND	2.34	117	2.00	2.29		
<b>Ethylbenzene*</b>	<b>0.121</b>	0.050	02/24/2022	ND	2.29	115	2.00	1.40	GC-NC1	
<b>Total Xylenes*</b>	<b>0.960</b>	0.150	02/24/2022	ND	7.12	119	6.00	1.17	GC-NC1	
<b>Total BTEX</b>	<b>1.08</b>	0.300	02/24/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 188 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/23/2022	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>130</b>	10.0	02/23/2022	ND	210	105	200	3.13		
<b>DRO &gt;C10-C28*</b>	<b>2370</b>	10.0	02/23/2022	ND	213	106	200	1.86		
<b>EXT DRO &gt;C28-C36</b>	<b>503</b>	10.0	02/23/2022	ND						

Surrogate: 1-Chlorooctane 143 % 66.9-136

Surrogate: 1-Chlorooctadecane 192 % 59.5-142

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	02/21/2022	Sampling Date:	02/18/2022
Reported:	02/26/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02305	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 18 ( 6-7 ) (H220656-05)**

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/25/2022	ND	2.25	113	2.00	0.275	
Toluene*	<0.050	0.050	02/25/2022	ND	2.34	117	2.00	2.29	
<b>Ethylbenzene*</b>	<b>0.610</b>	0.050	02/25/2022	ND	2.29	115	2.00	1.40	GC-NC1
<b>Total Xylenes*</b>	<b>3.06</b>	0.150	02/25/2022	ND	7.12	119	6.00	1.17	GC-NC1
<b>Total BTEX</b>	<b>3.67</b>	0.300	02/25/2022	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 233 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/23/2022	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>201</b>	10.0	02/23/2022	ND	210	105	200	3.13	
<b>DRO &gt;C10-C28*</b>	<b>2140</b>	10.0	02/23/2022	ND	213	106	200	1.86	
<b>EXT DRO &gt;C28-C36</b>	<b>414</b>	10.0	02/23/2022	ND					

Surrogate: 1-Chlorooctane 123 % 66.9-136

Surrogate: 1-Chlorooctadecane 115 % 59.5-142

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	02/21/2022	Sampling Date:	02/18/2022
Reported:	02/26/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02305	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 18 ( 8-9 ) (H220656-06)**

BTEX 8021B		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/24/2022	ND	2.25	113	2.00	0.275		
Toluene*	<0.050	0.050	02/24/2022	ND	2.34	117	2.00	2.29		
<b>Ethylbenzene*</b>	<b>0.802</b>	0.050	02/24/2022	ND	2.29	115	2.00	1.40	GC-NC1	
<b>Total Xylenes*</b>	<b>3.90</b>	0.150	02/24/2022	ND	7.12	119	6.00	1.17	GC-NC1	
<b>Total BTEX</b>	<b>4.70</b>	0.300	02/24/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 269 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/23/2022	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>223</b>	10.0	02/23/2022	ND	210	105	200	3.13		
<b>DRO &gt;C10-C28*</b>	<b>2190</b>	10.0	02/23/2022	ND	213	106	200	1.86		
<b>EXT DRO &gt;C28-C36</b>	<b>431</b>	10.0	02/23/2022	ND						

Surrogate: 1-Chlorooctane 160 % 66.9-136

Surrogate: 1-Chlorooctadecane 185 % 59.5-142

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	02/21/2022	Sampling Date:	02/18/2022
Reported:	02/26/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02305	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 18 ( 10-11 ) (H220656-07)**

BTEX 8021B		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/24/2022	ND	2.25	113	2.00	0.275		
Toluene*	<0.050	0.050	02/24/2022	ND	2.34	117	2.00	2.29		
<b>Ethylbenzene*</b>	<b>0.598</b>	0.050	02/24/2022	ND	2.29	115	2.00	1.40	GC-NC1	
<b>Total Xylenes*</b>	<b>2.68</b>	0.150	02/24/2022	ND	7.12	119	6.00	1.17	GC-NC1	
<b>Total BTEX</b>	<b>3.28</b>	0.300	02/24/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 230 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/23/2022	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>182</b>	10.0	02/23/2022	ND	210	105	200	3.13		
<b>DRO &gt;C10-C28*</b>	<b>2100</b>	10.0	02/23/2022	ND	213	106	200	1.86		
<b>EXT DRO &gt;C28-C36</b>	<b>418</b>	10.0	02/23/2022	ND						

Surrogate: 1-Chlorooctane 133 % 66.9-136

Surrogate: 1-Chlorooctadecane 221 % 59.5-142

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	02/21/2022	Sampling Date:	02/18/2022
Reported:	02/26/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02305	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 18 ( 12-13 ) (H220656-08)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/24/2022	ND	2.25	113	2.00	0.275	
Toluene*	<0.050	0.050	02/24/2022	ND	2.34	117	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/24/2022	ND	2.29	115	2.00	1.40	
<b>Total Xylenes*</b>	<b>0.194</b>	0.150	02/24/2022	ND	7.12	119	6.00	1.17	GC-NC1
Total BTEX	<0.300	0.300	02/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/23/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>23.8</b>	10.0	02/23/2022	ND	210	105	200	3.13	
<b>DRO &gt;C10-C28*</b>	<b>340</b>	10.0	02/23/2022	ND	213	106	200	1.86	
<b>EXT DRO &gt;C28-C36</b>	<b>45.6</b>	10.0	02/23/2022	ND					

Surrogate: 1-Chlorooctane 112 % 66.9-136

Surrogate: 1-Chlorooctadecane 124 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	02/21/2022	Sampling Date:	02/18/2022
Reported:	02/26/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02305	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 19 ( 6-7 ) (H220656-09)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/24/2022	ND	2.25	113	2.00	0.275	
Toluene*	<0.050	0.050	02/24/2022	ND	2.34	117	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/24/2022	ND	2.29	115	2.00	1.40	
Total Xylenes*	<0.150	0.150	02/24/2022	ND	7.12	119	6.00	1.17	
Total BTEX	<0.300	0.300	02/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/23/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2022	ND	210	105	200	3.13	
DRO >C10-C28*	<10.0	10.0	02/23/2022	ND	213	106	200	1.86	
EXT DRO >C28-C36	<10.0	10.0	02/23/2022	ND					

Surrogate: 1-Chlorooctane 82.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 85.5 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	02/21/2022	Sampling Date:	02/18/2022
Reported:	02/26/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02305	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 19 ( 9-10 ) (H220656-10)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/24/2022	ND	2.25	113	2.00	0.275	
Toluene*	<0.050	0.050	02/24/2022	ND	2.34	117	2.00	2.29	
Ethylbenzene*	<0.050	0.050	02/24/2022	ND	2.29	115	2.00	1.40	
Total Xylenes*	<0.150	0.150	02/24/2022	ND	7.12	119	6.00	1.17	
Total BTEX	<0.300	0.300	02/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	02/23/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/23/2022	ND	210	105	200	3.13	
DRO >C10-C28*	<10.0	10.0	02/23/2022	ND	213	106	200	1.86	
EXT DRO >C28-C36	<10.0	10.0	02/23/2022	ND					

Surrogate: 1-Chlorooctane 87.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 89.6 % 59.5-142

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Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
GC-NC1 8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

101 East Marland, Hobbs, NM 88240  
 (575) 393-2326 FAX (575) 393-2476

Page 01 of 02

**BILL TO**

**ANALYSIS REQUEST**

Company Name: ConocoPhillips  
 Project Manager: Christian Lull  
 Address: christian.lull@tetratech.com  
 City: State: Zip:  
 Phone #: (512) 338-1667 Fax #: NA  
 Project #: 212C-MD-02305 Project Owner:  
 Project Name: VGEU 02-20 Flowline Release  
 Project Location: Lea County, New Mexico  
 Sampler Name: Joe Tyler  
 P.O. #: Company: Tetra Tech  
 Attn: Christian Lull  
 Address: by email  
 City: State: Zip:  
 Phone #: Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	TPH	BTEX	Chlorides	Hold
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :						
H2201656	BH-17	(6-7)	1							9-18-20	1300	X	X	X	
		(8-9)	2								1400				
		(10-11)	3								1430				
		(12-13)	4								1000				
		(6-7)	5								1030				
		(8-9)	6								1100				
		(10-11)	7								1130				
		(12-13)	8								0900				
		(6-7)	9								0920				
		(9-10)	10												

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Relinquished By: *Joe Tyler* Date: 9-21-20 Time: 1:35  
 Received By: *Christian Lull*  
 Delivered By: (Circle One) 1.62 CO-050 Sample Condition Cool Intact Yes  No   
 Sampler - UPS - Bus - Other: 1.12 #113  Yes  No

CHECKED BY: (Initials) *YL*  
 Phone Results:  Yes  No Add'l Phone #:  
 Fax Results:  Yes  No Add'l Fax #:  
 Email Results to: *Christian (PM)*

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326



101 East Marland, Hobbs, NM 88240  
 (575) 393-2326 FAX (575) 393-2476

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: ConocoPhillips Project Manager: Christian Lull Address: christian.lull@tetratech.com City: State: Zip: Phone #: (512) 338-1667 Fax #: NA Project #: 212C-MD-02305 Project Owner: Project Name: VGEU 02-20 Flowline Release Project Location: Lea County, New Mexico Sampler Name: Joe Tyler		<b>BILL TO</b> P.O. #: Company: Tetra Tech Attn: Christian Lull Address: by email City: State: Zip: Phone #: Fax #:	
FOR LAB USE ONLY Lab I.D. Sample I.D. H220656 84-19 (H-15) 11		(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :	MATRIX PRESERV. SAMPLING DATE TIME 2-18-22 0940
Relinquished By: <i>[Signature]</i> Date: 2-21-22 Time: 1335-		Received By: <i>[Signature]</i> Date: 2-18-22 Time: 0940	
Delivered By: (Circle One) 1.60 C-0.50 Sampler - UPS - Bus - Other: 1.1 C #113		Sample Condition Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No CHECKED BY: (Initials) <i>[Signature]</i>	
Phone Results: <input type="checkbox"/> Yes <input type="checkbox"/> No Fax Results: <input type="checkbox"/> Yes <input type="checkbox"/> No Email Results to: <i>[Signature]</i>		Add'l Phone #: <i>[Signature]</i> Add'l Fax #:	

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May 25, 2022

RYAN DICKERSON

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: VGEU 02-20 FLOWLINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 05/24/22 14:13.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 17 A ( 14'-15' ) (H222202-01)**

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2022	ND	2.08	104	2.00	5.92		
Toluene*	<0.050	0.050	05/24/2022	ND	2.07	103	2.00	5.53	GC-NC	
Ethylbenzene*	<0.050	0.050	05/24/2022	ND	1.97	98.7	2.00	6.26	GC-NC	
Total Xylenes*	<0.150	0.150	05/24/2022	ND	6.15	102	6.00	6.65	GC-NC	
Total BTEX	<0.300	0.300	05/24/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 273 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>32.0</b>	16.0	05/25/2022	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>200</b>	50.0	05/25/2022	ND	204	102	200	0.0987	QM-07	
<b>DRO &gt;C10-C28*</b>	<b>4860</b>	50.0	05/25/2022	ND	208	104	200	1.27	QM-07	
<b>EXT DRO &gt;C28-C36</b>	<b>1060</b>	50.0	05/25/2022	ND						

Surrogate: 1-Chlorooctane 121 % 66.9-136

Surrogate: 1-Chlorooctadecane 140 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 17 A ( 19'-20' ) (H222202-02)**

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2022	ND	2.08	104	2.00	5.92	
<b>Toluene*</b>	<b>0.332</b>	0.050	05/25/2022	ND	2.07	103	2.00	5.53	
<b>Ethylbenzene*</b>	<b>0.294</b>	0.050	05/25/2022	ND	1.97	98.7	2.00	6.26	
<b>Total Xylenes*</b>	<b>4.60</b>	0.150	05/25/2022	ND	6.15	102	6.00	6.65	
<b>Total BTEX</b>	<b>5.23</b>	0.300	05/25/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 250 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>284</b>	50.0	05/25/2022	ND	204	102	200	0.0987	
<b>DRO &gt;C10-C28*</b>	<b>4360</b>	50.0	05/25/2022	ND	208	104	200	1.27	
<b>EXT DRO &gt;C28-C36</b>	<b>851</b>	50.0	05/25/2022	ND					

Surrogate: 1-Chlorooctane 112 % 66.9-136

Surrogate: 1-Chlorooctadecane 313 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 17 A ( 24'-25' ) (H222202-03)**

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2022	ND	2.08	104	2.00	5.92	
<b>Toluene*</b>	<b>0.136</b>	0.050	05/25/2022	ND	2.07	103	2.00	5.53	
<b>Ethylbenzene*</b>	<b>0.121</b>	0.050	05/25/2022	ND	1.97	98.7	2.00	6.26	
<b>Total Xylenes*</b>	<b>2.69</b>	0.150	05/25/2022	ND	6.15	102	6.00	6.65	
<b>Total BTEX</b>	<b>2.95</b>	0.300	05/25/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 160 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>16.0</b>	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>145</b>	50.0	05/25/2022	ND	204	102	200	0.0987	
<b>DRO &gt;C10-C28*</b>	<b>2800</b>	50.0	05/25/2022	ND	208	104	200	1.27	
<b>EXT DRO &gt;C28-C36</b>	<b>557</b>	50.0	05/25/2022	ND					

Surrogate: 1-Chlorooctane 101 % 66.9-136

Surrogate: 1-Chlorooctadecane 187 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 17 A ( 29'-30' ) (H222202-04)**

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.08	104	2.00	5.92	
Toluene*	<0.050	0.050	05/24/2022	ND	2.07	103	2.00	5.53	
<b>Ethylbenzene*</b>	<b>0.062</b>	0.050	05/24/2022	ND	1.97	98.7	2.00	6.26	
<b>Total Xylenes*</b>	<b>0.730</b>	0.150	05/24/2022	ND	6.15	102	6.00	6.65	
<b>Total BTEX</b>	<b>0.793</b>	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>38.9</b>	10.0	05/25/2022	ND	204	102	200	0.0987		
<b>DRO &gt;C10-C28*</b>	<b>1440</b>	10.0	05/25/2022	ND	208	104	200	1.27		
<b>EXT DRO &gt;C28-C36</b>	<b>287</b>	10.0	05/25/2022	ND						

Surrogate: 1-Chlorooctane 90.5 % 66.9-136

Surrogate: 1-Chlorooctadecane 161 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 17 A ( 34'-35' ) (H222202-05)**

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.08	104	2.00	5.92	
<b>Toluene*</b>	<b>0.108</b>	0.050	05/24/2022	ND	2.07	103	2.00	5.53	
<b>Ethylbenzene*</b>	<b>0.177</b>	0.050	05/24/2022	ND	1.97	98.7	2.00	6.26	
<b>Total Xylenes*</b>	<b>1.24</b>	0.150	05/24/2022	ND	6.15	102	6.00	6.65	
<b>Total BTEX</b>	<b>1.53</b>	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>41.4</b>	10.0	05/25/2022	ND	204	102	200	0.0987		
<b>DRO &gt;C10-C28*</b>	<b>1400</b>	10.0	05/25/2022	ND	208	104	200	1.27		
<b>EXT DRO &gt;C28-C36</b>	<b>287</b>	10.0	05/25/2022	ND						

Surrogate: 1-Chlorooctane 90.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 143 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 17 A ( 39'-40' ) (H222202-06)**

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.08	104	2.00	5.92	
Toluene*	<0.050	0.050	05/24/2022	ND	2.07	103	2.00	5.53	
<b>Ethylbenzene*</b>	<b>0.076</b>	0.050	05/24/2022	ND	1.97	98.7	2.00	6.26	
<b>Total Xylenes*</b>	<b>0.407</b>	0.150	05/24/2022	ND	6.15	102	6.00	6.65	
<b>Total BTEX</b>	<b>0.483</b>	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>16.0</b>	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>21.6</b>	10.0	05/25/2022	ND	204	102	200	0.0987	
<b>DRO &gt;C10-C28*</b>	<b>997</b>	10.0	05/25/2022	ND	208	104	200	1.27	
<b>EXT DRO &gt;C28-C36</b>	<b>219</b>	10.0	05/25/2022	ND					

Surrogate: 1-Chlorooctane 85.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 141 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 17 A ( 44'-45' ) (H222202-07)**

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.08	104	2.00	5.92	
<b>Toluene*</b>	<b>0.500</b>	0.050	05/24/2022	ND	2.07	103	2.00	5.53	
<b>Ethylbenzene*</b>	<b>0.894</b>	0.050	05/24/2022	ND	1.97	98.7	2.00	6.26	
<b>Total Xylenes*</b>	<b>2.34</b>	0.150	05/24/2022	ND	6.15	102	6.00	6.65	
<b>Total BTEX</b>	<b>3.74</b>	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>54.0</b>	10.0	05/25/2022	ND	204	102	200	0.0987	
<b>DRO &gt;C10-C28*</b>	<b>1100</b>	10.0	05/25/2022	ND	208	104	200	1.27	
<b>EXT DRO &gt;C28-C36</b>	<b>227</b>	10.0	05/25/2022	ND					

Surrogate: 1-Chlorooctane 90.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 133 % 59.5-142

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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 18 A ( 14'-15' ) (H222202-09)**

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	05/24/2022	ND	2.08	104	2.00	5.92	
<b>Toluene*</b>	<b>4.06</b>	0.200	05/24/2022	ND	2.07	103	2.00	5.53	
<b>Ethylbenzene*</b>	<b>13.3</b>	0.200	05/24/2022	ND	1.97	98.7	2.00	6.26	
<b>Total Xylenes*</b>	<b>27.6</b>	0.600	05/24/2022	ND	6.15	102	6.00	6.65	
<b>Total BTEX</b>	<b>44.9</b>	1.20	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 140 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>366</b>	50.0	05/25/2022	ND	204	102	200	0.0987		
<b>DRO &gt;C10-C28*</b>	<b>2590</b>	50.0	05/25/2022	ND	208	104	200	1.27		
<b>EXT DRO &gt;C28-C36</b>	<b>496</b>	50.0	05/25/2022	ND						

Surrogate: 1-Chlorooctane 116 % 66.9-136

Surrogate: 1-Chlorooctadecane 181 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 18 A ( 19'-20' ) (H222202-10)**

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	05/24/2022	ND	2.08	104	2.00	5.92	
<b>Toluene*</b>	<b>8.44</b>	0.500	05/24/2022	ND	2.07	103	2.00	5.53	
<b>Ethylbenzene*</b>	<b>20.9</b>	0.500	05/24/2022	ND	1.97	98.7	2.00	6.26	
<b>Total Xylenes*</b>	<b>37.9</b>	1.50	05/24/2022	ND	6.15	102	6.00	6.65	
<b>Total BTEX</b>	<b>67.2</b>	3.00	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>728</b>	50.0	05/25/2022	ND	204	102	200	0.0987		
<b>DRO &gt;C10-C28*</b>	<b>3580</b>	50.0	05/25/2022	ND	208	104	200	1.27		
<b>EXT DRO &gt;C28-C36</b>	<b>638</b>	50.0	05/25/2022	ND						

Surrogate: 1-Chlorooctane 131 % 66.9-136

Surrogate: 1-Chlorooctadecane 203 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 18 A ( 24'-25' ) (H222202-11)**

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.08	104	2.00	5.92	
<b>Toluene*</b>	<b>0.383</b>	0.050	05/24/2022	ND	2.07	103	2.00	5.53	
<b>Ethylbenzene*</b>	<b>1.25</b>	0.050	05/24/2022	ND	1.97	98.7	2.00	6.26	
<b>Total Xylenes*</b>	<b>2.48</b>	0.150	05/24/2022	ND	6.15	102	6.00	6.65	
<b>Total BTEX</b>	<b>4.11</b>	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 122 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>58.9</b>	10.0	05/25/2022	ND	204	102	200	0.0987	
<b>DRO &gt;C10-C28*</b>	<b>1000</b>	10.0	05/25/2022	ND	208	104	200	1.27	
<b>EXT DRO &gt;C28-C36</b>	<b>191</b>	10.0	05/25/2022	ND					

Surrogate: 1-Chlorooctane 93.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 130 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 18 A ( 29'-30' ) (H222202-12)**

BTEX 8021B		mg/kg		Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2022	ND	2.08	104	2.00	5.92		
Toluene*	<0.050	0.050	05/24/2022	ND	2.07	103	2.00	5.53		
Ethylbenzene*	<0.050	0.050	05/24/2022	ND	1.97	98.7	2.00	6.26		
Total Xylenes*	<0.150	0.150	05/24/2022	ND	6.15	102	6.00	6.65		
Total BTEX	<0.300	0.300	05/24/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>16.0</b>	16.0	05/25/2022	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	05/24/2022	ND	204	102	200	0.0987		
<b>DRO &gt;C10-C28*</b>	<b>54.2</b>	10.0	05/24/2022	ND	208	104	200	1.27		
EXT DRO >C28-C36	<10.0	10.0	05/24/2022	ND						

Surrogate: 1-Chlorooctane 83.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 93.9 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 18 A ( 34'-35' ) (H222202-13)**

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.19	109	2.00	8.30	
Toluene*	<0.050	0.050	05/24/2022	ND	2.14	107	2.00	8.62	
<b>Ethylbenzene*</b>	<b>0.067</b>	0.050	05/24/2022	ND	2.11	105	2.00	8.85	
Total Xylenes*	<0.150	0.150	05/24/2022	ND	6.52	109	6.00	8.44	
Total BTEX	<0.300	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2022	ND	204	102	200	0.0987	
<b>DRO &gt;C10-C28*</b>	<b>86.8</b>	10.0	05/24/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	<10.0	10.0	05/24/2022	ND					

Surrogate: 1-Chlorooctane 81.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 92.0 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 18 A ( 39'-40' ) (H222202-14)**

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.19	109	2.00	8.30	
Toluene*	<0.050	0.050	05/24/2022	ND	2.14	107	2.00	8.62	
Ethylbenzene*	<0.050	0.050	05/24/2022	ND	2.11	105	2.00	8.85	
Total Xylenes*	<0.150	0.150	05/24/2022	ND	6.52	109	6.00	8.44	
Total BTEX	<0.300	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2022	ND	204	102	200	0.0987	
DRO >C10-C28*	101	10.0	05/24/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	13.1	10.0	05/24/2022	ND					

Surrogate: 1-Chlorooctane 89.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 103 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 18 A ( 44'-45' ) (H222202-15)**

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.19	109	2.00	8.30	
Toluene*	<0.050	0.050	05/24/2022	ND	2.14	107	2.00	8.62	
Ethylbenzene*	<0.050	0.050	05/24/2022	ND	2.11	105	2.00	8.85	
Total Xylenes*	<0.150	0.150	05/24/2022	ND	6.52	109	6.00	8.44	
Total BTEX	<0.300	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2022	ND	204	102	200	0.0987	
<b>DRO &gt;C10-C28*</b>	<b>45.4</b>	10.0	05/24/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	<10.0	10.0	05/24/2022	ND					

Surrogate: 1-Chlorooctane 90.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 101 % 59.5-142

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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 18 A ( 49'-50' ) (H222202-16)**

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.19	109	2.00	8.30	
Toluene*	<0.050	0.050	05/24/2022	ND	2.14	107	2.00	8.62	
Ethylbenzene*	<0.050	0.050	05/24/2022	ND	2.11	105	2.00	8.85	
Total Xylenes*	<0.150	0.150	05/24/2022	ND	6.52	109	6.00	8.44	
Total BTEX	<0.300	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2022	ND	204	102	200	0.0987	
<b>DRO &gt;C10-C28*</b>	<b>16.0</b>	10.0	05/24/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	<10.0	10.0	05/24/2022	ND					

Surrogate: 1-Chlorooctane 90.7 % 66.9-136

Surrogate: 1-Chlorooctadecane 100 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 20 ( 0-1' ) (H222202-17)**

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.19	109	2.00	8.30	
Toluene*	<0.050	0.050	05/24/2022	ND	2.14	107	2.00	8.62	
Ethylbenzene*	<0.050	0.050	05/24/2022	ND	2.11	105	2.00	8.85	
Total Xylenes*	<0.150	0.150	05/24/2022	ND	6.52	109	6.00	8.44	
Total BTEX	<0.300	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2022	ND	204	102	200	0.0987	
<b>DRO &gt;C10-C28*</b>	<b>53.7</b>	10.0	05/24/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	<10.0	10.0	05/24/2022	ND					

Surrogate: 1-Chlorooctane 76.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 84.6 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 20 ( 2'-3' ) (H222202-18)**

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.19	109	2.00	8.30	
Toluene*	<0.050	0.050	05/24/2022	ND	2.14	107	2.00	8.62	
Ethylbenzene*	<0.050	0.050	05/24/2022	ND	2.11	105	2.00	8.85	
Total Xylenes*	<0.150	0.150	05/24/2022	ND	6.52	109	6.00	8.44	
Total BTEX	<0.300	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/25/2022	ND	204	102	200	0.0987	
<b>DRO &gt;C10-C28*</b>	<b>20.2</b>	10.0	05/25/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	<10.0	10.0	05/25/2022	ND					

Surrogate: 1-Chlorooctane 69.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 76.7 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 20 ( 4'-5' ) (H222202-19)**

BTEX 8021B		mg/kg		Analyzed By: MS\						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2022	ND	2.19	109	2.00	8.30		
Toluene*	<0.050	0.050	05/24/2022	ND	2.14	107	2.00	8.62		
Ethylbenzene*	<0.050	0.050	05/24/2022	ND	2.11	105	2.00	8.85		
Total Xylenes*	<0.150	0.150	05/24/2022	ND	6.52	109	6.00	8.44		
Total BTEX	<0.300	0.300	05/24/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	05/25/2022	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	05/24/2022	ND	204	102	200	0.0987		
DRO >C10-C28*	<10.0	10.0	05/24/2022	ND	208	104	200	1.27		
EXT DRO >C28-C36	<10.0	10.0	05/24/2022	ND						

Surrogate: 1-Chlorooctane 85.9 % 66.9-136

Surrogate: 1-Chlorooctadecane 94.7 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 20 ( 6'-7' ) (H222202-20)**

BTEX 8021B		mg/kg		Analyzed By: MS\						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/24/2022	ND	2.19	109	2.00	8.30		
Toluene*	<0.050	0.050	05/24/2022	ND	2.14	107	2.00	8.62		
Ethylbenzene*	<0.050	0.050	05/24/2022	ND	2.11	105	2.00	8.85		
Total Xylenes*	<0.150	0.150	05/24/2022	ND	6.52	109	6.00	8.44		
Total BTEX	<0.300	0.300	05/24/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	05/25/2022	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	05/24/2022	ND	204	102	200	0.0987		
DRO >C10-C28*	<10.0	10.0	05/24/2022	ND	208	104	200	1.27		
EXT DRO >C28-C36	<10.0	10.0	05/24/2022	ND						

Surrogate: 1-Chlorooctane 80.7 % 66.9-136

Surrogate: 1-Chlorooctadecane 89.0 % 59.5-142

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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 20 ( 9'-10' ) (H222202-21)**

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.19	109	2.00	8.30	
Toluene*	<0.050	0.050	05/24/2022	ND	2.14	107	2.00	8.62	
Ethylbenzene*	<0.050	0.050	05/24/2022	ND	2.11	105	2.00	8.85	
Total Xylenes*	<0.150	0.150	05/24/2022	ND	6.52	109	6.00	8.44	
Total BTEX	<0.300	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2022	ND	210	105	200	4.31	
DRO >C10-C28*	<10.0	10.0	05/24/2022	ND	203	102	200	4.64	
EXT DRO >C28-C36	<10.0	10.0	05/24/2022	ND					

Surrogate: 1-Chlorooctane 78.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 79.1 % 59.5-142

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**Analytical Results For:**

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

Received:	05/24/2022	Sampling Date:	05/24/2022
Reported:	05/25/2022	Sampling Type:	Soil
Project Name:	VGEU 02-20 FLOWLINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02305 - WEST	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

**Sample ID: BH - 20 ( 14'-15' ) (H222202-22)**

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2022	ND	2.19	109	2.00	8.30	
Toluene*	<0.050	0.050	05/24/2022	ND	2.14	107	2.00	8.62	
Ethylbenzene*	<0.050	0.050	05/24/2022	ND	2.11	105	2.00	8.85	
Total Xylenes*	<0.150	0.150	05/24/2022	ND	6.52	109	6.00	8.44	
Total BTEX	<0.300	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	05/25/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2022	ND	210	105	200	4.31	
DRO >C10-C28*	<10.0	10.0	05/24/2022	ND	203	102	200	4.64	
EXT DRO >C28-C36	<10.0	10.0	05/24/2022	ND					

Surrogate: 1-Chlorooctane 78.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 79.0 % 59.5-142

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Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC 8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1/3

Company Name: <u>Conoco Phillips</u>		P.O. #:		ANALYSIS REQUEST	
Project Manager: <u>Ryan Dikerson</u>		Company: <u>Tetra Tech</u>			
Address:		Attn: <u>Ryan Dikerson</u>			
City:		Address: <u>by email</u>			
State:		City:			
Zip:		State:			
Phone #:		Fax #:			
Project #: <u>212L-MD-02305</u>		Project Owner:			
Project Name: <u>VGBN 02-20 West Fluvial Release</u>		City:			
Project Location: <u>Lea County, NM</u>		State:			
Sampler Name: <u>Coleen Birkedale</u>		Phone #:			
FOR LAB USE ONLY		Fax #:			
Lab I.D.		Sample I.D.			
(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :		MATRIX PRESERV		SAMPLING DATE TIME	
BH-17A (14'-15') BH-17A (14'-20') BH-17A (24'-25') BH-17A (29'-30') BH-17A (34'-35') BH-17A (39'-40') BH-17A (44'-45') BH-17A (49'-50') BH-18A (14'-15') BH-18A (19'-20')		1 1 1 1 1 1 1 1 1 1 1		5/24/22 5/24/22 5/24/22 5/24/22 5/24/22 5/24/22 5/24/22 5/24/22 5/24/22 5/24/22 5/24/22	
TPH BTEX Chlordes					
Hold Hold analysis on BH-17A (44'-45') and BH-50'					

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Relinquished By: Coleen Birkedale

Date: 5/24/22 Received By: Ryan Dikerson

Time: 11:13

Date: \_\_\_\_\_ Received By: \_\_\_\_\_

Time: \_\_\_\_\_

Delivered By: (Circle One) Observed Temp. °C 31.50

Corrected Temp. °C 31.02

Sample Condition: Intact

Checked By: SR

Turnaround Time: Standard

Thermometer ID #113 RUSH

Correction Factor -0.5°C 24hrs TAT

Bacteria (only) Sample Condition: Intact

Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: ConocoPhillips

P.O. #:

Project Manager: Ryan Dikeston

Address:

Company: Tetra Tech

City: State: Zip:

Attn: Ryan Dikeston  
Address: by email

Phone #: Fax #: Project Owner:

Project #: 212-MD-02305 Project Name: VBEL 02-20 West Florline Release

Project Location: Lee County, NM

Sample Name: Colton Breakover

FOR LAB USE ONLY

MATRIX

PRESERV

SAMPLING

Lab I.D. Sample I.D.

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH	BTEX	Chlorides
<u>4922200</u>																	
11	BH-18A (24'-25')		5												X	X	X
12	BH-18A (29'-30')		1												X	X	X
13	BH-18A (34'-35')		1												X	X	X
14	BH-18A (39'-40')		1												X	X	X
15	BH-18A (44'-45')		1												X	X	X
16	BH-18A (49'-50')		1												X	X	X
17	BH-20 (2-11)		1												X	X	X
18	BH-20 (2-31)		1												X	X	X
19	BH-20 (4-5)		1												X	X	X
20	BH-20 (6-7)		1												X	X	X

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Relinquished By: Colton Breakover

Received By: Schneider

Vertical Result:  Yes  No Add'l Phone #:

Relinquished By: Colton Breakover

Received By: Schneider

REMARKS: Ryan Dikeston et al tetra tech, lora

Hold analysis on BH-17A (49'-50') and 54'-55')

Delivered By: (Circle One)  UPS  Bus  Other:

Observed Temp. °C: 31.5 Sample Condition:  Cool  Intact  Yes  No

Corrected Temp. °C: 31.0  Yes  No

Turnaround Time:  Standard  Rush

Thermometer ID #113 24 hr TAT Bacteria (only)  Cool  Intact  Yes  No

Correction Factor -0.5°C  Yes  No

Observed Temp. °C: 31.5 Sample Condition:  Cool  Intact  Yes  No

Corrected Temp. °C: 31.0  Yes  No

Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

5-24-22

213



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**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

3/5

Company Name: <u>ConocoPhillips</u>		P.O. #:		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>	
Project Manager: <u>Ryan Dickerson</u>		Company: <u>Tetra Tech</u>		Attn: <u>Ryan Dickerson</u>			
Address:		State: <u>WV</u>		Address: <u>by email</u>			
City: <u>Waynesburg, WV</u>		Zip: <u>26062</u>		City: <u>Waynesburg, WV</u>			
Phone #: <u>212C-MD-02505</u>		Fax #: <u>212C-MD-02505</u>		State: <u>WV</u>		Zip: <u>26062</u>	
Project Name: <u>WVBY 02-20 West Flowline Release</u>		Project Location: <u>West Flowline Release</u>		Project Owner: <u>ConocoPhillips</u>			
Sampler Name: <u>Coleen Strickland</u>		FOR LAB USE ONLY		Matrix:		PRESERV.	
Lab I.D.:		Sample I.D.:		(G)RAB OR (C)OMP.		# CONTAINERS	
21220003		BH-20 (9-10')		61		GROUNDWATER	
22		BH-20 (14-15')		61		WASTEWATER	
23		BH-17A (54-55')		61		SOIL	
						OIL	
						SLUDGE	
						OTHER :	
						ACID/BASE:	
						ICE / COOL	
						OTHER :	
						DATE	
						TIME	
						TPH	
						BTEX	
						Chlorides	
						Hold	

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Relinquished By: [Signature] Date: 5/24/22 Received By: [Signature] Date: 5/24/22

Reinforced By: [Signature] Date: 5/24/22 Received By: [Signature] Date: 5/24/22

Delivered By: (Circle One)  UPS  Bus  Other: \_\_\_\_\_

Observed Temp. °C: 31.50 Corrected Temp. °C: 31.02

Sample Condition:  Intact  Cool  Yes  No

Checked By: [Signature] (Initials)

Turnaround Time: \_\_\_\_\_ Standard  Rush

Thermometer ID #113 24h TAT Bacteria (only)  Cool Intact  Yes  No

Correction Factor -0.5°C 24h TAT Sample Condition:  Observed Temp. °C  Corrected Temp. °C

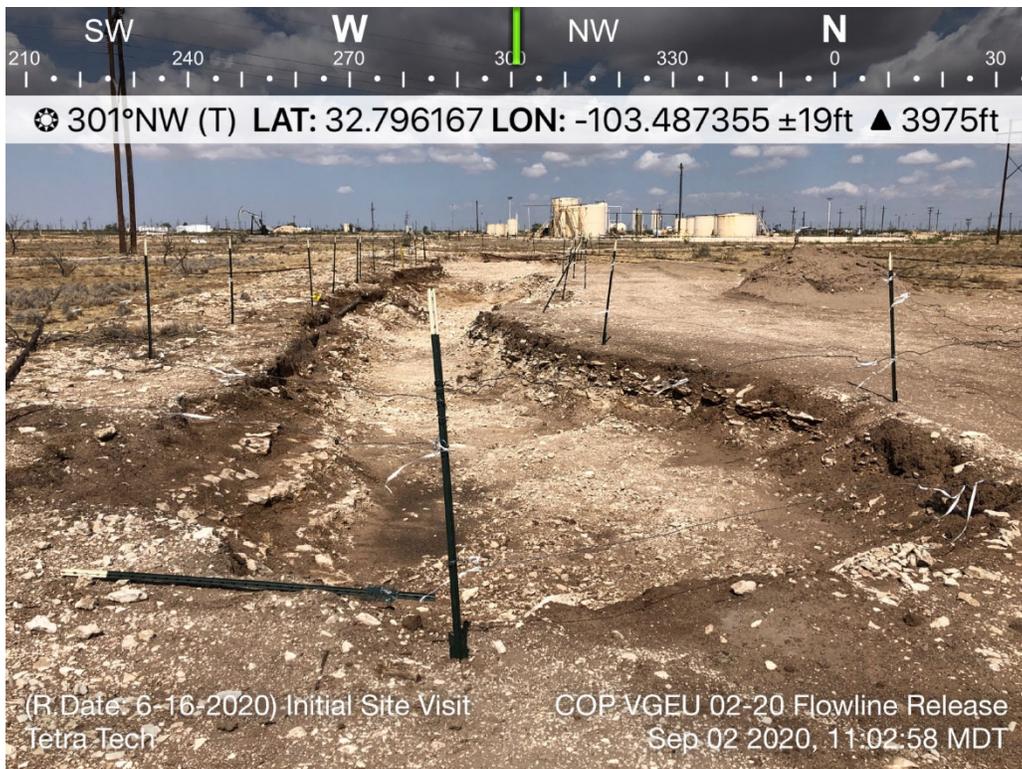
† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

# **APPENDIX D**

## **Photographic Documentation**



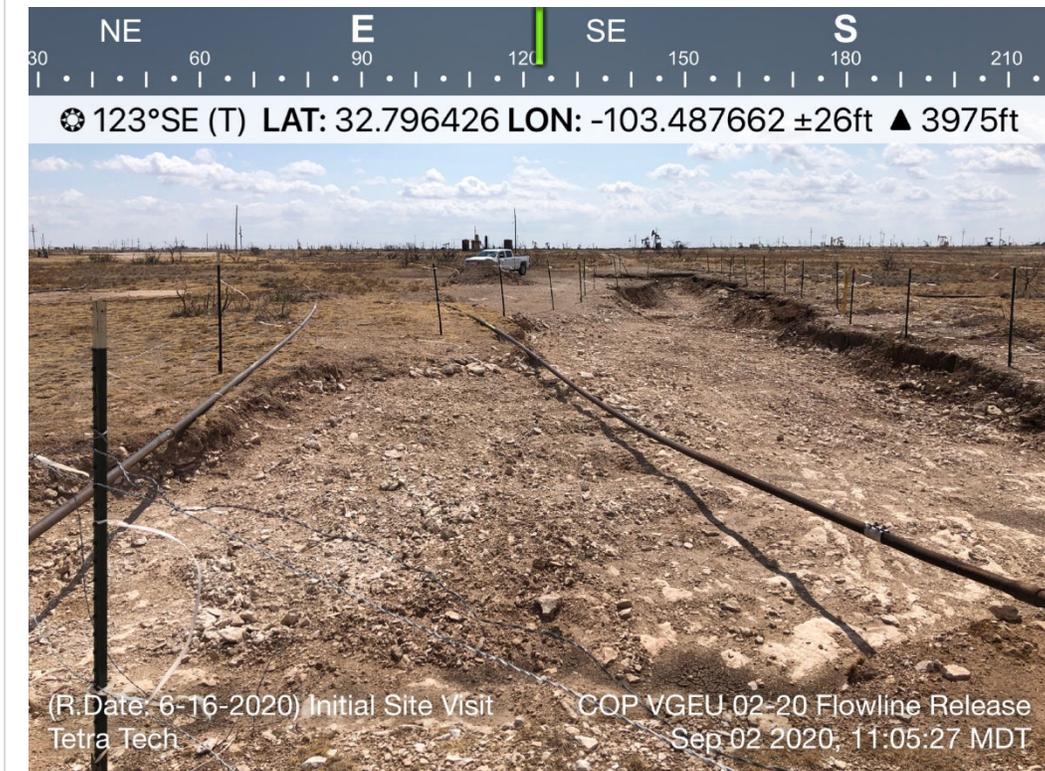
TETRA TECH, INC. PROJECT NO. 212C-MD-02305	DESCRIPTION	View of the eastern portion of the VGEU 02-20 West flowline release area, looking west.	1
	SITE NAME	ConocoPhillips VGEU 02-20 West Release	9/02/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02305	DESCRIPTION	View of the eastern portion of the VGEU 02-20 West flowline release area, looking west.	2
	SITE NAME	ConocoPhillips VGEU 02-20 West Release	9/02/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02305	DESCRIPTION	View of the western portion of the VGEU 02-20 West flowline release area, looking southwest.	3
	SITE NAME	ConocoPhillips VGEU 02-20 West Release	9/02/2020



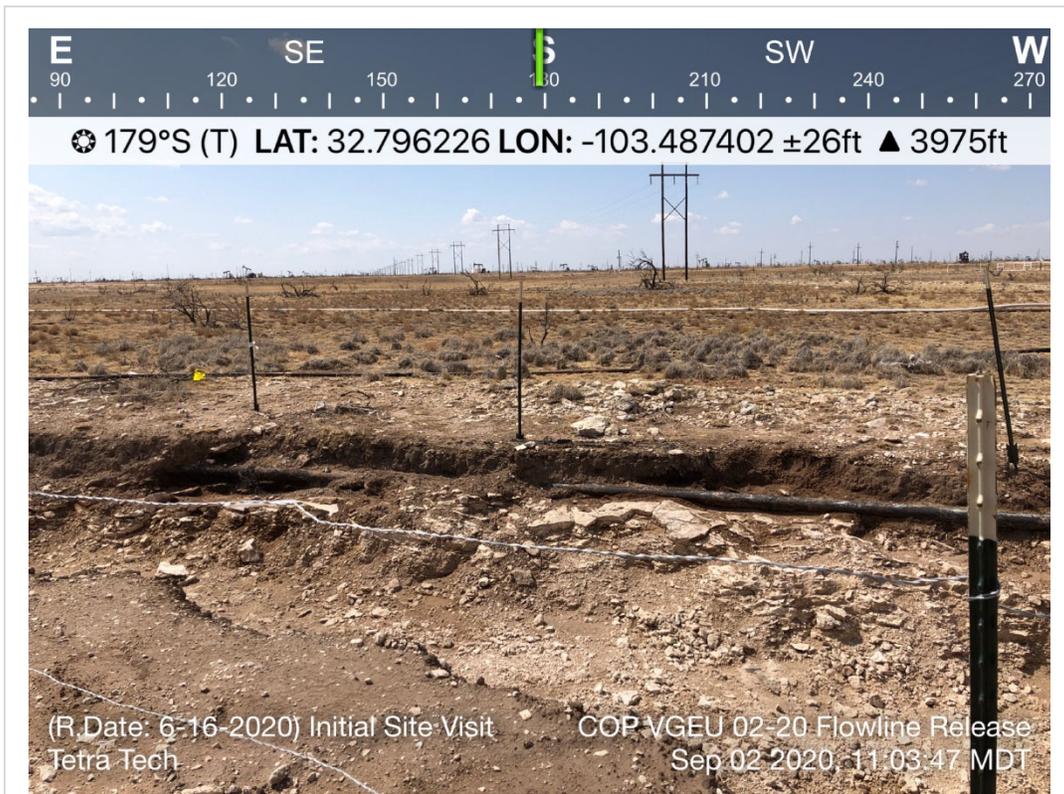
TETRA TECH, INC. PROJECT NO. 212C-MD-02305	DESCRIPTION	View of the western portion of the VGEU 02-20 West flowline release area, looking southeast.	4
	SITE NAME	ConocoPhillips VGEU 02-20 West Release	9/02/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02305	DESCRIPTION	View of the western portion of the VGEU 02-20 West flowline release area, looking west.	5
	SITE NAME	ConocoPhillips VGEU 02-20 West Release	9/02/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02305	DESCRIPTION	View of the central portion of the VGEU 02-20 West flowline release area, looking southeast.	6
	SITE NAME	ConocoPhillips VGEU 02-20 West Release	9/02/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02305	DESCRIPTION	View of the western portion of the VGEU 02-20 West flowline release area, looking south.	7
	SITE NAME	ConocoPhillips VGEU 02-20 West Release	9/02/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02305	DESCRIPTION	View of the southeastern extent of the VGEU 02-20 West flowline release area, looking northwest.	8
	SITE NAME	ConocoPhillips VGEU 02-20 West Release	9/02/2020

# **APPENDIX E**

## **Soil Boring Logs**

212C-MD-02305	 <b>TETRA TECH</b>	<b>LOG OF BORING BH-1</b>	Page 1 of 1
---------------	--	---------------------------	----------------

Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS: 32.796171, -103.487380      Surface Elevation: 3977 ft

Borehole Number: BH-1      Borehole Diameter (in.): 8      Date Started: 1/18/2021      Date Finished: 1/18/2021

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	Upon Completion of Drilling	DEPTH (ft)
												WATER LEVEL OBSERVATIONS While Drilling $\nabla$ Dry ft    Upon Completion of Drilling $\nabla$ Dry ft Remarks:		
5			3210									-- Previously excavated to approximately 4' bgs.	4	BH-1 (4-5')
			220	8								-ML- SILT: Light grey, very dense, cemented, with occasional chert.	7	BH-1 (6-7')
10			42	5								-ML- SILT: Light tan, very dense, cemented, with occasional chert.		
												-- Becoming brittle at 10' bgs.		
													13	
15												-SM- SILTY SAND: Reddish brown, medium dense, dry.	15	BH-1 (15')

Bottom of borehole at 15.0 feet.

<b>Sampler Types:</b>  Split Spoon  Shelby  Bulk Sample  Grab Sample	 Acetate Liner  Vane Shear  California  Test Pit	<b>Operation Types:</b>  Mud Rotary  Continuous Flight Auger  Wash Rotary	 Hand Auger  Air Rotary  Direct Push  Core Barrel	<b>Notes:</b> Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.
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Logger: John Thurston      Drilling Equipment: Air Rotary      Driller: Scarborough Drilling

212C-MD-02305	<b>TETRA TECH</b>	<b>LOG OF BORING BH-2</b>	Page 1 of 1
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Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS: 32.796291, -103.487576      Surface Elevation: 3977 ft

Borehole Number: BH-2      Borehole Diameter (in.): 8      Date Started: 1/18/2021      Date Finished: 1/18/2021

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	Upon Completion of Drilling	DEPTH (ft)
												WATER LEVEL OBSERVATIONS While Drilling <u>∇</u> Dry ft    Upon Completion of Drilling <u>∇</u> Dry ft Remarks:		
												MATERIAL DESCRIPTION		
			ExStik	PID				LL	PI					
5			778	8								-- Previously excavated to approximately 2' bgs.	2	
												<b>-GM-</b> CALICHE: Light tan, very dense, cemented, with occasional sand.		BH-2 (2-3')
			554	5								<b>-ML-</b> SILT: Light tan, very dense, cemented, with occasional chert.	5	BH-2 (4-5')
														BH-2 (6-7')
10			78	3.7										BH-2 (9-10')
15			88	5.6										BH-2 (15')

Bottom of borehole at 15.0 feet.

Sampler Types: <input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> California <input checked="" type="checkbox"/> Test Pit	Operation Types: <input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.
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Logger: John Thurston      Drilling Equipment: Air Rotary      Driller: Scarborough Drilling



212C-MD-02305	<b>TETRA TECH</b>	<b>LOG OF BORING BH-3</b>	Page 2 of 2
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Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS: 32.796390, -103.487729      Surface Elevation: 3977 ft

Borehole Number: BH-3      Borehole Diameter (in.): 8      Date Started: 1/18/2021      Date Finished: 1/18/2021

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		DEPTH (ft)	REMARKS
												While Drilling	Upon Completion of Drilling		
			ExStik	PID									While Drilling <u>∇</u> Dry ft    Upon Completion of Drilling <u>∇</u> Dry ft Remarks:		
30														30	BH-3 (30')

Bottom of borehole at 30.0 feet.

<b>Sampler Types:</b> Split Spoon Shelby Bulk Sample Grab Sample	Acetate Liner Vane Shear California Test Pit	<b>Operation Types:</b> Mud Rotary Continuous Flight Auger Wash Rotary	Hand Auger Air Rotary Direct Push Core Barrel	<b>Notes:</b> Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.
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Logger: John Thurston      Drilling Equipment: Air Rotary      Driller: Scarborough Drilling



212C-MD-02305	<b>TETRA TECH</b>	<b>LOG OF BORING BH-5</b>	Page 1 of 1
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Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS: 32.796421, -103.487760      Surface Elevation: 3977 ft

Borehole Number: BH-5      Borehole Diameter (in.): 8      Date Started: 1/18/2021      Date Finished: 1/18/2021

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)		VOC FIELD SCREENING (ppm)		SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		DEPTH (ft)	REMARKS
			ExStik	PID	While Drilling	Upon Completion of Drilling											
														While Drilling $\nabla$ Dry ft    Upon Completion of Drilling $\nabla$ Dry ft Remarks:			
														MATERIAL DESCRIPTION			
5			79	5										-GM- CALICHE: Light tan, very dense, cemented, with occasional topsoil.	2	BH-5 (0-1')	
			90	5										-GM- CALICHE: Light tan, very dense, cemented, dry.		BH-5 (2-3')	
																BH-5 (4-5')	
			44	4										-ML- SILT: Light tan, very dense, cemented, dry.	6	BH-5 (6-7')	
10																BH-5 (9-10')	
15														-SM- SILTY SAND: Tan, medium dense, dry. Bottom of borehole at 15.0 feet.	14.9		
															15		

<b>Sampler Types:</b> <input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> California <input checked="" type="checkbox"/> Test Pit	<b>Operation Types:</b> <input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	<b>Notes:</b> Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.
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Logger: John Thurston      Drilling Equipment: Air Rotary      Driller: Scarborough Drilling

212C-MD-02305	<b>TETRA TECH</b>	<b>LOG OF BORING BH-6</b>	Page 1 of 1
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Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS: 32.796421, -103.487760      Surface Elevation: 3977 ft

Borehole Number: BH-6      Borehole Diameter (in.): 8      Date Started: 1/18/2021      Date Finished: 1/18/2021

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	Upon Completion of Drilling	DEPTH (ft)
												While Drilling $\nabla$ Dry ft    Upon Completion of Drilling $\nabla$ Dry ft Remarks:		
												MATERIAL DESCRIPTION		
5			88	3								-SM- SILTY SAND: Brown, medium dense, dry.	0-1'	BH-6 (0-1')
			195	9								-GM- CALICHE: Light tan, very dense, cemented, dry.	3	BH-6 (2-3')
													6	BH-6 (4-5')
			126	5								-ML- SILT: Light grey/tan, very dense, cemented, dry.	6	BH-6 (6-7')
10													10	BH-6 (9-10')

Bottom of borehole at 10.0 feet.

Sampler Types: <input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> California <input checked="" type="checkbox"/> Test Pit	Operation Types: <input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.
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Logger: John Thurston      Drilling Equipment: Air Rotary      Driller: Scarborough Drilling

212C-MD-02305	<b>TETRA TECH</b>	<b>LOG OF BORING BH-7</b>	Page 1 of 1
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Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS: 32.796135, -103.487395      Surface Elevation: 3977 ft

Borehole Number: BH-7      Borehole Diameter (in.): 8      Date Started: 1/18/2021      Date Finished: 1/18/2021

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	Upon Completion of Drilling	DEPTH (ft)
												While Drilling <u>∇</u> Dry ft    Upon Completion of Drilling <u>∇</u> Dry ft Remarks:		
			ExStik	PID				LL	PI					
5			142									-SM-	SILTY SAND: Brown, medium dense, dry.	0-1'
			44									-GM-	CALICHE: Light tan, very dense, cemented, dry.	2-3'
			66									-ML-	SILT: Light tan, very dense, cemented, dry.	4-5'
			59											6-7'
10			64										-- Becoming brittle at 10' bgs	9-10'

Bottom of borehole at 10.0 feet.

Sampler Types: <input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> California <input checked="" type="checkbox"/> Test Pit	Operation Types: <input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.
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Logger: John Thurston      Drilling Equipment: Air Rotary      Driller: Scarborough Drilling

Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS: 32.796171, -103.487380      Surface Elevation: 3977 ft

Borehole Number: BH-8      Borehole Diameter (in.): 8      Date Started: 1/18/2021      Date Finished: 1/18/2021

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	Upon Completion of Drilling	DEPTH (ft)
												While Drilling $\nabla$ Dry ft    Upon Completion of Drilling $\nabla$ Dry ft Remarks:		
5			84	5								-SM- SILTY SAND: Brown, medium dense, dry, occasional limestone.	0-1'	BH-8 (0-1')
			42	5								-GM- CALICHE: Light tan, very dense, cemented, dry.	3	BH-8 (2-3')
			41	5								-ML- SILT: Light grey/tan, very dense, cemented, dry.	6	BH-8 (4-5')
			56									-ML- SILT: Light tan, very dense, cemented, dry.	8	BH-8 (6-7')
10			32									-ML- SILT: Light tan, very dense, cemented, dry.	14.9	BH-8 (9-10')
15												-ML- SILT: Light tan, very dense, cemented, dry, sandy.	15	

Bottom of borehole at 15.0 feet.

<b>Sampler Types:</b> <input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> California <input checked="" type="checkbox"/> Test Pit	<b>Operation Types:</b> <input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel
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**Notes:**  
 Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.

212C-MD-02305	<b>TETRA TECH</b>	<b>LOG OF BORING BH-9</b>	Page 1 of 1
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Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS: 32.796534, -103.487717      Surface Elevation: 3977 ft

Borehole Number: BH-9      Borehole Diameter (in.): 4      Date Started: 1/18/2021      Date Finished: 1/18/2021

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		DEPTH (ft)	REMARKS
												While Drilling	Upon Completion of Drilling		
												While Drilling $\nabla$ Dry ft    Upon Completion of Drilling $\nabla$ Dry ft Remarks:			
			ExStik	PID				LL	PI			<b>MATERIAL DESCRIPTION</b>			
			77	3								<b>-SM-</b> SILTY SAND: Brown, medium dense, dry.	1	BH-9 (0-1')	
			55	3								<b>-GM-</b> CALICHE: Light tan, very dense, cemented, dry.	1.5	BH-9 (1-1.5')	

Bottom of borehole at 1.5 feet.

Sampler Types: <input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> California <input checked="" type="checkbox"/> Test Pit	Operation Types: <input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data. Drill rig unable to mobilize to boring location.
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Logger: John Thurston      Drilling Equipment: Hand Auger      Driller: Scarborough Drilling

212C-MD-02305	<b>TETRA TECH</b>	<b>LOG OF BORING BH-17/BH-17A</b>	Page 1 of 2
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Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS Coordinates: 32.796482°, -103.487724° Surface Elevation: 3977 ft

Borehole Number: BH-17/BH-17A Borehole Diameter (in.): 4 Date Started: 2/18/2022 Date Finished: 5/24/2022

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	Upon Completion of Drilling	DEPTH (ft)
			ExStik	PID								While Drilling <u>∇</u> DRY ft Upon Completion of Drilling <u>∇</u> DRY ft Remarks:		
5											-GM- CALICHE: Tan, dense, with minimal gravel.			BH-17 (6-7')
10														BH-17 (8-9')
														BH-17 (10-11')
												-SW- SAND: Reddish brown, loose, with no gravel.		BH-17 (12-13')
15														BH-17A (14-15')
												-SM- SILTY SAND: Light tan, medium dense, fine to very fine-grained, with some caliche.		BH-17A (19-20')
20														BH-17A (24-25')
25														BH-17A (29-30')
30														

Sampler Types: <input checked="" type="checkbox"/> Split Spoon <input type="checkbox"/> Shelby <input type="checkbox"/> Bulk Sample <input type="checkbox"/> Grab Sample	<input type="checkbox"/> Acetate Liner <input type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> Discrete Sample <input type="checkbox"/> Test Pit	Operation Types: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Continuous Flight Auger <input type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input type="checkbox"/> Air Rotary <input type="checkbox"/> Direct Push <input type="checkbox"/> Core Barrel	Notes: Surface elevation is an estimated value from Google Earth data. Laboratory analyzed sample intervals are shown in the "Remarks" column above.
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Logger: Joe Tyler/Colton Bickerstaff Drilling Equipment: Air Rotary Driller: Scarborough Drilling

212C-MD-02305	<b>TETRA TECH</b>	<b>LOG OF BORING BH-17/BH-17A</b>	Page 2 of 2
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Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS Coordinates: 32.796482°, -103.487724° Surface Elevation: 3977 ft

Borehole Number: BH-17/BH-17A Borehole Diameter (in.): 4 Date Started: 2/18/2022 Date Finished: 5/24/2022

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS			
												While Drilling	Upon Completion of Drilling	DEPTH (ft)	REMARKS
												While Drilling <input checked="" type="checkbox"/> DRY ft Upon Completion of Drilling <input checked="" type="checkbox"/> DRY ft Remarks:			
35														38	BH-17A (34-35')
40												-SM- SILTY SAND: Light tan to light brown, very fine-grained, with trace caliche.		40	BH-17A (39-40')
45														45	BH-17A (44-45')
50														50	
55														55	

Bottom of borehole at 55.0 feet.

Sampler Types: <input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> Discrete Sample <input checked="" type="checkbox"/> Test Pit	Operation Types: <input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	Notes: Surface elevation is an estimated value from Google Earth data. Laboratory analyzed sample intervals are shown in the "Remarks" column above.
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Logger: Joe Tyler/Colton Bickerstaff Drilling Equipment: Air Rotary Driller: Scarborough Drilling

212C-MD-02305	<b>TETRA TECH</b>	<b>LOG OF BORING BH-18/BH-18A</b>	Page 1 of 2
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Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS Coordinates: 32.796263°, -103.487698° Surface Elevation: 3977 ft

Borehole Number: BH-18/BH-18A Borehole Diameter (in.): 4 Date Started: 2/18/2022 Date Finished: 5/24/2022

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS	
												While Drilling	Upon Completion of Drilling
												While Drilling <input checked="" type="checkbox"/> DRY ft Upon Completion of Drilling <input checked="" type="checkbox"/> DRY ft Remarks:	
												MATERIAL DESCRIPTION	
5											-GM- CALICHE: Tan, dense, with minimal gravel.		
10													
12											-SW- SAND: Reddish brown, loose, with no gravel.		
15													
15											-SM- SILTY SAND: Light tan, medium dense, fine to very fine-grained, with some caliche.		
20													
25													
30													

Sampler Types: <input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> Discrete Sample <input checked="" type="checkbox"/> Test Pit	Operation Types: <input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	Notes: Surface elevation is an estimated value from Google Earth data. Laboratory analyzed sample intervals are shown in the "Remarks" column above.
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Logger: Joe Tyler/Colton Bickerstaff Drilling Equipment: Air Rotary Driller: Scarborough Drilling

212C-MD-02305	<b>TETRA TECH</b>	<b>LOG OF BORING BH-18/BH-18A</b>	Page 2 of 2
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Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS Coordinates: 32.796263°, -103.487698° Surface Elevation: 3977 ft

Borehole Number: BH-18/BH-18A Borehole Diameter (in.): 4 Date Started: 2/18/2022 Date Finished: 5/24/2022

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS			
												While Drilling	Upon Completion of Drilling	DEPTH (ft)	REMARKS
												While Drilling <input checked="" type="checkbox"/> DRY ft Upon Completion of Drilling <input checked="" type="checkbox"/> DRY ft Remarks:			
35														38	BH-18A (34-35')
40												-SM- SILTY SAND: Light tan to light brown, very fine-grained, with trace caliche.		40	BH-18A (39-40')
45														45	BH-18A (44-45')
50														50	BH-18A (49-50')

Bottom of borehole at 50.0 feet.

<b>Sampler Types:</b> <input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> Discrete Sample <input checked="" type="checkbox"/> Test Pit	<b>Operation Types:</b> <input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	<b>Notes:</b> Surface elevation is an estimated value from Google Earth data. Laboratory analyzed sample intervals are shown in the "Remarks" column above.
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Logger: Joe Tyler/Colton Bickerstaff Drilling Equipment: Air Rotary Driller: Scarborough Drilling

212C-MD-02305	<b>TETRA TECH</b>	<b>LOG OF BORING BH-19</b>	Page 1 of 1
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Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS Coordinates: 32.796590°, -103.487716° Surface Elevation: 3977 ft

Borehole Number: BH-19 Borehole Diameter (in.): 4 Date Started: 2/28/2022 Date Finished: 5/24/2022

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS	
												While Drilling	Upon Completion of Drilling
												While Drilling <input checked="" type="checkbox"/> DRY ft Upon Completion of Drilling <input checked="" type="checkbox"/> DRY ft Remarks:	
												MATERIAL DESCRIPTION	
5											-GM- CALICHE: Tan, dense, with minimal gravel.		
10											-SW- SAND: Reddish brown, loose, with no gravel.		
15													

Bottom of borehole at 15.0 feet.

<b>Sampler Types:</b> <input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> Discrete Sample <input checked="" type="checkbox"/> Test Pit	<b>Operation Types:</b> <input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	<b>Notes:</b> Surface elevation is an estimated value from Google Earth data. Laboratory analyzed sample intervals are shown in the "Remarks" column above.
--	--	---	--	--

Logger: Joe Tyler Drilling Equipment: Air Rotary Driller: Scarborough Drilling

212C-MD-02305	<b>TETRA TECH</b>	<b>LOG OF BORING BH-20</b>	Page 1 of 1
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Project Name: VGEU 02-20 West Flowline Release

Borehole Location: GPS Coordinates: 32.796170°, -103.487698° Surface Elevation: 3977 ft

Borehole Number: BH-20 Borehole Diameter (in.): 4 Date Started: 5/24/2022 Date Finished: 5/24/2022

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	Upon Completion of Drilling	DEPTH (ft)
												While Drilling $\nabla$ DRY ft Upon Completion of Drilling $\nabla$ DRY ft Remarks:		
5			ExStik	PID								4	-ML- SILT: Light tan, very dense, with abundant caliche.	BH-20 (0-1')  BH-20 (2-3')
10												4	-SM- SILTY SAND: Light tan to light brown, fine-grained, with trace caliche.	BH-20 (4-5')  BH-20 (6-7')  BH-20 (9-10')
15												15		BH-20 (14-15')

Bottom of borehole at 15.0 feet.

Sampler Types: <input checked="" type="checkbox"/> Split Spoon <input type="checkbox"/> Shelby <input type="checkbox"/> Bulk Sample <input type="checkbox"/> Grab Sample	<input type="checkbox"/> Acetate Liner <input type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> Discrete Sample <input type="checkbox"/> Test Pit	Operation Types: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Continuous Flight Auger <input type="checkbox"/> Wash Rotary	<input type="checkbox"/> Hand Auger <input type="checkbox"/> Air Rotary <input type="checkbox"/> Direct Push <input type="checkbox"/> Core Barrel	Notes: Surface elevation is an estimated value from Google Earth data. Laboratory analyzed sample intervals are shown in the "Remarks" column above.
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Logger: Colton Bickerstaff      Drilling Equipment: Air Rotary      Driller: Scarborough Drilling

# **APPENDIX F**

## **Regulatory Correspondence**

Form C-141

State of New Mexico  
Oil Conservation Division

Page 5

Incident ID	nRM2017856312
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: Samuel Widmer Title: RM&R Program Manager  
 Signature: [Signature] Date: 10/07/21  
 email: Sam.Widmer@cop.com Telephone: 281-206-5298

**OCD Only**

Received by: Chad Hensley Date: 11/15/2021

Approved     Approved with Attached Conditions of Approval     Denied     Deferral Approved

Signature: [Signature] Date: 11/15/2021

**Lull, Christian**

---

**From:** Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>  
**Sent:** Monday, April 04, 2022 9:03 AM  
**To:** Lull, Christian  
**Cc:** Widmer, Sam A  
**Subject:** RE: [EXTERNAL] (Extension Request #2) VGEU 02-20 West Flowline (nRM2017856312)

**⚠ CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. **⚠**

Extension request for nRM2017856312 is granted. Closure report due 07/15/2022.

NOTE: The OCD requires a copy of all correspondence relative to remedial projects be included in all proposal and/or final closure reports. Correspondence required to be included in reports may include, but not necessarily limited to, extension requests, liner inspection notifications, sample event notifications, spill/release/fire notifications, and variance requests. This will allow for notifications and requests to become a documented part of the incident file.

Cheers,

**Chad Hensley** • Environmental Science & Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

811 First St. | Artesia, NM 88210

Office: 575.748.1283 | Cell: 575-703-1723

[chad.hensley@state.nm.us](mailto:chad.hensley@state.nm.us)

<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Lull, Christian <Christian.Lull@tetrattech.com>  
**Sent:** Thursday, March 31, 2022 3:51 PM  
**To:** Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>  
**Cc:** Widmer, Sam A <Sam.Widmer@conocophillips.com>  
**Subject:** [EXTERNAL] (Extension Request #2) VGEU 02-20 West Flowline (nRM2017856312)

**CAUTION:** This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Mr. Hensley,

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nRM2017856312, with the following conditions:

- **Mentioned samples have not been fully delineated vertically: BH-4, BH-11, and BH-16. Please show on closure report delineation from 10ft bgs to closure criteria in five foot increments.**

- **Closure report due 02/15/2022**

OCD previously granted an extension via email on December 20, 2021. Thus, the closure Report is due for the above release is currently due on **April 16, 2022**.

Per discussion, we are providing more data for an additional extension request. Justification for this request, including figures and analytical data showing the project progress of ConocoPhillips is described below.

#### *EXTENSION REQUEST #2*

ConocoPhillips is requesting a three-month extension of the current deadline of April 16, 2022 (**to July 15, 2022**) in order to complete delineation and remediation for the subject line release (Incident Number nRM2017856312).

In February 2022, on behalf of COP, Tetra Tech personnel drilled three soil borings (BH-17 through BH-19) to approximately 13 ft bgs using an air rotary drilling rig. The borings were completed to attempt to vertically delineate the impacted soil at previously drilled locations BH-4, BH-11 and BH-16 and/or horizontally define the VGEU 02-20 West flowline release, as discussed in the conditions.

During drilling, a loose unconsolidated sand unit was encountered below lithified soils at approximately 13'. This loose sand unit sloughed in the open borehole, and did not allow for representative sampling at depth. The release assessment and delineation activities will need to continue.

Based on the most recent laboratory analytical results, additional assessment is required at the site to fulfill OCD directives. Please see attached laboratory analytical results.

- The analytical data from BH-17 (closest to the release) again exhibited the "clean" soils above the impacted depth interval at 12-13 bgs.
- The analytical data from BH-19 (northern delineation) was clean at the 9-10 bgs interval. This was a successful horizontal delineation of BH-4 and BH-16.
- The analytical data from BH-18 (south of the release) was impacted in the upper 11', but did delineate vertically at the 12-13' bgs interval.

Thus, additional drilling is required in the vicinity of BH-17 and south of BH-18. COP intends to complete additional drilling in the next 30 days, and provide the additional data to OCD.

Once the data is collected and evaluated, final remediation extents at the Site will be discussed with OCD.

Please let me know if you have any additional questions, (M) 512-565-0190.

Thank you for your time.

**Christian Llull, P.G.** | Program Manager

Direct +1 (512) 338-2861 | Business +1 (512) 338-1667 | Fax +1 (512) 338-1331 | [christian.llull@tetrattech.com](mailto:christian.llull@tetrattech.com)

**Tetra Tech** | *Leading with Science*® | OGA

8911 N. Capital of Texas Highway | Bldg. 2, Suite 2310 | Austin, TX 78759 | [tetrattech.com](http://tetrattech.com)

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Please consider the environment before printing. [Read more](#)



**Lull, Christian**

---

**From:** Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>  
**Sent:** Monday, December 20, 2021 11:09 AM  
**To:** Widmer, Sam A  
**Cc:** Dickerson, Ryan; Lull, Christian; Bratcher, Mike, EMNRD  
**Subject:** RE: [EXTERNAL] RE: [EXTERNAL]FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 54738

**⚠ CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. **⚠**

Sam,

I hope all is well with you and your family for this coming Christmas. I have no issues with the 60-day extension and that is granted. For the later part “Once the data is reported, COP would recommend leaving this impacted material in place.” We can discuss this when you all have the data in hand.

**Chad Hensley** • Environmental Science & Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
811 First St. | Artesia, NM 88210  
Office: 575.748.1283 | Cell: 575-703-1723  
[chad.hensley@state.nm.us](mailto:chad.hensley@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Widmer, Sam A <Sam.Widmer@conocophillips.com>  
**Sent:** Monday, December 20, 2021 8:16 AM  
**To:** Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>  
**Cc:** Dickerson, Ryan <Ryan.Dickerson@tetrattech.com>; Lull, Christian <christian.lull@tetrattech.com>  
**Subject:** [EXTERNAL] RE: [EXTERNAL]FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 54738

**CAUTION:** This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Hi Chad,

COP appreciates the OCD approval for this Work Plan associated with this complex incident site.

Regarding the conditions of your approval below, based on interpretation, COP is planning to drill soil borings in the mentioned locations below to confirm vertical delineation at those specific locations. Based on the reported incident footprint, the lack of lateral transmissivity at the site, and the lack of widespread contamination in the overlying strata in these areas, COP maintains the belief that these observed impacts at depth are unrelated to the nRM2017856312

incident. Given that this observed impacted interval is at a depth of 9-10 ft, along with the surrounding pipelines and obstructions, COP believes that remediation in these areas would cause more damage to the environment and create additional risk for a line strike during remedial activities. Once delineated, COP would report these soil boring results as a Work Plan addendum.

Once the data is reported, COP would recommend leaving this impacted material in place.

Additionally, COP requests a 60-day extension of time. This time will allow us to assess and delineate these areas as requested before remediation of the reported release footprint.

Does the OCD approve of this path forward and action plan?

Thanks for your support,  
Sam Widmer  
Risk Management & Remediation  
ConocoPhillips  
O: 281-206-5298  
C: 907-227-1777

---

**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us) <[OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)>  
**Sent:** Monday, November 15, 2021 12:38 PM  
**To:** Llull, Christian <[Christian.Llull@tetrattech.com](mailto:Christian.Llull@tetrattech.com)>  
**Subject:** The Oil Conservation Division (OCD) has approved the application, Application ID: 54738

**⚠ CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. **⚠**

To whom it may concern (c/o Christian Llull for CONOCOPHILLIPS COMPANY),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action (C-141)*, for incident ID (n#) nRM2017856312, with the following conditions:

- **Mentioned samples have not been fully delineated vertically: BH-4, BH-11, and BH-16. Please show on closure report delineation from 10ft bgs to closure criteria in five foot increments.**
- **Closure report due 02/15/2022**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,  
Chad Hensley  
Environmental Science & Specialist  
575-703-1723  
[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)

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

## **APPENDIX G NMSLO Seed Mixture Details**



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

# Custom Soil Resource Report for Lea County, New Mexico

## VGEU 02-20 West Flowline Release



August 24, 2021

## Soil Map

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

### Custom Soil Resource Report Soil Map



Map Scale: 1:1,060 if printed on A landscape (11" x 8.5") sheet.

0 15 30 60 90 Meters

0 50 100 200 300 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

Custom Soil Resource Report

**MAP LEGEND**

**Area of Interest (AOI)**

 Area of Interest (AOI)

**Soils**

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

**Special Point Features**

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

**MAP INFORMATION**

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

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

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

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

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

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

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

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

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

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

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

## Custom Soil Resource Report

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KU	Kimbrough-Lea complex, dry, 0 to 3 percent slopes	1.7	100.0%
<b>Totals for Area of Interest</b>		<b>1.7</b>	<b>100.0%</b>

## Map Unit Descriptions

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

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

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

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

## Custom Soil Resource Report

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

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

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

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

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

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

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

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

## Custom Soil Resource Report

**Lea County, New Mexico****KU—Kimbrough-Lea complex, dry, 0 to 3 percent slopes****Map Unit Setting**

*National map unit symbol:* 2tw46  
*Elevation:* 2,500 to 4,800 feet  
*Mean annual precipitation:* 14 to 16 inches  
*Mean annual air temperature:* 57 to 63 degrees F  
*Frost-free period:* 180 to 220 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Kimbrough and similar soils:* 45 percent  
*Lea and similar soils:* 25 percent  
*Minor components:* 30 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Kimbrough****Setting**

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

**Typical profile**

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

**Properties and qualities**

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* 4 to 18 inches to petrocalcic  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.01 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 95 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 1.0  
*Available water supply, 0 to 60 inches:* Very low (about 1.4 inches)

**Interpretive groups**

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

## Custom Soil Resource Report

**Description of Lea****Setting***Landform:* Plains*Down-slope shape:* Convex*Across-slope shape:* Linear*Parent material:* Calcareous, loamy eolian deposits from the blackwater draw formation of pleistocene age over indurated caliche of pliocene age**Typical profile***A - 0 to 10 inches:* loam*Bk - 10 to 18 inches:* loam*Bkk - 18 to 26 inches:* gravelly fine sandy loam*Bkkm - 26 to 80 inches:* cemented material**Properties and qualities***Slope:* 0 to 3 percent*Depth to restrictive feature:* 22 to 30 inches to petrocalcic*Drainage class:* Well drained*Runoff class:* High*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)*Depth to water table:* More than 80 inches*Frequency of flooding:* None*Frequency of ponding:* None*Calcium carbonate, maximum content:* 90 percent*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*Sodium adsorption ratio, maximum:* 3.0*Available water supply, 0 to 60 inches:* Very low (about 2.9 inches)**Interpretive groups***Land capability classification (irrigated):* None specified*Land capability classification (nonirrigated):* 7s*Hydrologic Soil Group:* D*Ecological site:* R077DY047TX - Sandy Loam 12-17" PZ*Hydric soil rating:* No**Minor Components****Douro***Percent of map unit:* 12 percent*Landform:* Plains*Down-slope shape:* Linear*Across-slope shape:* Linear*Ecological site:* R077DY047TX - Sandy Loam 12-17" PZ*Other vegetative classification:* Unnamed (G077DH000TX)*Hydric soil rating:* No**Kenhill***Percent of map unit:* 12 percent*Landform:* Plains*Down-slope shape:* Linear*Across-slope shape:* Linear*Ecological site:* R077DY038TX - Clay Loam 12-17" PZ*Hydric soil rating:* No

Custom Soil Resource Report

**Spraberry**

*Percent of map unit:* 6 percent

*Landform:* Plains, playa rims

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear

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

*Other vegetative classification:* Unnamed (G077DH000TX)

*Hydric soil rating:* No

**NMSLO Seed Mix****Sandy Loam (SL)****SANDY LOAM (SL) SITES SEED MIXTURE:**

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
<b>Grasses:</b>			
Galleta grass	Viva, VNS, So.	2.5	F
Little bluestem	Cimmaron, Pastura	2.5	F
Blue grama	Hachita, Lovington	2.0	D
Sideoats grama	Vaughn, El Reno	2.0	F
Sand dropseed	VNS, Southern	1.0	S
<b>Forbs:</b>			
Indian blanketflower	VNS, Southern	1.0	D
Parry penstemon	VNS, Southern	1.0	D
Blue flax	Appar	1.0	D
Desert globemallow	VNS, Southern	1.0	D
<b>Shrubs:</b>			
Fourwing saltbush	VNS, Southern	2.0	D
Common winterfat	VNS, Southern	1.0	F
Apache plume	VNS, Southern	0.75	F
<b>Total PLS/acre</b>		<b>17.75</b>	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box

- VNS, Southern – No Variety Stated, seed should be from a southern latitude collection of this species.
- Double above seed rates for broadcast or hydroseeding.
- If Parry penstemon is not available, substitute firecracker penstemon.
- If desert globemallow is not available, substitute scarlet globemallow or Nelson globemallow.
- If a species is not available, provide a suggested substitute to the New Mexico Land Office for approval. Increasing all other species proportionately may be acceptable.



**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
 811 S. First St., Artesia, NM 88210  
 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 112102

**CONDITIONS**

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 112102
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. Composite confirmation samples will be collected from the bottom and sidewalls of the excavation from areas representing no more than four hundred (400) square feet. Please address AH-2 in remedial process. Please identify the Responsible Party (RP) of the suspected deeper TPH release identified in borings BH-4, BH-11, and BH-16. Do not backfill excavation until RP is identified and a discussion with OCD can be held.	9/23/2022