



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 SM4500CL-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@tetrattech.com.

Sincerely,
Tetra Tech, Inc.

A handwritten signature in blue ink, appearing to read 'CLlull', is positioned above the printed 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

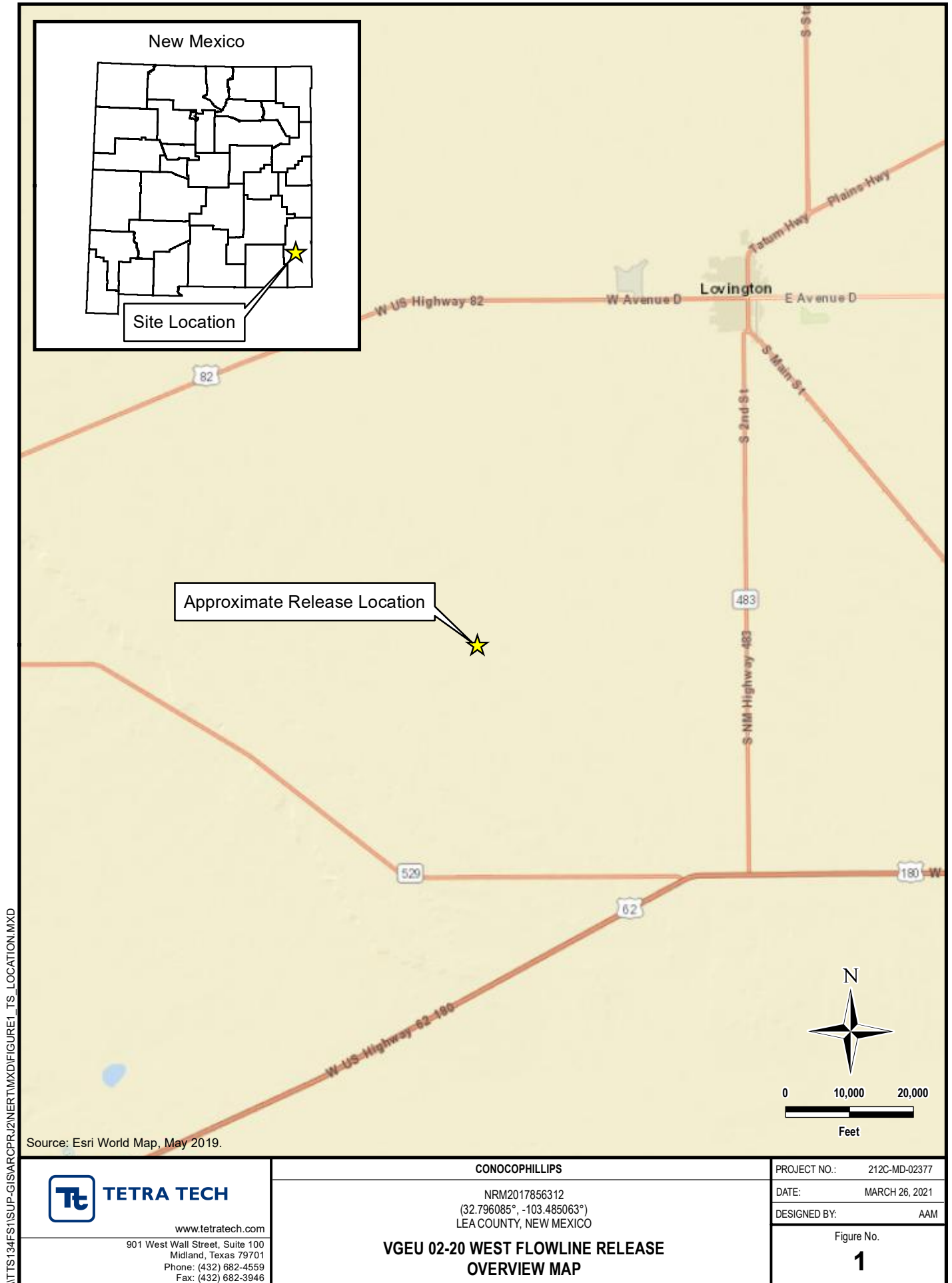
Tables:

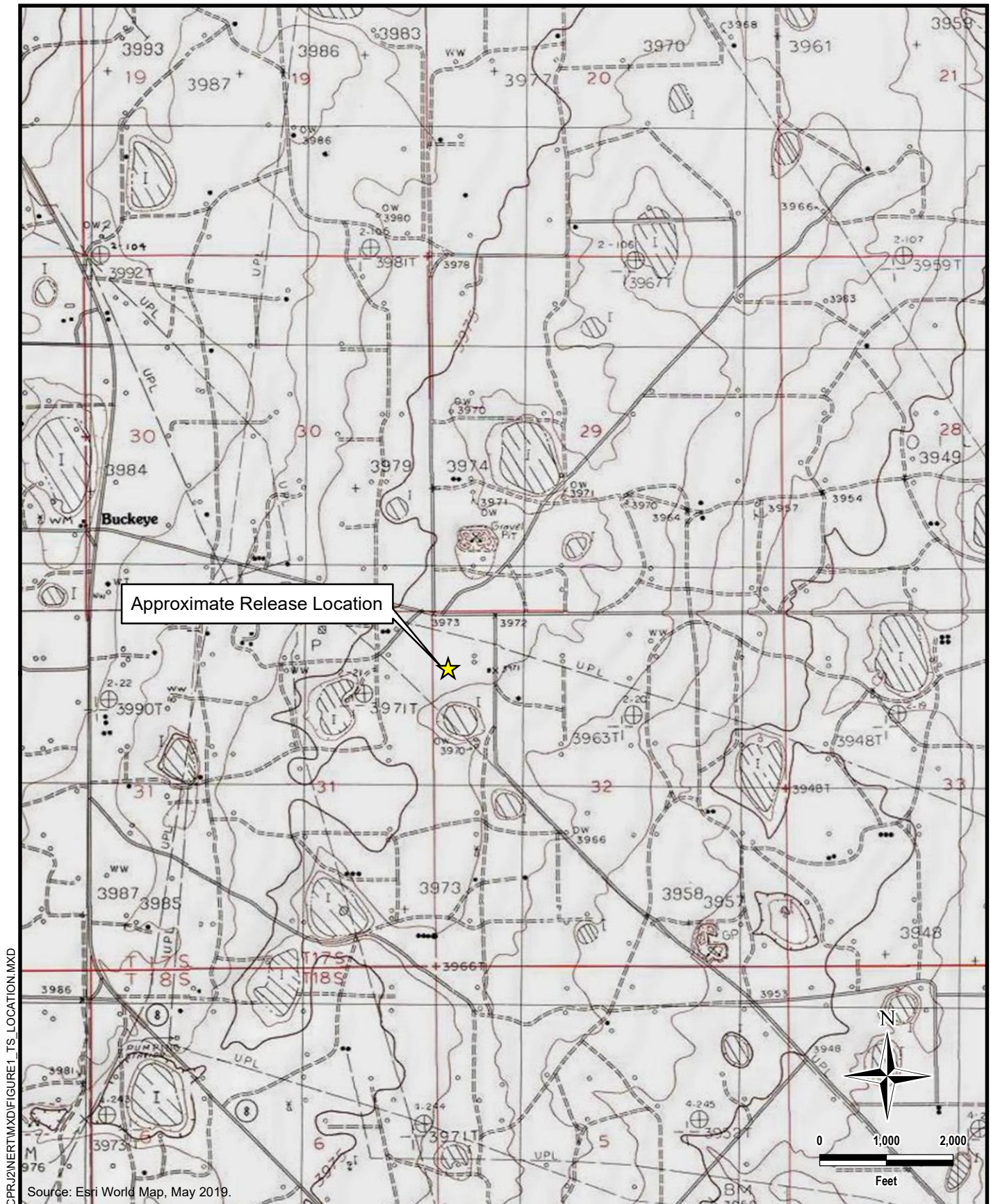
- Table 1 – Summary of Analytical Results – Initial Soil Assessment
- Table 2 – Summary of Analytical Results – Additional Soil Assessment

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\SUP-GIS\ARCP\2\NERT\TX\FIGURE1_TS_LOCATION.MXD


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CONOCOPHILLIPS

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

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

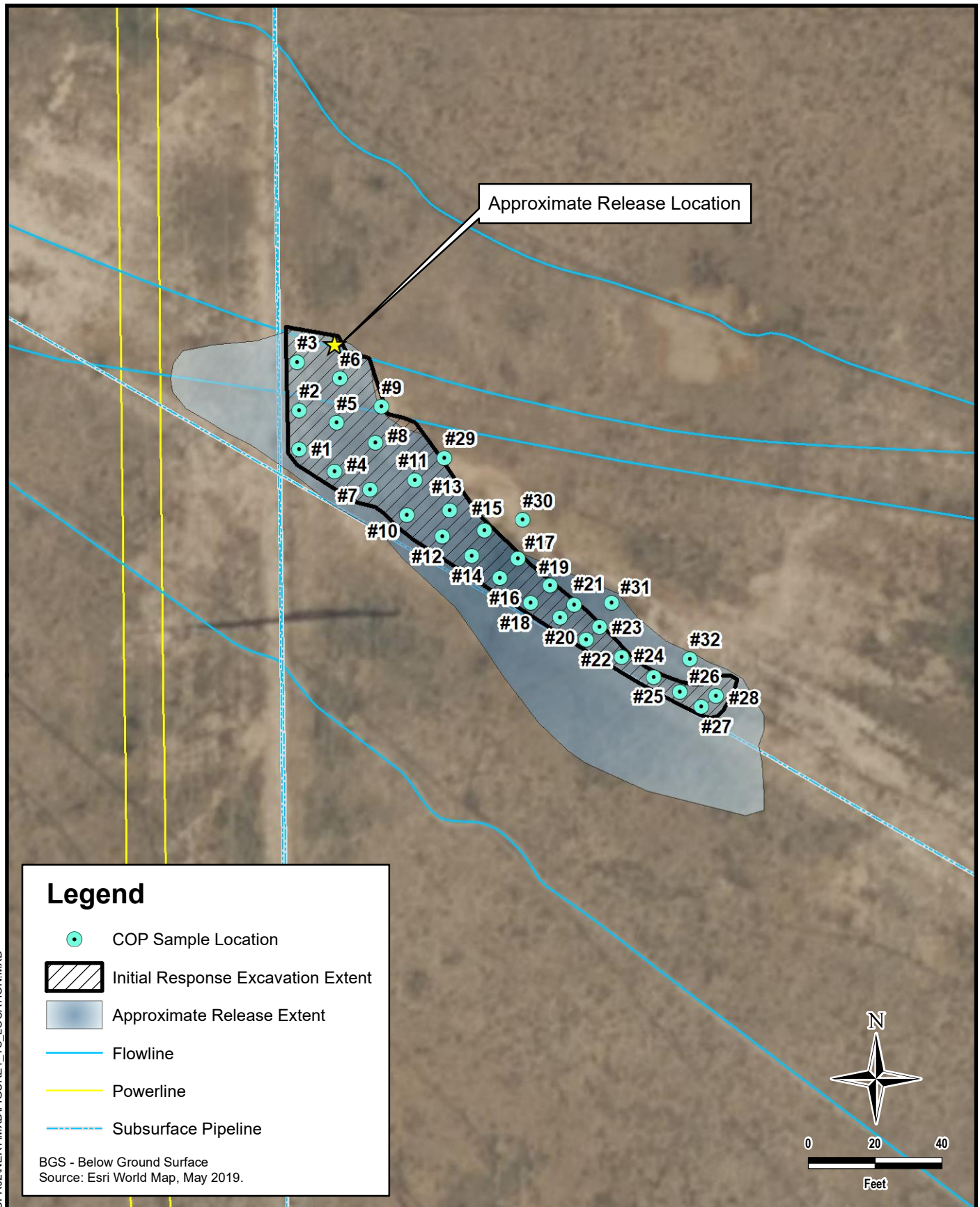
PROJECT NO.: 212C-MD-02377

DATE: MARCH 26, 2021

DESIGNED BY: AAM

Figure No.

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CONOCOPHILLIPS

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

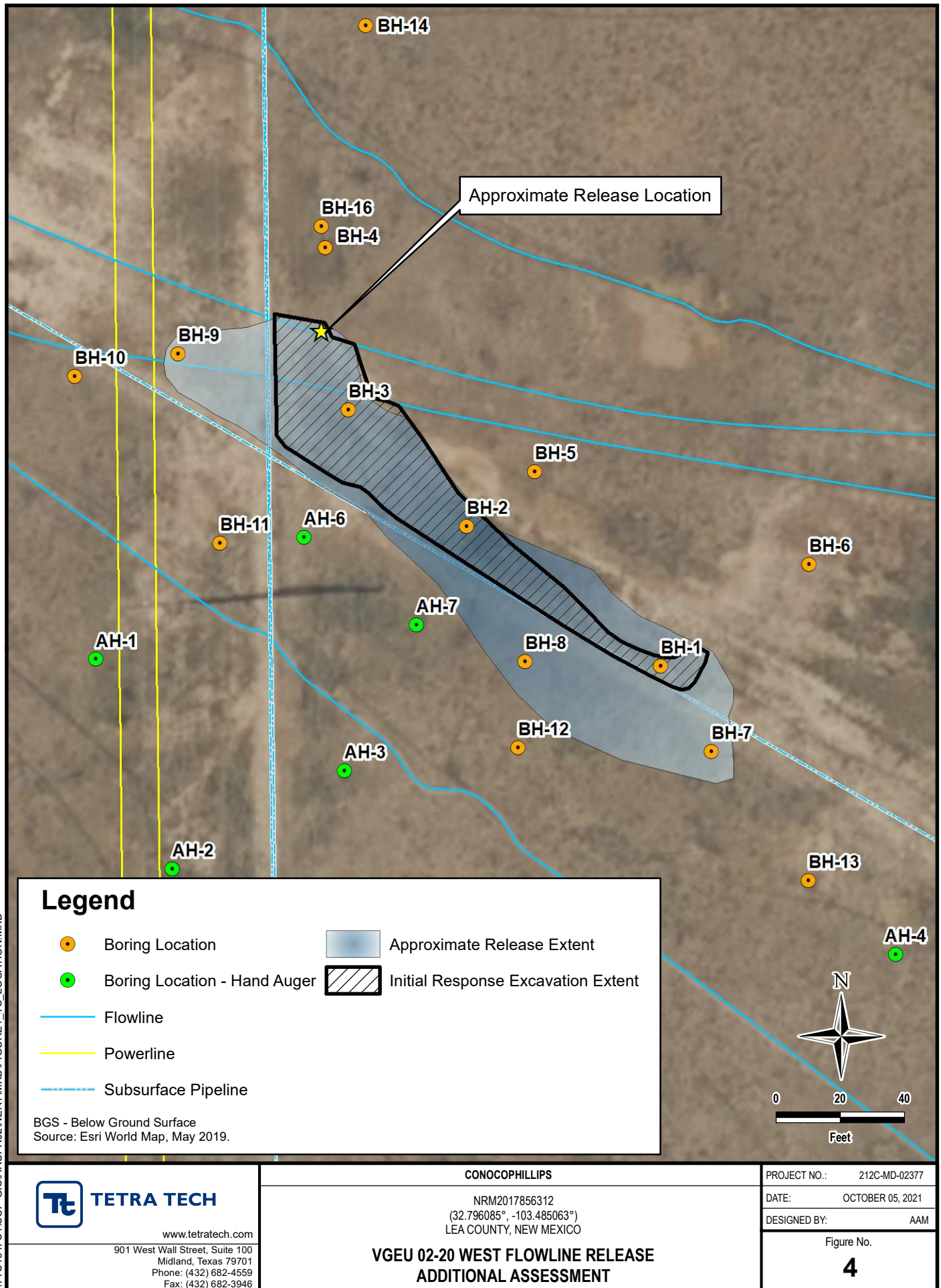
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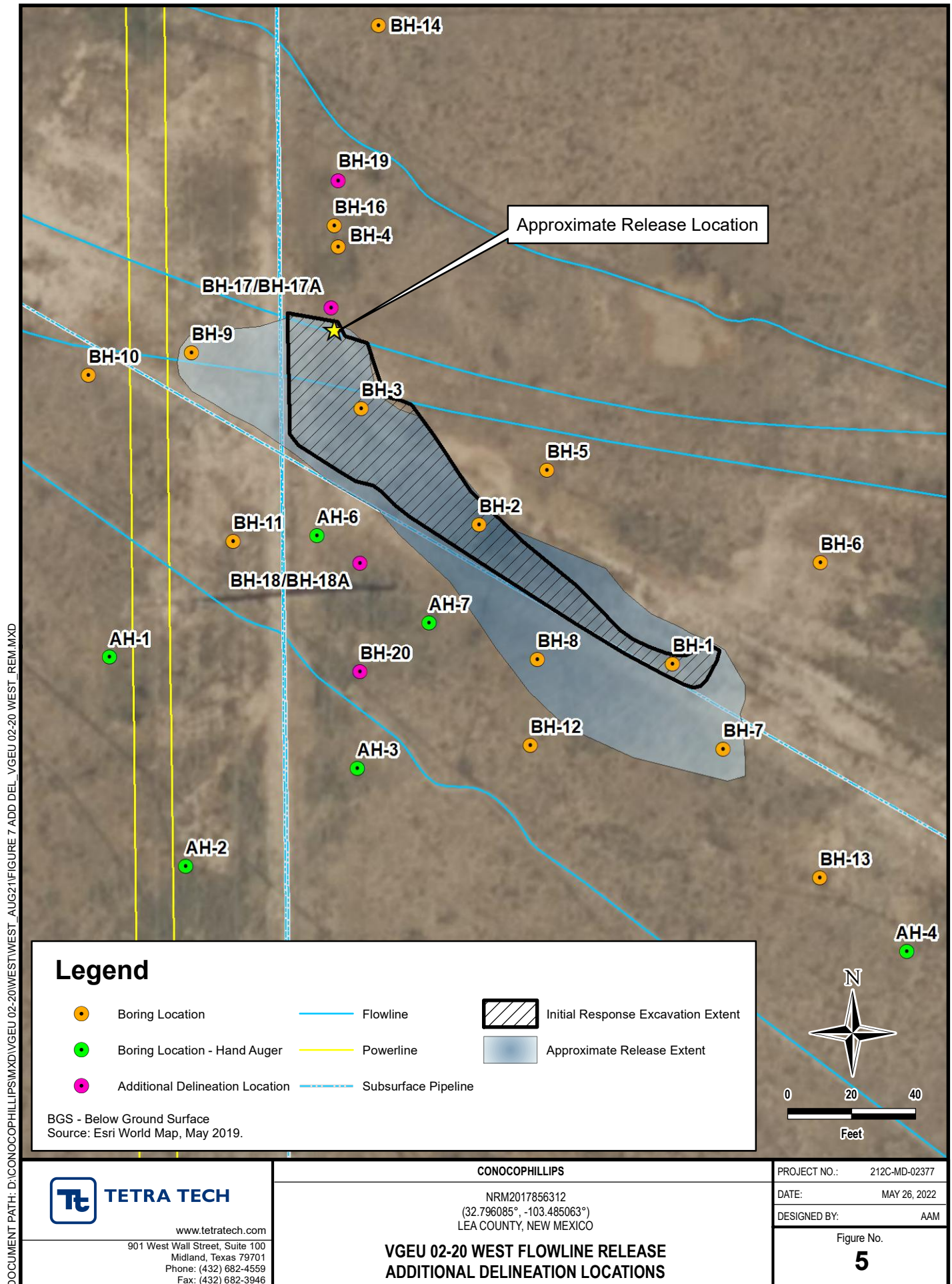
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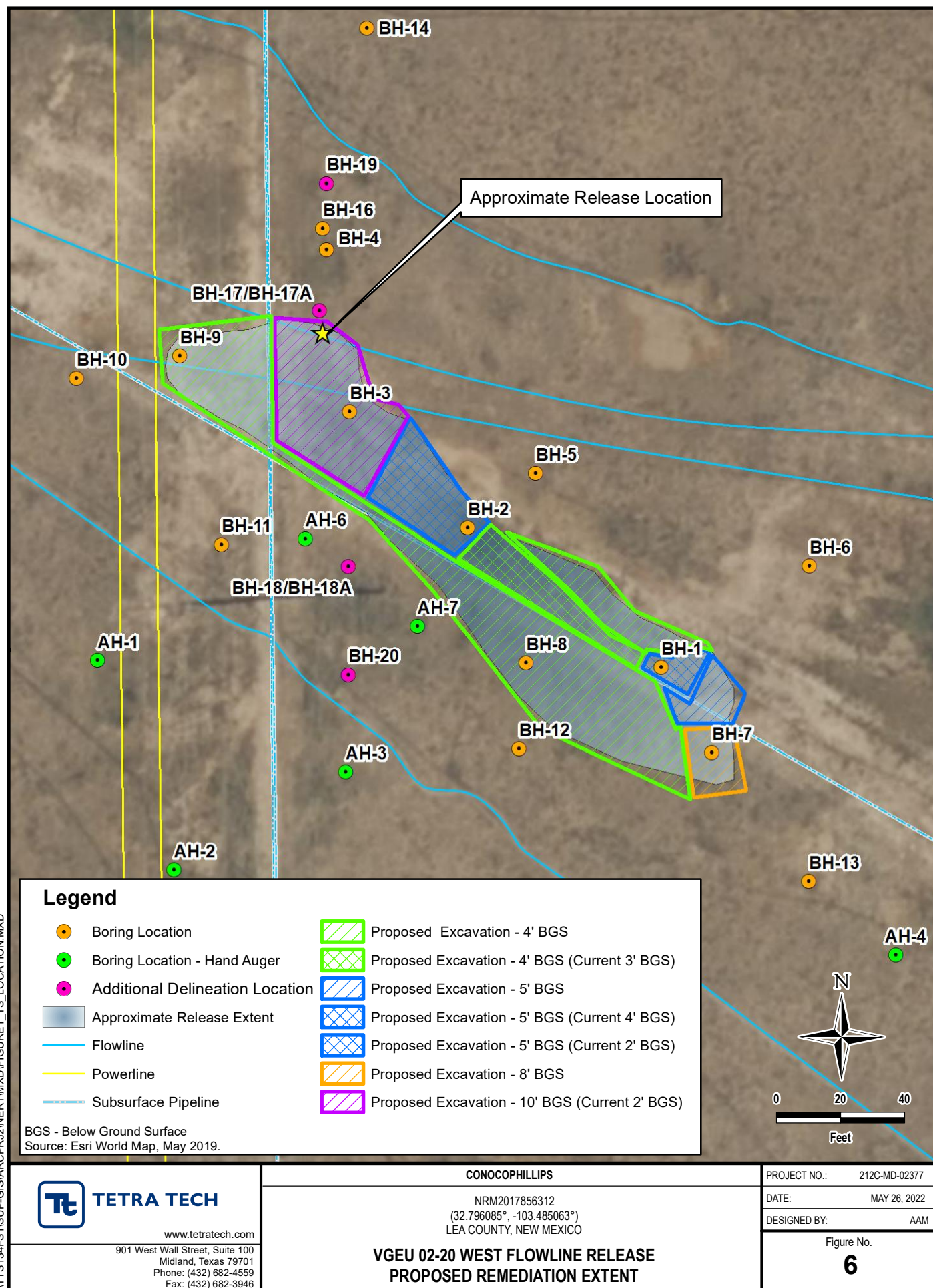
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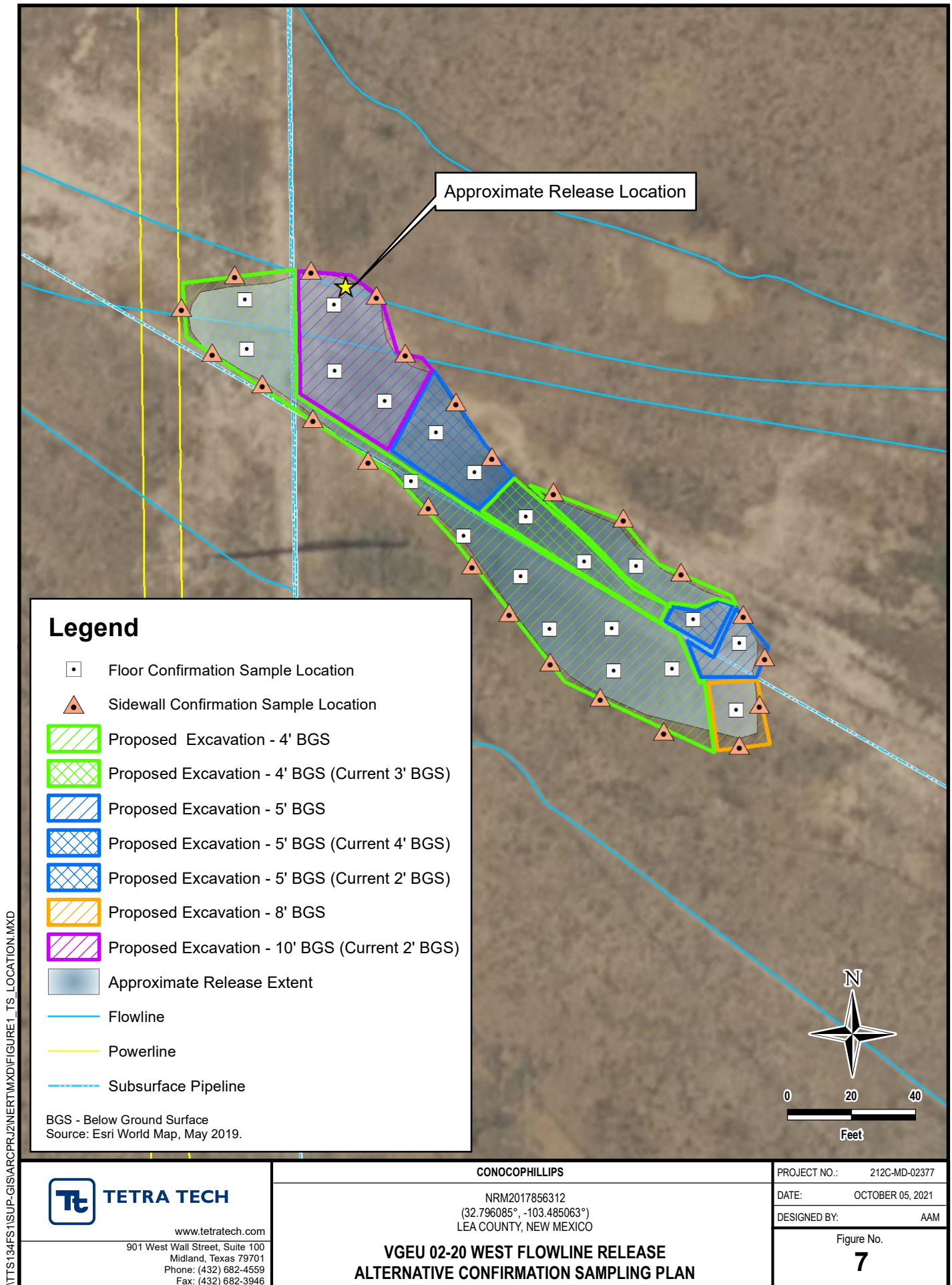
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TABLES

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 ¹		BTX ²								TPH ³								
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTX	GRO ⁴		DRO		ORO		Total TPH	
		ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	C ₃ - C ₁₀	Q	C ₁₀ - C ₂₈	Q	C ₂₈ - C ₄₀	Q				
SP #1	7/1/2020	2.0	4,360		< 0.050		0.051		0.158		< 0.150		0.323		< 10.0		1,560		517		2,077
SP #2	7/1/2020	2.0	12,400		< 0.050		0.073		0.147		0.302		0.523		11.0		7,450		1,700		9,161
SP #3	7/1/2020	2.0	3,600		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		5,680		1,750		7,430
SP #4	7/1/2020	2.0	10,400		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1,920		687		2,607
SP #5	7/1/2020	2.0	18,300		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		2,140		786		2,926
SP #6	7/1/2020	2.0	15,600		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		533		188		721
SP #7	7/1/2020	2.0	15,600		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1,670		610		2,280
SP #8	7/1/2020	2.0	17,200		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		3,780		1,190		4,970
SP #9	7/1/2020	2.0	7,600		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		4,260		1,300		5,560
SP #10	7/1/2020	2.0	15,000		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1,260		327		1,587
SP #11	7/1/2020	2.0	14,800		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1,930		595		2,525
SP #12	7/1/2020	2.0	6,130		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		452		247		699
SP #13	7/1/2020	2.0	8,660		< 0.050		< 0.050		0.067		0.168		< 0.300		< 10.0		2,300		651		2,951
SP #14	7/1/2020	2.0	5,860		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		8,550		2,330		10,880
SP #15	7/1/2020	2.0	8,660		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1,260		543		1,803
SP #16	7/1/2020	5.0	3,040		< 0.500		2.77		43.0		31.2		77.0		1,160		3,970		543		5,673
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		5,510
SP #19	7/1/2020	5.0	1,880		< 0.100		0.442		< 0.100		10.900		11.4		597		5,050		826		6,473
SP #20	7/1/2020	3.5	6,160		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		19.3		1,840		605		2,464
SP #21	7/1/2020	3.5	5,060		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		2,470		674		3,144
SP #22	7/1/2020	3.5	2,200		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		15.8		3,270		803		4,089
SP #23	7/1/2020	3.5	5,600		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		365		124		489
SP #24	7/1/2020	3.0	3,840		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		10.8		2,100		467		2,578
SP #25	7/1/2020	3.0	3,280		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1,050		390		1,440
SP #26	7/1/2020	2.5	1,540		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		15.0		2,610		710		3,335
SP #27	7/1/2020	2.5	1,920		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		14.8		3,140		857		4,012
SP #28	7/1/2020	2.5	1,380		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		3,180		936		4,116
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		377
SP #32	7/1/2020	-	304		< 0.050		< 0.050		0.176		0.243		0.419		10.2		325		121		456

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 RRAIs and/or reclamation requirements above 4 feet bgs.

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 ¹		BTEX ²										TPH ³						
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX	GRO ⁴ C ₁ - C ₁₀		DRO C ₁₀ - C ₂₈		ORO C ₂₈ - C ₄₀		Total TPH (GRO+DRO+ORO)	
			ft. bgs	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	
BH-1	1/18/2021	4-5	3210	-	4430		< 0.00111		< 0.00557		0.0959		0.203		0.299	0.973		1540		1850		3391	
		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	-	-	2450		< 0.00110		< 0.00551		0.0562		0.142		0.198	1.73		930		1040		1972	
		4-5	778	8.0	3620		< 0.00114		< 0.00568		0.0376		0.0948		0.132	2.97		1520		1420		2943	
		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	-	-	3550		< 0.00113		< 0.00567		0.00639		0.0196		0.0260	2.22		784		649		1435	
		4-5	-	-	5070		< 0.0459		< 0.229		0.0352	J	0.109	J	0.144	411		3460		1650		5521	
		6-7	1250	-	6370		< 0.0475		< 0.237		0.0843	J	0.451		0.535	633		3210		1450		5293	
		9-10	790	0.7	2940		< 0.0481		< 0.241		0.0697	J	0.284	J	0.354	327		2280		1220		3827	
		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		< 0.00112		< 0.00560		0.000840	J	< 0.00728		0.000840	0.0528	B J	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	B J	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		3390	
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	B J	< 0.00603		0.00145	J	0.00317	J	0.00553	0.0715	B J	12.4		29.7		42.2	
		2-3	195	9.0	< 20.7		0.000643	B J	< 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	B J	< 0.00567		0.00259	J	0.00573	J	0.009247	0.0466	B J	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	B J	< 0.00578		0.0475		0.0896		0.138	0.770		293		869		1163	
		2-3	44	-	< 20.6		0.000576	B J	< 0.00530		0.0353		0.0841		0.120	1.89		233		586		821	
		4-5	66	-	< 21.3		< 0.00901		< 0.0451		0.205		0.497		0.702	401		3980		2090		6471	
		6-7	59	-	< 21.4		< 0.00913		< 0.0457		0.0404		0.116		0.156	111		2320		1130		3561	
		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	B J	< 0.00552		0.0278		0.0564		0.0849	0.985		314		820		1135	
		2-3	42	5.0	14.9	J	0.000778	B J	< 0.00519		0.00288		0.00875		0.0124	0.915		921		1330		2252	
		4-5	41	5.0	< 20.4		0.000488	B J	< 0.00519		< 0.00260		0.00164	J	0.00213	0.0843	B J	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		6360	
		1-1.5	55	3.0	< 20.6		0.000663	B J	< 0.00530		0.00313		0.00822		0.0114	0.173	B	520		1150		1670	

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 ¹		BTEX ²										TPH ³						
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX	GRO ⁴ C ₁ - C ₁₀		DRO C ₁₀ - C ₂₈		ORO C ₂₈ - C ₄₀		Total TPH (GRO+DRO+ORO)	
			ft. bgs	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	
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	J3	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		< 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 J	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 ¹		BTEx ²										TPH ³							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEx		GRO		DRO		EXT DRO		Total TPH (GRO+DRO+EXT DRO)	
															C ₆ - C ₁₀		> C ₁₀ - C ₂₈		> C ₂₈ - C ₃₆			
		ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	
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		3,003	
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		6,120	
		19-20	32.0		< 0.050		0.332		0.294		4.60		5.23		284		4,360		851		5,495	
		24-25	16.0		< 0.050		0.136		0.121		2.69		2.95		145		2,800		557		3,502	
		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	44-45	32.0		< 0.050		0.500		0.894		2.34		3.74		54.0		1,100		227		1,381	
		6-7	< 16.0		< 0.050		< 0.050		0.610	GC-NC1	3.06	GC-NC1	3.67	GC-NC1	201		2,140		414		2,755	
		8-9	< 16.0		< 0.050		< 0.050		0.802	GC-NC1	3.90	GC-NC1	4.70	GC-NC1	223		2,190		431		2,844	
		10-11	< 16.0		< 0.050		< 0.050		0.598	GC-NC1	2.68	GC-NC1	3.28	GC-NC1	182		2,100		418		2,700	
		12-13	< 16.0		< 0.050		< 0.050		< 0.050		0.194		< 0.300	GC-NC1	23.8		340		45.6		409	
		BH-18A	5/24/2022	14-15	< 16.0		< 0.200		4.06		13.3		27.6		44.9		366		2,590		496	
19-20	< 16.0				< 0.500		8.44		20.9		37.9		67.2		728		3,580		638		4,946	
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

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

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

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>
<u>OCD Only</u> Received by: _____ Date: _____	

L48 Spill Volume Estimate Form

Received by *OCD: 5/31/2022 1:14:59 PM*

Page 25 of 331

Release Discovery Date & 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?	<u>100</u> (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 not 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

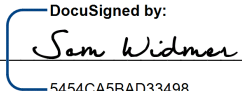
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, 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.

State of New Mexico
Oil Conservation Division

Page 4

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

Page 5

State of New Mexico
Oil Conservation Division

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 OnlyReceived by: Chad Hensley Date: 11/15/2021☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral ApprovedSignature: [Signature] Date: 11/15/2021

Incident ID	nRM2017856312
District RP	
Facility ID	
Application ID	

Remediation Plan

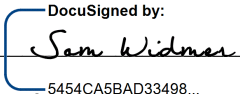
Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☒ 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		Q Q Q							X	Y	Distance	Depth Well	Depth Water	Water Column	
	Sub-Code	basin	County	64	16	4	Sec	Tws	Rng							
L 14183 POD2	L	LE	3	2	2	31	17S	35E	641304	3629691		300	227	105	122	
L 14183 POD1	L	LE	3	2	2	31	17S	35E	641266	3629667		341	229	106	123	
L 14183 POD3	L	LE	3	2	2	31	17S	35E	641213	3629731		388	227	104	123	
L 03875 S2	R	L	LE			2	31	17S	35E	641131	3629576*		496	120	95	25
L 03875 S4	L	LE				2	31	17S	35E	641131	3629576*		496	120		
L 03874	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.

10/19/20 10:20 AM





Page 1 of 1

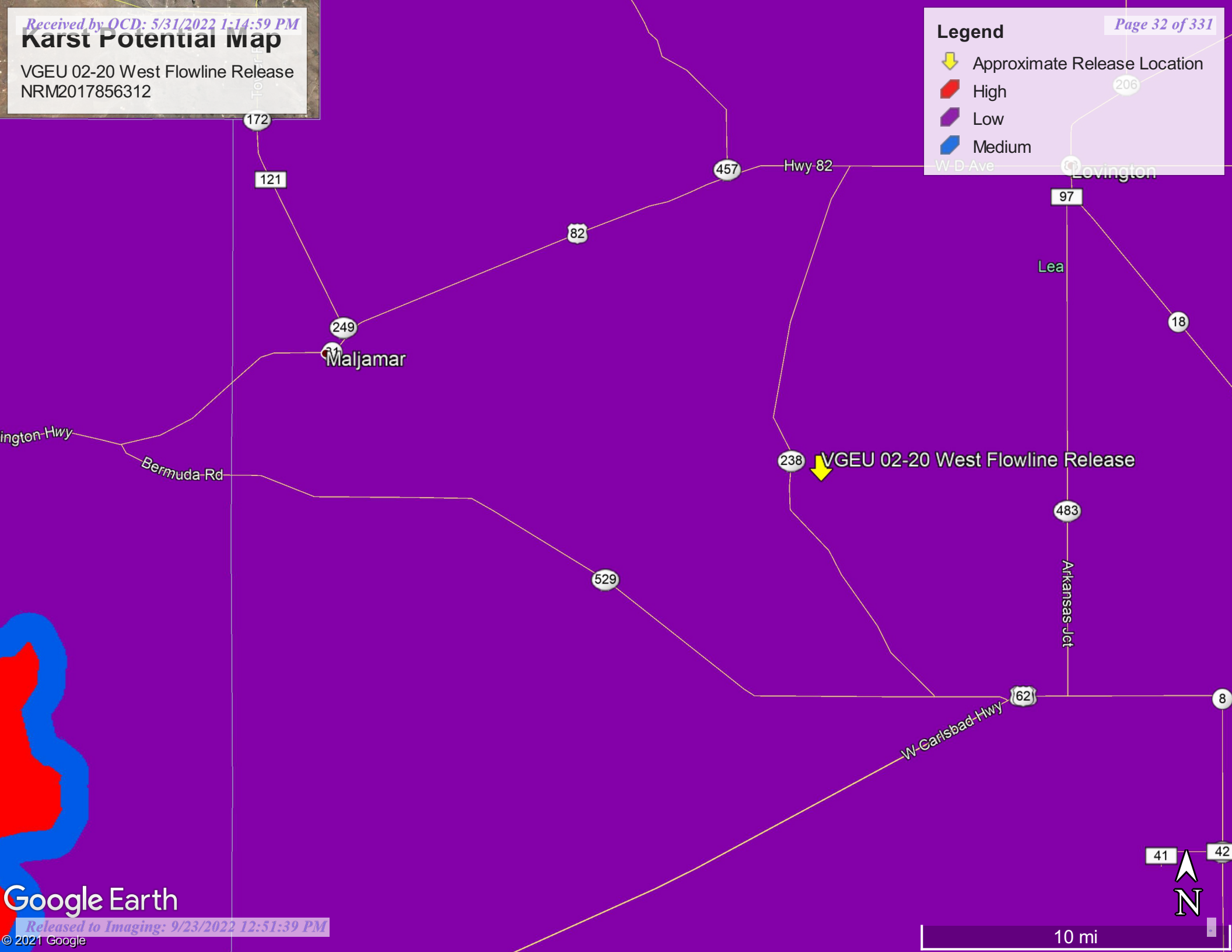
WATER COLUMN/ AVERAGE
DEPTH TO WATER

Karst Potential Map

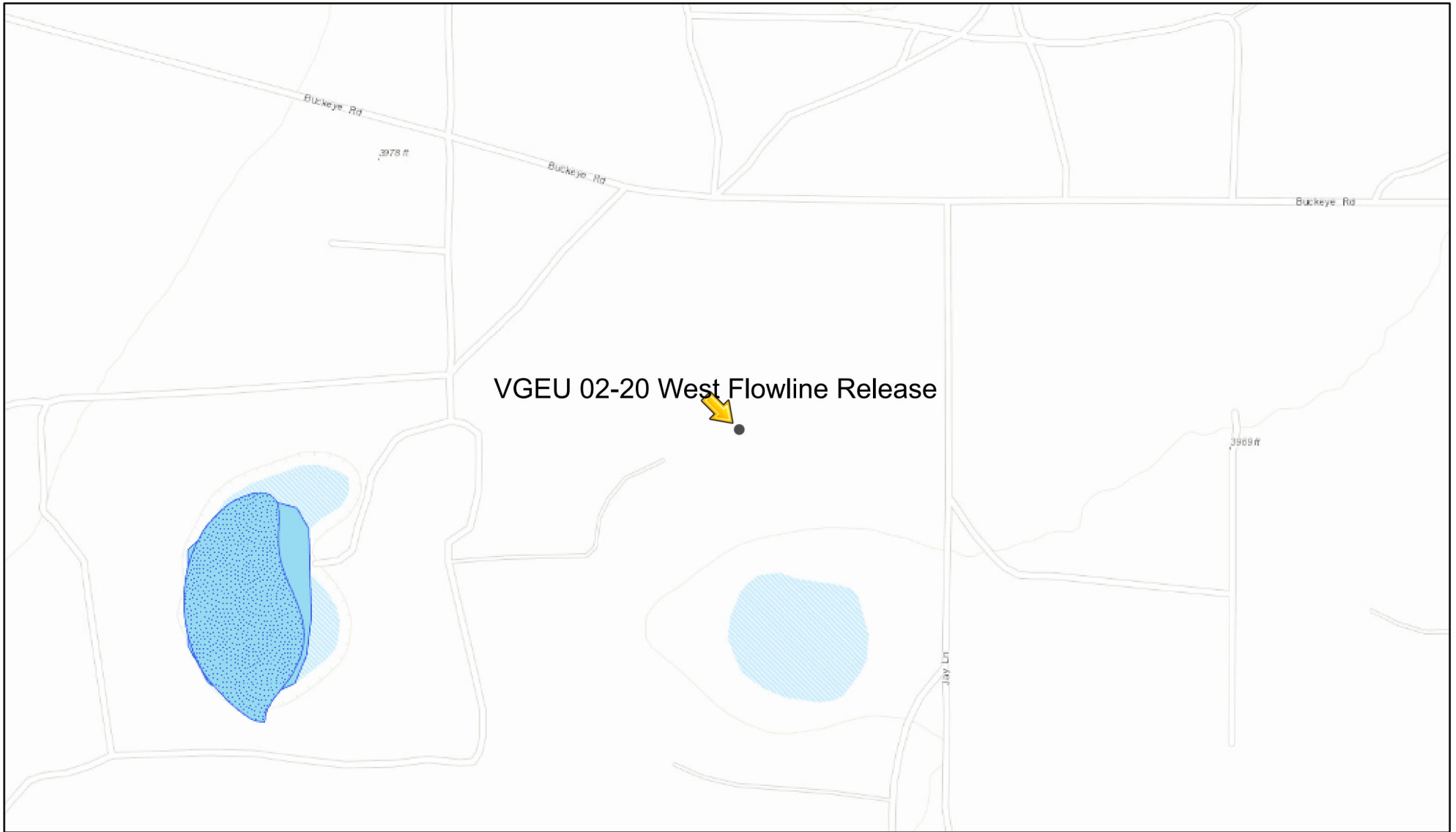
VGEU 02-20 West Flowline Release
NRM2017856312

Legend

-  Approximate Release Location
-  High
-  Low
-  Medium



VGEU 02-20 West Flowline Release



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



Override 1



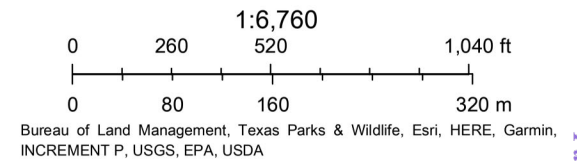
OSE Water-bodies



OSE Streams



PLJV Probable Playas



APPENDIX C

Laboratory Analytical Data



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

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.

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". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

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	
Toluene*	0.051	0.050	07/06/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	0.158	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	0.323	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
Chloride	4360	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	
DRO >C10-C28*	1560	10.0	07/02/2020	ND	169	84.5	200	2.06	
EXT DRO >C28-C36	517	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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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

BTX 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*	0.073	0.050	07/06/2020	ND	1.93	96.3	2.00	3.01		
Ethylbenzene*	0.147	0.050	07/06/2020	ND	1.95	97.3	2.00	3.30		
Total Xylenes*	0.302	0.150	07/06/2020	ND	5.66	94.4	6.00	3.42		
Total BTX	0.523	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	
Chloride	12400	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*	11.0	10.0	07/02/2020	ND	174	86.8	200	0.287	
DRO >C10-C28*	7450	10.0	07/02/2020	ND	169	84.5	200	2.06	
EXT DRO >C28-C36	1700	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 97.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 410 % 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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3600	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	
DRO >C10-C28*	5680	50.0	07/02/2020	ND	169	84.5	200	2.06	
EXT DRO >C28-C36	1750	50.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 85.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 301 % 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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10400	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	
DRO >C10-C28*	1920	10.0	07/02/2020	ND	169	84.5	200	2.06	
EXT DRO >C28-C36	687	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 83.4 % 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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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
Chloride	18300	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	
DRO >C10-C28*	2140	10.0	07/02/2020	ND	169	84.5	200	2.06	
EXT DRO >C28-C36	786	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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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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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	
Chloride	15600	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	
DRO >C10-C28*	533	10.0	07/02/2020	ND	169	84.5	200	2.06	
EXT DRO >C28-C36	188	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 74.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 83.8 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 07/01/2020
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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	
Chloride	15600	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	
DRO >C10-C28*	1670	10.0	07/02/2020	ND	169	84.5	200	2.06	
EXT DRO >C28-C36	610	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 86.1 % 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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17200	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	
DRO >C10-C28*	3780	10.0	07/02/2020	ND	169	84.5	200	2.06	
EXT DRO >C28-C36	1190	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 88.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 251 % 42.2-156

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Analytical Results For:

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

Received: 07/01/2020
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7600	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	
DRO >C10-C28*	4260	10.0	07/02/2020	ND	169	84.5	200	2.06	
EXT DRO >C28-C36	1300	10.0	07/02/2020	ND					

Surrogate: 1-Chlorooctane 87.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 249 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 07/01/2020
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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	
Chloride	15000	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	
DRO >C10-C28*	1260	10.0	07/02/2020	ND	218	109	200	1.17	
EXT DRO >C28-C36	327	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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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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	14800	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	
DRO >C10-C28*	1930	10.0	07/02/2020	ND	218	109	200	1.17	
EXT DRO >C28-C36	595	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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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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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

BTX 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 BTX	<0.300	0.300	07/03/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.3 % 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
Chloride	6130	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	
DRO >C10-C28*	452	10.0	07/02/2020	ND	218	109	200	1.17	
EXT DRO >C28-C36	247	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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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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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	
Ethylbenzene*	0.067	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	0.168	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
Chloride	8660	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	
DRO >C10-C28*	2300	10.0	07/02/2020	ND	218	109	200	1.17	
EXT DRO >C28-C36	651	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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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

BTX 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 BTX	<0.300	0.300	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.9 % 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
Chloride	5860	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	
DRO >C10-C28*	8550	50.0	07/02/2020	ND	218	109	200	1.17	
EXT DRO >C28-C36	2330	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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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

BTX 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 BTX	<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
Chloride	8660	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	
DRO >C10-C28*	1260	10.0	07/02/2020	ND	218	109	200	1.17	
EXT DRO >C28-C36	543	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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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

BTX 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	
Toluene*	2.77	0.500	07/03/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	43.0	0.500	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	31.2	1.50	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEX	77.0	3.00	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 135 % 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
Chloride	3040	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*	1160	100	07/02/2020	ND	208	104	200	1.20	
DRO >C10-C28*	3970	100	07/02/2020	ND	218	109	200	1.17	
EXT DRO >C28-C36	543	100	07/02/2020	ND					

Surrogate: 1-Chlorooctane 167 % 44.3-144

Surrogate: 1-Chlorooctadecane 203 % 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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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			
Toluene*	0.216	0.050	07/03/2020	ND	1.93	96.3	2.00	3.01			
Ethylbenzene*	4.18	0.050	07/03/2020	ND	1.95	97.3	2.00	3.30			
Total Xylenes*	2.78	0.150	07/03/2020	ND	5.66	94.4	6.00	3.42			
Total BTEx	7.17	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		
Chloride	2360	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*	71.8	50.0	07/02/2020	ND	208	104	200	1.20			
DRO >C10-C28*	369	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



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Analytical Results For:

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

Received: 07/01/2020
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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	
Toluene*	0.848	0.500	07/03/2020	ND	1.93	96.3	2.00	3.01	
Ethylbenzene*	16.6	0.500	07/03/2020	ND	1.95	97.3	2.00	3.30	
Total Xylenes*	16.1	1.50	07/03/2020	ND	5.66	94.4	6.00	3.42	
Total BTEx	33.5	3.00	07/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 132 % 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		
Chloride	8660	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*	868	50.0	07/02/2020	ND	208	104	200	1.20	
DRO >C10-C28*	4030	50.0	07/02/2020	ND	218	109	200	1.17	
EXT DRO >C28-C36	612	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



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Analytical Results For:

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

Received: 07/01/2020
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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

BTX 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	
Toluene*	0.442	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	
Total Xylenes*	10.9	0.300	07/06/2020	ND	5.66	94.4	6.00	3.42	
Total BTX	11.4	0.600	07/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 137 % 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
Chloride	1880	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*	597	50.0	07/02/2020	ND	208	104	200	1.20	
DRO >C10-C28*	5050	50.0	07/02/2020	ND	218	109	200	1.17	
EXT DRO >C28-C36	826	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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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

BTX 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 BTX	<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	
Chloride	6160	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*	19.3	10.0	07/06/2020	ND	207	103	200	2.16	QM-07
DRO >C10-C28*	1840	10.0	07/06/2020	ND	224	112	200	0.916	
EXT DRO >C28-C36	605	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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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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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	
Chloride	5060	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*	2420	10.0	07/06/2020	ND	224	112	200	0.916	
EXT DRO >C28-C36	674	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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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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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

BTX 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 BTX	<0.300	0.300	07/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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
Chloride	2200	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*	15.8	10.0	07/03/2020	ND	207	103	200	2.16	
DRO >C10-C28*	3270	10.0	07/03/2020	ND	224	112	200	0.916	
EXT DRO >C28-C36	803	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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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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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	
Chloride	5600	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	
DRO >C10-C28*	365	10.0	07/03/2020	ND	224	112	200	0.916	
EXT DRO >C28-C36	124	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



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Analytical Results For:

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

Received: 07/01/2020
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3840	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*	10.8	10.0	07/03/2020	ND	207	103	200	2.16	
DRO >C10-C28*	2100	10.0	07/03/2020	ND	224	112	200	0.916	
EXT DRO >C28-C36	467	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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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	
Chloride	3280	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*	1050	10.0	07/06/2020	ND	224	112	200	0.916	
EXT DRO >C28-C36	390	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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Analytical Results For:

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

Received: 07/01/2020
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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	
Chloride	1540	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*	15.0	10.0	07/03/2020	ND	207	103	200	2.16	
DRO >C10-C28*	2610	10.0	07/03/2020	ND	224	112	200	0.916	
EXT DRO >C28-C36	710	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



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Analytical Results For:

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

Received: 07/01/2020
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1920	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*	14.8	10.0	07/03/2020	ND	207	103	200	2.16	
DRO >C10-C28*	3140	10.0	07/03/2020	ND	224	112	200	0.916	
EXT DRO >C28-C36	857	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



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Analytical Results For:

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

Received: 07/01/2020
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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	
Chloride	1380	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	
DRO >C10-C28*	3180	10.0	07/06/2020	ND	193	96.6	200	0.138	QM-07
EXT DRO >C28-C36	936	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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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
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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
Chloride	32.0	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 77.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.4 % 42.2-156

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Analytical Results For:

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

Received: 07/01/2020
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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, 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	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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Analytical Results For:

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

Received: 07/01/2020
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

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	
Chloride	464	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	
DRO >C10-C28*	313	10.0	07/03/2020	ND	224	112	200	0.916	
EXT DRO >C28-C36	63.8	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



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Analytical Results For:

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

Received: 07/01/2020
 Reported: 07/07/2020
 Project Name: VGEU 02 - 20
 Project Number: NOT GIVEN
 Project Location: LEA CO NM

Sampling Date: 07/01/2020
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

Sample ID: SP 32 (H001735-32)

BTX 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*	0.176	0.050	07/06/2020	ND	1.95	97.5	2.00	0.476		
Total Xylenes*	0.243	0.150	07/06/2020	ND	5.63	93.9	6.00	0.648		
Total BTX	0.419	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	
Chloride	304	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*	10.2	10.0	07/03/2020	ND	207	103	200	2.16	
DRO >C10-C28*	325	10.0	07/03/2020	ND	224	112	200	0.916	
EXT DRO >C28-C36	121	10.0	07/03/2020	ND					

Surrogate: 1-Chlorooctane 72.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 82.1 % 42.2-156

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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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A handwritten signature in black ink, appearing to read "Celey D. Keene", written in a cursive style.

Celey D. Keene, Lab Director/Quality Manager

86 jo 5c e8ed



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: ConocoPhillips		P.O. #: BILL TO		ANALYSIS REQUEST	
Project Manager: Justin Wright		Company: ConocoPhillips			
Address: Hobbs St NM Zip ##		Attn:			
Phone #: 575-631-9092 Fax #:		Address:			
Project #: Project Owner: COPC		City:			
Project Name:		State:			
Project Location: VGEU 02-20 dea COUNTY, NM		Phone #:			
Sample Name: Justin Wright		Fax #:			
FOR LAB USE ONLY		PRESERV		SAMPLING	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.			
H001735		# CONTAINERS			
		GROUNDWATER			
		WASTEWATER			
		SOIL			
		OIL			
		SLUDGE			
		OTHER :			
		ACID/BASE:			
		ICE / COOL			
		OTHER :			
		DATE		TIME	
1	SP1-2	G		7-1-20	13:00
2	SP2-2	G		7-1-20	13:05
3	SP3-2	G		7-1-20	13:02
4	SP4-2	G		7-1-20	13:03
5	SP5-2	G		7-1-20	13:04
6	SP6-2	G		7-1-20	13:05
7	SP7-2	G		7-1-20	13:06
8	SP8-2	G		7-1-20	13:07
9	SP9-2	G		7-1-20	13:08
10	SP10-2	G		7-1-20	13:09
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Reinquired By: <i>Keene</i>		Date: 7-1-20		Time: 3:28pm	
Relinquished By: <i>Keene</i>		Received By: <i>Keene</i>		Remarks:	
Delivered By: (Circle One)		Observed Temp. °C 28.9		Sample Condition	
Sampler - UPS - Bus - Other:		Corrected Temp. °C		Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>		Thermometer ID: 497-113		Bacteria (only) Sample Condition	
Correction Factor: +0.4				Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
				Observed Temp. °C	
				Corrected Temp. °C	

FORM-006 R 3.0

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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Page 37 of 38

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[illegible][illegible]

Relinquished By:	Date:	Received By:	REMARKS:
	Time:		
W	7-1-20 3:28 pm	Wendy	All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	

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ANALYTICAL REPORT

January 31, 2021

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 Llull
901 West Wall
Suite 100
Midland, TX 79701

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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 National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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¹ Cp
² Tc
³ Ss
⁴ Cn
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1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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 Cp² Tc³ Ss⁴ Cn

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

⁵ Sr⁶ Qc⁷ Gl⁸ Al

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

⁹ Sc

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

1 Cp

2 Tc

3 Ss

4 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

5 Sr

6 Qc

7 Gl

8 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

9 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

¹ Cp² Tc³ Ss⁴ Cn

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

⁵ Sr⁶ Qc⁷ Gl⁸ Al

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

Collected by
John Thurston

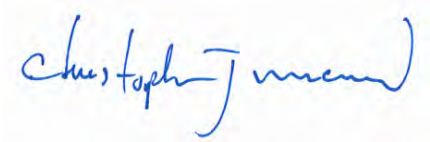
Collected date/time
01/18/21 00:00

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

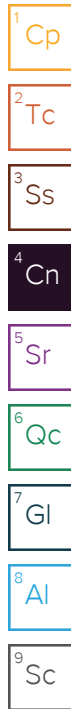
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1611244	1	01/27/21 16:01	01/27/21 16:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1610464	1	01/23/21 10:11	01/23/21 19:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by 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

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



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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.6		1	01/27/2021 10:40	WG1611241

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	4430		97.2	211	10	01/25/2021 17:06	WG1609660

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.973		0.0231	0.107	1.01	01/28/2021 02:06	WG1612206
(S) a,a,a-Trifluorotoluene(FID)	109			77.0-120		01/28/2021 02:06	WG1612206

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000520	0.00111	1	01/27/2021 09:02	WG1611866
Toluene	U		0.00145	0.00557	1	01/27/2021 09:02	WG1611866
Ethylbenzene	0.0959		0.000821	0.00278	1	01/27/2021 09:02	WG1611866
Total Xylenes	0.203		0.000980	0.00724	1	01/27/2021 09:02	WG1611866
(S) Toluene-d8	97.4			75.0-131		01/27/2021 09:02	WG1611866
(S) 4-Bromofluorobenzene	96.6			67.0-138		01/27/2021 09:02	WG1611866
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		01/27/2021 09:02	WG1611866

Semi-Volatile Organic Compounds (GC) by Method 8015

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

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	WG1611241

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	213		9.40	20.4	1	01/25/2021 17:24	WG1609660

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

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

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

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

Semi-Volatile Organic Compounds (GC) by Method 8015

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

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	WG1611241

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	WG1609660

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	WG1612206
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/28/2021 08:54	WG1612206

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	WG1611866
Toluene	U		0.00136	0.00526	1.01	01/27/2021 09:40	WG1611866
Ethylbenzene	U		0.000775	0.00263	1.01	01/27/2021 09:40	WG1611866
Total Xylenes	U		0.000926	0.00683	1.01	01/27/2021 09:40	WG1611866
(S) Toluene-d8	99.5			75.0-131		01/27/2021 09:40	WG1611866
(S) 4-Bromofluorobenzene	98.3			67.0-138		01/27/2021 09:40	WG1611866
(S) 1,2-Dichloroethane-d4	92.3			70.0-130		01/27/2021 09:40	WG1611866

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	WG1612296
C28-C40 Oil Range	6.71		0.280	4.08	1	01/28/2021 07:15	WG1612296
(S) o-Terphenyl	54.1			18.0-148		01/28/2021 07:15	WG1612296

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	WG1611241

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	2450		96.7	210	10	01/25/2021 17:43	WG1609660

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

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

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

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

Semi-Volatile Organic Compounds (GC) by Method 8015

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

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	WG1611241

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	3620		98.3	214	10	01/25/2021 17:53	WG1609660

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	2.97		0.0234	0.108	1.01	01/28/2021 09:38	WG1612206
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-120		01/28/2021 09:38	WG1612206

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000530	0.00114	1	01/27/2021 10:18	WG1611866
Toluene	U		0.00148	0.00568	1	01/27/2021 10:18	WG1611866
Ethylbenzene	0.0376		0.000837	0.00284	1	01/27/2021 10:18	WG1611866
Total Xylenes	0.0948		0.000999	0.00738	1	01/27/2021 10:18	WG1611866
(S) Toluene-d8	98.3			75.0-131		01/27/2021 10:18	WG1611866
(S) 4-Bromofluorobenzene	101			67.0-138		01/27/2021 10:18	WG1611866
(S) 1,2-Dichloroethane-d4	91.8			70.0-130		01/27/2021 10:18	WG1611866

Semi-Volatile Organic Compounds (GC) by Method 8015

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

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	WG1611241

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	WG1609660

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	WG1612206
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/28/2021 10:03	WG1612206

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	WG1611866
Toluene	U		0.00151	0.00581	1	01/27/2021 10:37	WG1611866
Ethylbenzene	U		0.000856	0.00290	1	01/27/2021 10:37	WG1611866
Total Xylenes	U		0.00102	0.00755	1	01/27/2021 10:37	WG1611866
(S) Toluene-d8	99.2			75.0-131		01/27/2021 10:37	WG1611866
(S) 4-Bromofluorobenzene	96.4			67.0-138		01/27/2021 10:37	WG1611866
(S) 1,2-Dichloroethane-d4	92.1			70.0-130		01/27/2021 10:37	WG1611866

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	WG1612296
C28-C40 Oil Range	83.5		0.296	4.32	1	01/28/2021 12:48	WG1612296
(S) o-Terphenyl	42.0			18.0-148		01/28/2021 12:48	WG1612296

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	WG1611241

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	WG1609660

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	WG1612206
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/28/2021 10:25	WG1612206

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	WG1611866
Toluene	U		0.00153	0.00589	1	01/27/2021 13:06	WG1611866
Ethylbenzene	U		0.000868	0.00294	1	01/27/2021 13:06	WG1611866
Total Xylenes	U		0.00104	0.00765	1	01/27/2021 13:06	WG1611866
(S) Toluene-d8	101			75.0-131		01/27/2021 13:06	WG1611866
(S) 4-Bromofluorobenzene	99.2			67.0-138		01/27/2021 13:06	WG1611866
(S) 1,2-Dichloroethane-d4	95.9			70.0-130		01/27/2021 13:06	WG1611866

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	WG1612296
C28-C40 Oil Range	8.95		0.298	4.36	1	01/28/2021 07:41	WG1612296
(S) o-Terphenyl	30.2			18.0-148		01/28/2021 07:41	WG1612296

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	WG1611241

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	33.9		9.84	21.4	1	01/25/2021 18:41	WG1609660

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0334	J	0.0234	0.108	1.01	01/28/2021 10:47	WG1612206
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/28/2021 10:47	WG1612206

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000532	0.00114	1	01/27/2021 13:25	WG1611866
Toluene	U		0.00148	0.00570	1	01/27/2021 13:25	WG1611866
Ethylbenzene	U		0.000840	0.00285	1	01/27/2021 13:25	WG1611866
Total Xylenes	U		0.00100	0.00741	1	01/27/2021 13:25	WG1611866
(S) Toluene-d8	99.4			75.0-131		01/27/2021 13:25	WG1611866
(S) 4-Bromofluorobenzene	96.2			67.0-138		01/27/2021 13:25	WG1611866
(S) 1,2-Dichloroethane-d4	90.6			70.0-130		01/27/2021 13:25	WG1611866

Semi-Volatile Organic Compounds (GC) by Method 8015

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

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.7		1	01/27/2021 10:29	WG1611242

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	3550		98.2	213	10	01/25/2021 18:50	WG1609660

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

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

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

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

Semi-Volatile Organic Compounds (GC) by Method 8015

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

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.2		1	01/27/2021 10:29	WG1611242

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	5070		98.7	215	10	01/25/2021 19:28	WG1609660

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

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

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

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

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 date / time	Batch
C10-C28 Diesel Range	3460		34.6	85.9	20	01/28/2021 09:22	WG1612296
C28-C40 Oil Range	1650		5.88	85.9	20	01/28/2021 09:22	WG1612296
(S) o-Terphenyl	348	J7		18.0-148		01/28/2021 09:22	WG1612296

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	WG1611242

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	6370		101	219	10	01/25/2021 19:38	WG1609660

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	633		2.58	11.9	100	01/29/2021 08:29	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	112			77.0-120		01/29/2021 08:29	WG1613028

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.0222	0.0475	40	01/27/2021 14:23	WG1611866
Toluene	U		0.0617	0.237	40	01/27/2021 14:23	WG1611866
Ethylbenzene	0.0843	J	0.0350	0.119	40	01/27/2021 14:23	WG1611866
Total Xylenes	0.451		0.0418	0.309	40	01/27/2021 14:23	WG1611866
(S) Toluene-d8	97.6			75.0-131		01/27/2021 14:23	WG1611866
(S) 4-Bromofluorobenzene	103			67.0-138		01/27/2021 14:23	WG1611866
(S) 1,2-Dichloroethane-d4	96.5			70.0-130		01/27/2021 14:23	WG1611866

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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3210		35.2	87.5	20	01/28/2021 09:09	WG1612296
C28-C40 Oil Range	1450		5.99	87.5	20	01/28/2021 09:09	WG1612296
(S) o-Terphenyl	359	J7		18.0-148		01/28/2021 09:09	WG1612296

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.8		1	01/27/2021 10:29	WG1611242

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	2940		101	220	10	01/25/2021 19:47	WG1609660

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	327		2.61	12.0	100	01/29/2021 08:51	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	112			77.0-120		01/29/2021 08:51	WG1613028

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		0.0225	0.0481	40	01/27/2021 14:41	WG1611866
Toluene	U		0.0625	0.241	40	01/27/2021 14:41	WG1611866
Ethylbenzene	0.0697	J	0.0355	0.120	40	01/27/2021 14:41	WG1611866
Total Xylenes	0.284	J	0.0423	0.313	40	01/27/2021 14:41	WG1611866
(S) Toluene-d8	99.4			75.0-131		01/27/2021 14:41	WG1611866
(S) 4-Bromofluorobenzene	104			67.0-138		01/27/2021 14:41	WG1611866
(S) 1,2-Dichloroethane-d4	96.8			70.0-130		01/27/2021 14:41	WG1611866

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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2280		35.5	88.1	20	01/28/2021 08:17	WG1612296
C28-C40 Oil Range	1220		6.03	88.1	20	01/28/2021 08:17	WG1612296
(S) o-Terphenyl	269	J7		18.0-148		01/28/2021 08:17	WG1612296

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.2		1	01/27/2021 10:29	WG1611242

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	648		9.77	21.2	1	01/25/2021 19:57	WG1609660

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	2.40		0.0230	0.106	1	01/29/2021 02:56	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	110			77.0-120		01/29/2021 02:56	WG1613028

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	01/27/2021 15:00	WG1611866
Toluene	U		0.00146	0.00562	1	01/27/2021 15:00	WG1611866
Ethylbenzene	0.00208	J	0.000829	0.00281	1	01/27/2021 15:00	WG1611866
Total Xylenes	0.00824		0.000989	0.00731	1	01/27/2021 15:00	WG1611866
(S) Toluene-d8	98.8			75.0-131		01/27/2021 15:00	WG1611866
(S) 4-Bromofluorobenzene	103			67.0-138		01/27/2021 15:00	WG1611866
(S) 1,2-Dichloroethane-d4	90.2			70.0-130		01/27/2021 15:00	WG1611866

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	337		1.71	4.25	1	01/29/2021 11:22	WG1613106
C28-C40 Oil Range	199		1.46	21.2	5	01/30/2021 21:56	WG1613106
(S) o-Terphenyl	89.9			18.0-148		01/29/2021 11:22	WG1613106
(S) o-Terphenyl	106			18.0-148		01/30/2021 21:56	WG1613106

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.0		1	01/27/2021 10:29	WG1611242

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	811		9.78	21.3	1	01/25/2021 20:06	WG1609660

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	47.4		2.45	11.3	100	01/29/2021 09:42	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	115			77.0-120		01/29/2021 09:42	WG1613028

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.00211	0.00451	4	01/27/2021 15:19	WG1611866
Toluene	U		0.00586	0.0225	4	01/27/2021 15:19	WG1611866
Ethylbenzene	0.00349	J	0.00332	0.0113	4	01/27/2021 15:19	WG1611866
Total Xylenes	0.0128	J	0.00397	0.0293	4	01/27/2021 15:19	WG1611866
(S) Toluene-d8	98.1			75.0-131		01/27/2021 15:19	WG1611866
(S) 4-Bromofluorobenzene	100			67.0-138		01/27/2021 15:19	WG1611866
(S) 1,2-Dichloroethane-d4	94.6			70.0-130		01/27/2021 15:19	WG1611866

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 date / time	Batch
C10-C28 Diesel Range	330		1.71	4.25	1	01/29/2021 11:35	WG1613106
C28-C40 Oil Range	183		1.46	21.3	5	01/30/2021 22:10	WG1613106
(S) o-Terphenyl	92.2			18.0-148		01/29/2021 11:35	WG1613106
(S) o-Terphenyl	120			18.0-148		01/30/2021 22:10	WG1613106

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.3		1	01/27/2021 10:29	WG1611242

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		9.75	21.2	1	01/25/2021 20:35	WG1609660

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	0.0528	B J	0.0230	0.106	1	01/29/2021 03:18	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/29/2021 03:18	WG1613028

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		0.000523	0.00112	1	01/27/2021 15:38	WG1611866
Toluene	U		0.00146	0.00560	1	01/27/2021 15:38	WG1611866
Ethylbenzene	0.000840	J	0.000825	0.00280	1	01/27/2021 15:38	WG1611866
Total Xylenes	U		0.000986	0.00728	1	01/27/2021 15:38	WG1611866
(S) Toluene-d8	98.5			75.0-131		01/27/2021 15:38	WG1611866
(S) 4-Bromofluorobenzene	96.9			67.0-138		01/27/2021 15:38	WG1611866
(S) 1,2-Dichloroethane-d4	90.9			70.0-130		01/27/2021 15:38	WG1611866

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	3.81	J	1.71	4.24	1	01/30/2021 20:35	WG1613106
C28-C40 Oil Range	9.72		0.290	4.24	1	01/30/2021 20:35	WG1613106
(S) o-Terphenyl	63.1			18.0-148		01/30/2021 20:35	WG1613106

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	WG1611242

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	WG1609660

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	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/29/2021 03:40	WG1613028

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	WG1611866
Toluene	U		0.00139	0.00536	1	01/27/2021 15:58	WG1611866
Ethylbenzene	0.000912	J	0.000790	0.00268	1	01/27/2021 15:58	WG1611866
Total Xylenes	0.00279	J	0.000944	0.00697	1	01/27/2021 15:58	WG1611866
(S) Toluene-d8	99.6			75.0-131		01/27/2021 15:58	WG1611866
(S) 4-Bromofluorobenzene	96.4			67.0-138		01/27/2021 15:58	WG1611866
(S) 1,2-Dichloroethane-d4	88.6			70.0-130		01/27/2021 15:58	WG1611866

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	WG1613106
C28-C40 Oil Range	5.71		0.284	4.14	1	01/30/2021 20:48	WG1613106
(S) o-Terphenyl	55.1			18.0-148		01/30/2021 20:48	WG1613106

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	WG1611242

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	WG1609660

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	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	110			77.0-120		01/29/2021 04:02	WG1613028

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	WG1611866
Toluene	U		0.00140	0.00538	1	01/27/2021 16:17	WG1611866
Ethylbenzene	U		0.000792	0.00269	1	01/27/2021 16:17	WG1611866
Total Xylenes	U		0.000946	0.00699	1	01/27/2021 16:17	WG1611866
(S) Toluene-d8	101			75.0-131		01/27/2021 16:17	WG1611866
(S) 4-Bromofluorobenzene	99.6			67.0-138		01/27/2021 16:17	WG1611866
(S) 1,2-Dichloroethane-d4	89.9			70.0-130		01/27/2021 16:17	WG1611866

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	WG1613106
C28-C40 Oil Range	3.49	J	0.284	4.15	1	01/30/2021 21:02	WG1613106
(S) o-Terphenyl	62.3			18.0-148		01/30/2021 21:02	WG1613106

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	WG1611242

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	WG1609660

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	WG1612071
(S) a,a,a-Trifluorotoluene(FID)	90.8			77.0-120		01/29/2021 03:35	WG1612071

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	WG1611866
Toluene	U		0.00138	0.00531	1	01/27/2021 16:36	WG1611866
Ethylbenzene	U		0.000783	0.00266	1	01/27/2021 16:36	WG1611866
Total Xylenes	U		0.000935	0.00691	1	01/27/2021 16:36	WG1611866
(S) Toluene-d8	98.9			75.0-131		01/27/2021 16:36	WG1611866
(S) 4-Bromofluorobenzene	97.7			67.0-138		01/27/2021 16:36	WG1611866
(S) 1,2-Dichloroethane-d4	91.6			70.0-130		01/27/2021 16:36	WG1611866

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	WG1613106
C28-C40 Oil Range	12.5		0.283	4.12	1	01/29/2021 12:56	WG1613106
(S) o-Terphenyl	64.3			18.0-148		01/29/2021 12:56	WG1613106

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.6		1	01/27/2021 10:16	WG1611243

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	13.9	J	9.63	20.9	1	01/25/2021 21:18	WG1609660

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	01/29/2021 03:56	WG1612071
(S) a,a,a-Trifluorotoluene(FID)	91.7			77.0-120		01/29/2021 03:56	WG1612071

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

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

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	8.23		1.68	4.19	1	01/29/2021 13:09	WG1613106
C28-C40 Oil Range	19.7		0.287	4.19	1	01/29/2021 13:09	WG1613106
(S) o-Terphenyl	60.7			18.0-148		01/29/2021 13:09	WG1613106

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.7		1	01/27/2021 10:16	WG1611243

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	211		9.61	20.9	1	01/25/2021 21:28	WG1609660

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

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

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

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

Semi-Volatile Organic Compounds (GC) by Method 8015

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

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	WG1611243

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	WG1609663

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	WG1612071
(S) a,a,a-Trifluorotoluene(FID)	92.2			77.0-120		01/29/2021 04:38	WG1612071

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	WG1612070
Toluene	U		0.00138	0.00531	1	01/28/2021 17:12	WG1612070
Ethylbenzene	U		0.000783	0.00266	1	01/28/2021 17:12	WG1612070
Total Xylenes	U		0.000935	0.00691	1	01/28/2021 17:12	WG1612070
(S) Toluene-d8	97.9			75.0-131		01/28/2021 17:12	WG1612070
(S) 4-Bromofluorobenzene	98.6			67.0-138		01/28/2021 17:12	WG1612070
(S) 1,2-Dichloroethane-d4	90.9			70.0-130		01/28/2021 17:12	WG1612070

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	WG1613106
C28-C40 Oil Range	12.4		0.283	4.13	1	01/29/2021 13:36	WG1613106
(S) o-Terphenyl	52.1			18.0-148		01/29/2021 13:36	WG1613106

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.7		1	01/27/2021 10:16	WG1611243

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	12.5	J	10.1	22.1	1	01/26/2021 19:22	WG1609663

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	0.0715	B J	0.0239	0.110	1	01/29/2021 04:59	WG1612071
(S) a,a,a-Trifluorotoluene(FID)	89.8			77.0-120		01/29/2021 04:59	WG1612071

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	0.000905	B J	0.000563	0.00121	1	01/27/2021 22:14	WG1612072
Toluene	U		0.00157	0.00603	1	01/27/2021 22:14	WG1612072
Ethylbenzene	0.00145	J	0.000889	0.00302	1	01/27/2021 22:14	WG1612072
Total Xylenes	0.00317	J	0.00106	0.00784	1	01/27/2021 22:14	WG1612072
(S) Toluene-d8	101			75.0-131		01/27/2021 22:14	WG1612072
(S) 4-Bromofluorobenzene	93.1			67.0-138		01/27/2021 22:14	WG1612072
(S) 1,2-Dichloroethane-d4	95.5			70.0-130		01/27/2021 22:14	WG1612072

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	12.4		1.78	4.41	1	01/29/2021 13:49	WG1613106
C28-C40 Oil Range	29.7		0.302	4.41	1	01/29/2021 13:49	WG1613106
(S) o-Terphenyl	57.1			18.0-148		01/29/2021 13:49	WG1613106

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	WG1611243

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	WG1609663

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	WG1612071
(S) a,a,a-Trifluorotoluene(FID)	91.4			77.0-120		01/29/2021 05:19	WG1612071

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 J	0.000501	0.00107	1	01/27/2021 22:33	WG1612072
Toluene	U		0.00139	0.00536	1	01/27/2021 22:33	WG1612072
Ethylbenzene	U		0.000790	0.00268	1	01/27/2021 22:33	WG1612072
Total Xylenes	U		0.000944	0.00697	1	01/27/2021 22:33	WG1612072
(S) Toluene-d8	105			75.0-131		01/27/2021 22:33	WG1612072
(S) 4-Bromofluorobenzene	96.1			67.0-138		01/27/2021 22:33	WG1612072
(S) 1,2-Dichloroethane-d4	91.8			70.0-130		01/27/2021 22:33	WG1612072

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	J	1.67	4.14	1	01/30/2021 21:15	WG1613106
C28-C40 Oil Range	7.13		0.284	4.14	1	01/30/2021 21:15	WG1613106
(S) o-Terphenyl	62.3			18.0-148		01/30/2021 21:15	WG1613106

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.7		1	01/27/2021 10:16	WG1611243

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	31.6		9.82	21.3	1	01/26/2021 20:00	WG1609663

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

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

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

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

Semi-Volatile Organic Compounds (GC) by Method 8015

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

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.8		1	01/27/2021 10:16	WG1611243

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	19.5	J	9.92	21.6	1	01/26/2021 20:10	WG1609663

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	0.770		0.0234	0.108	1	01/29/2021 04:46	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-120		01/29/2021 04:46	WG1613028

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	0.000780	B J	0.000540	0.00116	1	01/27/2021 23:12	WG1612072
Toluene	U		0.00150	0.00578	1	01/27/2021 23:12	WG1612072
Ethylbenzene	0.0475		0.000852	0.00289	1	01/27/2021 23:12	WG1612072
Total Xylenes	0.0896		0.00102	0.00751	1	01/27/2021 23:12	WG1612072
(S) Toluene-d8	101			75.0-131		01/27/2021 23:12	WG1612072
(S) 4-Bromofluorobenzene	97.4			67.0-138		01/27/2021 23:12	WG1612072
(S) 1,2-Dichloroethane-d4	93.2			70.0-130		01/27/2021 23:12	WG1612072

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	293		17.4	43.1	10	01/29/2021 14:29	WG1613106
C28-C40 Oil Range	869		2.95	43.1	10	01/29/2021 14:29	WG1613106
(S) o-Terphenyl	95.9			18.0-148		01/29/2021 14:29	WG1613106

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.1		1	01/27/2021 10:16	WG1611243

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		9.47	20.6	1	01/26/2021 20:19	WG1609663

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	1.89		0.0223	0.103	1	01/29/2021 05:08	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	110			77.0-120		01/29/2021 05:08	WG1613028

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	0.000576	B J	0.000495	0.00106	1	01/27/2021 23:30	WG1612072
Toluene	U		0.00138	0.00530	1	01/27/2021 23:30	WG1612072
Ethylbenzene	0.0353		0.000781	0.00265	1	01/27/2021 23:30	WG1612072
Total Xylenes	0.0841		0.000932	0.00689	1	01/27/2021 23:30	WG1612072
(S) Toluene-d8	104			75.0-131		01/27/2021 23:30	WG1612072
(S) 4-Bromofluorobenzene	104			67.0-138		01/27/2021 23:30	WG1612072
(S) 1,2-Dichloroethane-d4	92.3			70.0-130		01/27/2021 23:30	WG1612072

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	233		16.6	41.2	10	01/29/2021 14:43	WG1613106
C28-C40 Oil Range	586		2.82	41.2	10	01/29/2021 14:43	WG1613106
(S) o-Terphenyl	88.4			18.0-148		01/29/2021 14:43	WG1613106

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.1		1	01/27/2021 10:16	WG1611243

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		9.78	21.3	1	01/26/2021 20:29	WG1609663

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	401		2.44	11.3	100	01/28/2021 08:26	WG1612479
(S) a,a,a-Trifluorotoluene(FID)	96.3			77.0-120		01/28/2021 08:26	WG1612479

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		0.00421	0.00901	8	01/27/2021 23:50	WG1612072
Toluene	U		0.0117	0.0451	8	01/27/2021 23:50	WG1612072
Ethylbenzene	0.205		0.00665	0.0225	8	01/27/2021 23:50	WG1612072
Total Xylenes	0.497		0.00793	0.0586	8	01/27/2021 23:50	WG1612072
(S) Toluene-d8	104			75.0-131		01/27/2021 23:50	WG1612072
(S) 4-Bromofluorobenzene	105			67.0-138		01/27/2021 23:50	WG1612072
(S) 1,2-Dichloroethane-d4	93.1			70.0-130		01/27/2021 23:50	WG1612072

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) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3980		85.6	213	50	01/30/2021 21:42	WG1613106
C28-C40 Oil Range	2090		14.6	213	50	01/30/2021 21:42	WG1613106
(S) o-Terphenyl	733	J7		18.0-148		01/30/2021 21:42	WG1613106

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.0		1	01/27/2021 10:16	WG1611243

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	17.1	J	9.68	21.0	1	01/26/2021 20:38	WG1609663

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	0.985		0.0228	0.105	1	01/29/2021 05:30	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	109			77.0-120		01/29/2021 05:30	WG1613028

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	0.000746	B J	0.000516	0.00110	1	01/28/2021 00:08	WG1612072
Toluene	U		0.00144	0.00552	1	01/28/2021 00:08	WG1612072
Ethylbenzene	0.0278		0.000814	0.00276	1	01/28/2021 00:08	WG1612072
Total Xylenes	0.0564		0.000972	0.00718	1	01/28/2021 00:08	WG1612072
(S) Toluene-d8	106			75.0-131		01/28/2021 00:08	WG1612072
(S) 4-Bromofluorobenzene	99.3			67.0-138		01/28/2021 00:08	WG1612072
(S) 1,2-Dichloroethane-d4	89.6			70.0-130		01/28/2021 00:08	WG1612072

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	314		18.9	47.1	11.2	01/29/2021 15:10	WG1613106
C28-C40 Oil Range	820		3.23	47.1	11.2	01/29/2021 15:10	WG1613106
(S) o-Terphenyl	101			18.0-148		01/29/2021 15:10	WG1613106

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	WG1611244

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	WG1609664

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	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	110			77.0-120		01/29/2021 05:52	WG1613028

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	WG1612072
Toluene	U		0.00135	0.00519	1	01/28/2021 00:27	WG1612072
Ethylbenzene	0.00288		0.000765	0.00259	1	01/28/2021 00:27	WG1612072
Total Xylenes	0.00875		0.000913	0.00674	1	01/28/2021 00:27	WG1612072
(S) Toluene-d8	100			75.0-131		01/28/2021 00:27	WG1612072
(S) 4-Bromofluorobenzene	101			67.0-138		01/28/2021 00:27	WG1612072
(S) 1,2-Dichloroethane-d4	87.7			70.0-130		01/28/2021 00:27	WG1612072

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	WG1613106
C28-C40 Oil Range	1330		2.79	40.7	10	01/29/2021 15:23	WG1613106
(S) o-Terphenyl	145			18.0-148		01/29/2021 15:23	WG1613106

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.1		1	01/27/2021 16:09	WG1611244

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		9.38	20.4	1	01/25/2021 17:49	WG1609666

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

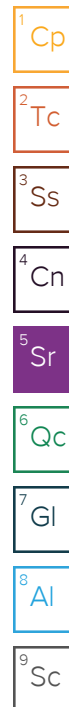
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0843	B J	0.0221	0.102	1	01/29/2021 06:14	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/29/2021 06:14	WG1613028

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	0.000488	B J	0.000485	0.00104	1	01/28/2021 00:46	WG1612072
Toluene	U		0.00135	0.00519	1	01/28/2021 00:46	WG1612072
Ethylbenzene	U		0.000766	0.00260	1	01/28/2021 00:46	WG1612072
Total Xylenes	0.00164	J	0.000914	0.00675	1	01/28/2021 00:46	WG1612072
(S) Toluene-d8	106			75.0-131		01/28/2021 00:46	WG1612072
(S) 4-Bromofluorobenzene	97.0			67.0-138		01/28/2021 00:46	WG1612072
(S) 1,2-Dichloroethane-d4	92.1			70.0-130		01/28/2021 00:46	WG1612072

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	320		16.4	40.8	10	01/29/2021 15:36	WG1613106
C28-C40 Oil Range	612		2.79	40.8	10	01/29/2021 15:36	WG1613106
(S) o-Terphenyl	88.1			18.0-148		01/29/2021 15:36	WG1613106



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	WG1611244

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	WG1609666

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	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		01/29/2021 06:36	WG1613028

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	WG1612072
Toluene	U		0.00146	0.00562	1	01/28/2021 01:05	WG1612072
Ethylbenzene	0.00227	J	0.000828	0.00281	1	01/28/2021 01:05	WG1612072
Total Xylenes	0.0126		0.000989	0.00730	1	01/28/2021 01:05	WG1612072
(S) Toluene-d8	104			75.0-131		01/28/2021 01:05	WG1612072
(S) 4-Bromofluorobenzene	94.3			67.0-138		01/28/2021 01:05	WG1612072
(S) 1,2-Dichloroethane-d4	91.7			70.0-130		01/28/2021 01:05	WG1612072

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	WG1613106
C28-C40 Oil Range	5100		58.2	849	200	01/29/2021 16:03	WG1613106
(S) o-Terphenyl	180	J7		18.0-148		01/29/2021 16:03	WG1613106

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

L1308926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.1		1	01/27/2021 16:09	WG1611244

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		9.48	20.6	1	01/25/2021 18:21	WG1609666

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	0.173	<u>B</u>	0.0224	0.103	1	01/29/2021 06:58	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	109			77.0-120		01/29/2021 06:58	WG1613028

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	0.000663	<u>B J</u>	0.000495	0.00106	1	01/28/2021 01:24	WG1612072
Toluene	U		0.00138	0.00530	1	01/28/2021 01:24	WG1612072
Ethylbenzene	0.00313		0.000782	0.00265	1	01/28/2021 01:24	WG1612072
Total Xylenes	0.00822		0.000933	0.00689	1	01/28/2021 01:24	WG1612072
(S) Toluene-d8	105			75.0-131		01/28/2021 01:24	WG1612072
(S) 4-Bromofluorobenzene	97.0			67.0-138		01/28/2021 01:24	WG1612072
(S) 1,2-Dichloroethane-d4	86.7			70.0-130		01/28/2021 01:24	WG1612072

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	520		16.6	41.2	10	01/29/2021 15:50	WG1613106
C28-C40 Oil Range	1150		2.82	41.2	10	01/29/2021 15:50	WG1613106
(S) o-Terphenyl	81.8			18.0-148		01/29/2021 15:50	WG1613106

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	WG1611244

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	WG1610464

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	WG1613028
(S) a,a,a-Trifluorotoluene(FID)	111			77.0-120		01/29/2021 07:23	WG1613028

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	WG1612072
Toluene	U		0.00137	0.00528	1	01/28/2021 01:43	WG1612072
Ethylbenzene	U		0.000779	0.00264	1	01/28/2021 01:43	WG1612072
Total Xylenes	U		0.000930	0.00687	1	01/28/2021 01:43	WG1612072
(S) Toluene-d8	102			75.0-131		01/28/2021 01:43	WG1612072
(S) 4-Bromofluorobenzene	96.8			67.0-138		01/28/2021 01:43	WG1612072
(S) 1,2-Dichloroethane-d4	91.4			70.0-130		01/28/2021 01:43	WG1612072

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	WG1612302
C28-C40 Oil Range	1.32	J	0.282	4.11	1	01/28/2021 09:25	WG1612302
(S) o-Terphenyl	70.7			18.0-148		01/28/2021 09:25	WG1612302

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			

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	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

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

L1308926-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1308926-09 01/27/21 10:29 • (DUP) R3616884-3 01/27/21 10:29

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	93.7	93.2	1	0.549		10

Laboratory Control Sample (LCS)

(LCS) R3616884-2 01/27/21 10:29

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

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 %	<u>DUP Qualifier</u>	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 %	<u>LCS Qualifier</u>
Total Solids	50.0	50.0	100	85.0-115	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Total Solids by Method 2540 G-2011 [L1308926-29,30,31,32,33](#)

Method Blank (MB)

(MB) R3616933-1 01/27/21 16:09

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

L1308927-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1308927-05 01/27/21 16:09 • (DUP) R3616933-3 01/27/21 16:09

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	82.5	85.0	1	2.95		10

Laboratory Control Sample (LCS)

(LCS) R3616933-2 01/27/21 16:09

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 300.0

[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 mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		9.20	20.0

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) mg/kg	DUP Result (dry) mg/kg	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) mg/kg	DUP Result (dry) mg/kg	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 mg/kg	LCS Result mg/kg	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) 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	537	4920	5340	5250	78.1	61.1	1	80.0-120	<u>E V</u>	<u>E V</u>	1.72	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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) mg/kg	DUP Result (dry) mg/kg	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) mg/kg	DUP Result (dry) mg/kg	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 mg/kg	LCS Result mg/kg	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) 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	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 mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		9.20	20.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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) mg/kg	DUP Result (dry) mg/kg	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) mg/kg	DUP Result (dry) mg/kg	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 mg/kg	LCS Result mg/kg	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) 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	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 mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		9.20	20.0

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

Laboratory Control Sample (LCS)

(LCS) R3616129-2 01/25/21 16:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	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) 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	593	U	614	615	104	104	1	80.0-120			0.130	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 300.0

L1308926-33

Method Blank (MB)

(MB) R3615640-1 01/23/21 17:39

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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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 mg/kg	DUP Result mg/kg	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) mg/kg	DUP Result (dry) mg/kg	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 mg/kg	LCS Result mg/kg	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 mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	500	U	499	502	99.8	100	1	80.0-120			0.543	20

Method Blank (MB)

(MB) R3617325-2 01/28/21 22:07

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)	93.5			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3617325-1 01/28/21 21:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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 mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	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				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

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	

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				

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

L1308926-09,10

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

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				

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

[L1308926-11,12,13,14,15,16,17,24,25,26,28,29,30,31,32,33](#)

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	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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 mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	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 mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.139	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				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

L1308926-21

Method Blank (MB)

(MB) R3617193-3 01/28/21 10:52

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	99.0			75.0-131
(S) 4-Bromofluorobenzene	96.9			67.0-138
(S) 1,2-Dichloroethane-d4	90.4			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) R3617193-1 01/28/21 09:36 • (LCSD) R3617193-2 01/28/21 09:55

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	0.113	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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.130	0.000493	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				

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 mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	0.000600	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	102			75.0-131
(S) 4-Bromofluorobenzene	94.5			67.0-138
(S) 1,2-Dichloroethane-d4	93.9			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) R3617071-1 01/27/21 20:40 • (LCSD) R3617071-2 01/27/21 20:59

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	0.129	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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.151	U	0.100	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				

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 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	55.1			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3616817-2 01/27/21 23:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	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 mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	80.3			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3617096-2 01/28/21 09:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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 mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	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 mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	0.413	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 mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	32.6	65.2	50.0-150	
(S) o-Terphenyl			80.9	18.0-148	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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 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	68.9			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3617498-2 01/29/21 11:08

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	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				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Guide to Reading and Understanding Your Laboratory Report

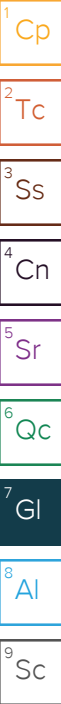
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
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 ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
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 ⁵	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		

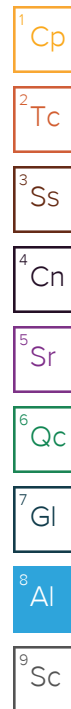
Pace Analytical National 6000 South Eastern Avenue Ste 9A Las Vegas, NV, 89119

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



Page : 1 of 4⁵
$$1.7 \pm 0 = 1.7$$

Analysis Request of Chain of Custody Record

Page : 2 of 45

Tetra Tech, Inc.

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

61708926

Client Name:	Conoco Phillips	Site Manager:	Christian Llull
Project Name:	VGEU 02-20 WEST	Contact Info:	Email: christian.llull@tetrattech.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			

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)																	HOLD							
		YEAR: 2021		WATER	SOIL	HCL	HNO ₃	ICE	NONE			BTX 8021B	BTX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCPL Metals Ag As Ba Cd Cr Pb Se Hg	TCPL Volatiles	TCPL Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Sulfate	TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			
		DATE	TIME																																
	BH-3 (4-5')	1/18/2021	10:30	X				X			1	N	X	X													X								
	BH-3 (6-7')	1/18/2021	10:35	X				X			1	N	X	X													X								
	BH-3 (9-10')	1/18/2021	10:40	X				X			1	N	X	X													X								
	BH-3 (15')	1/18/2021	10:45	X				X			1	N	X	X													X								
	BH-3 (20')	1/18/2021	10:50	X				X			1	N	X	X													X								
	BH-3 (25')	1/18/2021	10:55	X				X			1	N	X	X													X							X	
	BH-3 (30')	1/18/2021	11:00	X				X			1	N	X	X													X							X	
	BH-4 (0-1')	1/18/2021	11:05	X				X			1	N	X	X													X								
	BH-4 (2-3')	1/18/2021	11:10	X				X			1	N	X	X													X								
	BH-4 (4-5')	1/18/2021	11:15	X				X			1	N	X	X													X								

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	1/20/21	1500			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
				1/21	0900
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

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

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:</

Analysis Request of Chain of Custody Record

Page : 3 of 4

<div style="float:right; width: 80px;"> Tetra Tech, Inc. 901 West Wall Street, Suite 100 Midland, Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946 </div>																																														
Client Name: Conoco Phillips						Site Manager: Christian Llull						<div style="text-align: center;">ANALYSIS REQUEST</div> <div style="text-align: center;">(Circle or Specify Method No.)</div> <table border="1" style="width: 100%; font-size: small;"> <tr><td>BTEX 8021B</td><td>BTEX 8260B</td><td>TPH TX1005 (Ext to C35)</td><td>TPH 8015M (GRO - DRO - ORO - MRO)</td><td>PAH 8270C</td><td>Total Metals Ag As Ba Cd Cr Pb Se Hg</td><td>TCLP Metals Ag As Ba Cd Cr Pb Se Hg</td><td>TCLP Volatiles</td><td>TCLP Semi Volatiles</td><td>RCl</td><td>GC/MS Vol. 8260B / 624</td><td>GC/MS Semi. Vol. 8270C/625</td><td>PCBs 8082 / 608</td><td>NORM</td><td>PLM (Asbestos)</td><td>Chloride 300.0</td><td>Chloride Sulfate TDS</td><td>General Water Chemistry (see attached list)</td><td>Anion/Cation Balance</td><td>TPH 8015R</td><td>HOLD</td></tr> </table>														BTEX 8021B	BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCl	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCBs 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
BTEX 8021B	BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCl	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625															PCBs 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD												
Project Name: VGEU 02-20 WEST						Contact Info: Email: christian.llull@tetratesch.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)																																			
		YEAR: 2021		WATER	SOIL	HCL	HNO ₃	ICE	NONE																																					
		DATE	TIME																																											
	BH-4 (6'-7")	1/18/2021	11:20	X				X			1	N	X	X					X																											
	BH-4 (9-10')	1/18/2021	11:25	X				X			1	N	X	X					X																											
	BH-5 (0-1')	1/18/2021	11:30	X				X			1	N	X	X					X																											
	BH-5 (2-3')	1/18/2021	11:35	X				X			1	N	X	X					X																											
	BH-5 (4-5')	1/18/2021	11:40	X				X			1	N	X	X					X																											
	BH-5 (6-7')	1/18/2021	11:45	X				X			1	N	X	X					X																											
	BH-5 (9-10')	1/18/2021	11:50	X				X			1	N	X	X					X																											
	BH-6 (0-1')	1/18/2021	11:55	X				X			1	N	X	X					X																											
	BH-6 (2-3')	1/18/2021	12:00	X				X			1	N	X	X					X																											
	BH-6 (4-5')	1/18/2021	12:30	X				X			1	N	X	X					X																											
Relinquished by: 		Date: 1/20/21	Time: 1500	Received by:		Date:		Time:		LAB USE ONLY Sample Temperature _____				REMARKS: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr. <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report																																
Relinquished by:		Date:	Time:	Received by:		Date:		Time:																																						
Relinquished by:		Date:	Time:	Received by:		Date:		Time:																																						
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												(Circle) HAND DELIVERED FEDEX UPS Tracking #:																																		

$$1.7 \pm 0 = 1.7 \text{ mm}$$

Analysis Request of Chain of Custody Record

Page : 4 of 4

Tetra Tech, Inc.							901 West Wall Street, Suite 100 Midland, Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946						<div style="text-align: right;">U308926</div>																								
Client Name: Conoco Phillips							Site Manager: Christian Llull							ANALYSIS REQUEST (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)	TEST METHODS																									
		YEAR: 2021		WATER	SOIL	HCL	HNO ₃	ICE	NONE			BTEX 8021B	BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCBs's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD					
		DATE	TIME									DATE	TIME	DATE	TIME	DATE	TIME																				
	BH-6 (6-7')	1/18/2021	12:35	X				X		1	N	X	X															X									X
	BH-6 (9-10')	1/18/2021	12:40	X				X		1	N	X	X															X								X	
	BH-7 (0-1')	1/18/2021	12:45	X				X		1	N	X	X															X									
	BH-7 (2-3')	1/18/2021	12:50	X				X		1	N	X	X															X									
	BH-7 (4-5')	1/18/2021	12:55	X				X		1	N	X	X															X									
	BH-7 (6-7')	1/18/2021	13:00	X				X		1	N	X	X															X								X	
	BH-7 (9-10')	1/18/2021	13:05	X				X		1	N	X	X															X								X	
	BH-8 (0-1')	1/18/2021	13:10	X				X		1	N	X	X															X									
	BH-8 (2-3')	1/18/2021	13:15	X				X		1	N	X	X															X									
	BH-8 (4-5')	1/18/2021	13:20	X				X		1	N	X	X															X									
Relinquished by: [Signature]		Date: 1/20/21	Time: 1500	Received by: [Signature]		Date:	Time:	LAB USE ONLY Sample Temperature _____		REMARKS: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr. <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report																											
Relinquished by:		Date:	Time:	Received by:		Date:	Time:																														
Relinquished by:		Date:	Time:	Received by:		Date:	Time:																														
ORIGINAL COPY																					(Circle) HAND DELIVERED FEDEX UPS Tracking #:																

Analysis Request of Chain of Custody Record

Page : 5 of 5

[illegible]



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

<i>Troy Dunlap</i>	<i>21 January 2021 3:38 PM</i>
Received BH-4 (3-4') not listed on the COC.	
<i>Christopher McCord</i>	<i>21 January 2021 4:29 PM</i>
Log for V8260BTEX, CHLORIDE-300, GRO, DRORIA, TS.	

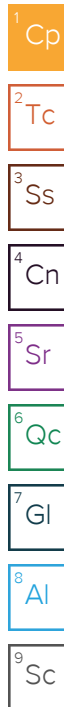


ANALYTICAL REPORT

February 05, 2021

ConocoPhillips - Tetra Tech

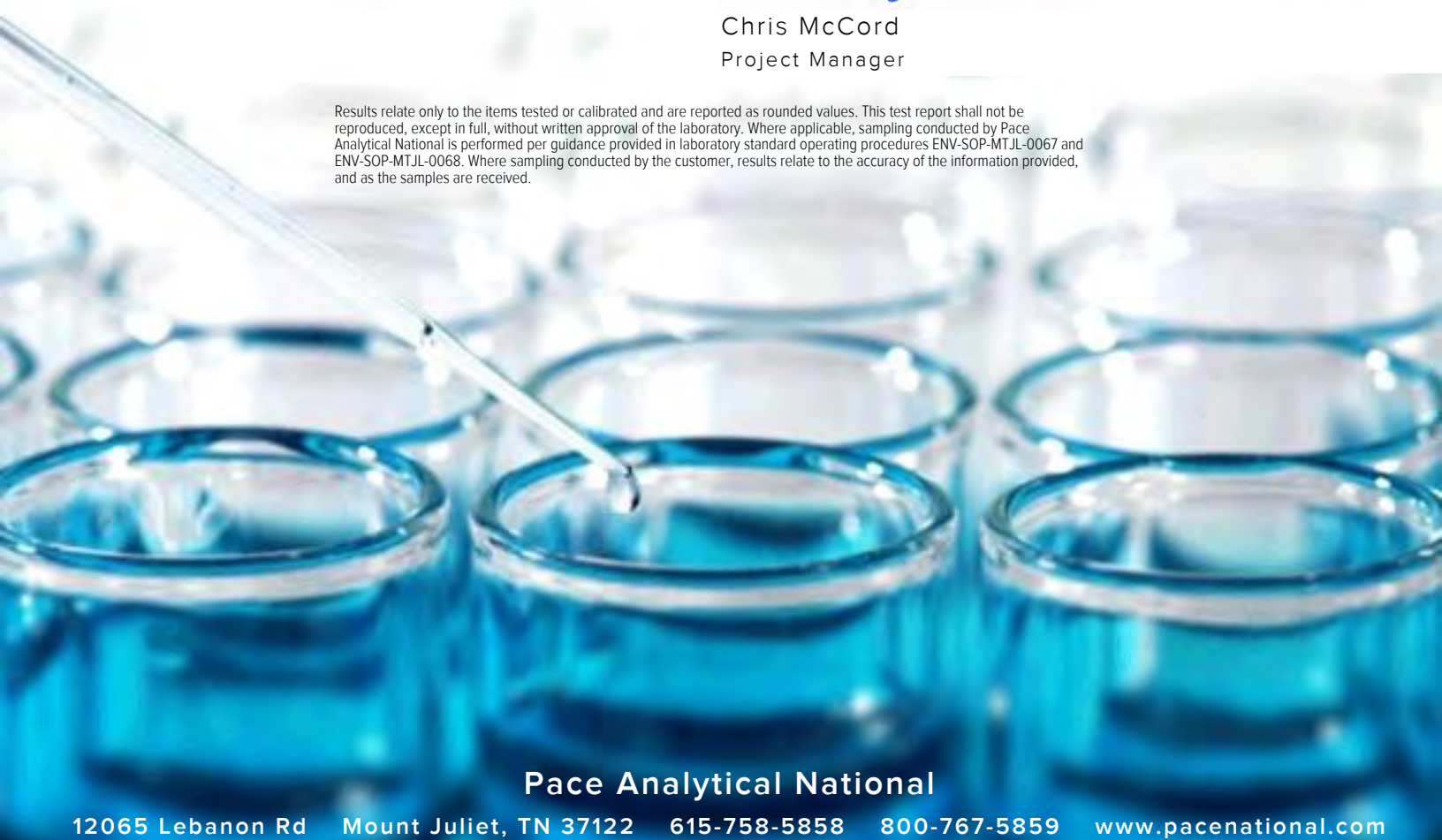
Sample Delivery Group: L1311641
Samples Received: 01/21/2021
Project Number: 212-MD-02305
Description: VGEU 02-20 West
Site: LEA COUNTY, NM
Report To: Christian Llull
901 West Wall
Suite 100
Midland, TX 79701



Entire Report Reviewed By:

Chris McCord
Project Manager

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

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

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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

¹ Cp² Tc³ Ss⁴ Cn

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

⁵ Sr⁶ Qc⁷ Gl⁸ Al

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

⁹ Sc

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

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

5 Sr

6 Qc

7 Gl

8 Al

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

9 Sc

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

1Cp

2Tc

3Ss

4Cn

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

5Sr

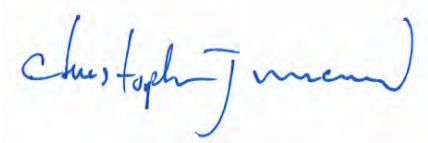
6Qc

7Gl

8Al

9Sc

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



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 09:45

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	WG1615131

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	WG1615163

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	WG1613977
(S) a,a,a-Trifluorotoluene(FID)	83.3			77.0-120		01/31/2021 14:29	WG1613977

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	WG1613926
Toluene	U		0.00139	0.00533	1	01/30/2021 13:41	WG1613926
Ethylbenzene	U		0.000786	0.00266	1	01/30/2021 13:41	WG1613926
Total Xylenes	0.00114	J	0.000938	0.00693	1	01/30/2021 13:41	WG1613926
(S) Toluene-d8	101			75.0-131		01/30/2021 13:41	WG1613926
(S) 4-Bromofluorobenzene	103			67.0-138		01/30/2021 13:41	WG1613926
(S) 1,2-Dichloroethane-d4	93.1			70.0-130		01/30/2021 13:41	WG1613926

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	WG1614200
C28-C40 Oil Range	8.98		0.283	4.13	1	02/01/2021 10:56	WG1614200
(S) o-Terphenyl	47.7			18.0-148		02/01/2021 10:56	WG1614200

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	WG1615131

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	WG1615163

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	WG1614454
(S) a,a,a-Trifluorotoluene(FID)	90.6			77.0-120		02/01/2021 10:29	WG1614454

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	WG1613926
Toluene	U		0.00150	0.00575	1	01/30/2021 14:01	WG1613926
Ethylbenzene	U		0.000848	0.00288	1	01/30/2021 14:01	WG1613926
Total Xylenes	U		0.00101	0.00748	1	01/30/2021 14:01	WG1613926
(S) Toluene-d8	103			75.0-131		01/30/2021 14:01	WG1613926
(S) 4-Bromofluorobenzene	96.4			67.0-138		01/30/2021 14:01	WG1613926
(S) 1,2-Dichloroethane-d4	91.8			70.0-130		01/30/2021 14:01	WG1613926

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	WG1615796
C28-C40 Oil Range	18.5	T8	0.295	4.30	1	02/04/2021 14:07	WG1615796
(S) o-Terphenyl	73.2			18.0-148		02/04/2021 14:07	WG1615796

Collected date/time: 01/18/21 11:00

L1311641

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.3		1	02/03/2021 17:08	WG1615133

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	27.8		9.76	21.2	1	02/03/2021 01:00	WG1615163

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	01/31/2021 15:10	WG1613977
(S) a,a,a-Trifluorotoluene(FID)	91.0			77.0-120		01/31/2021 15:10	WG1613977

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	01/30/2021 14:20	WG1613926
Toluene	U		0.00146	0.00560	1	01/30/2021 14:20	WG1613926
Ethylbenzene	U		0.000826	0.00280	1	01/30/2021 14:20	WG1613926
Total Xylenes	U		0.000986	0.00729	1	01/30/2021 14:20	WG1613926
(S) Toluene-d8	104			75.0-131		01/30/2021 14:20	WG1613926
(S) 4-Bromofluorobenzene	98.4			67.0-138		01/30/2021 14:20	WG1613926
(S) 1,2-Dichloroethane-d4	94.5			70.0-130		01/30/2021 14:20	WG1613926

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	19.6		1.71	4.24	1	02/01/2021 11:48	WG1614200
C28-C40 Oil Range	13.6		0.291	4.24	1	02/01/2021 11:48	WG1614200
(S) o-Terphenyl	50.6			18.0-148		02/01/2021 11:48	WG1614200

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	WG1615133

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	WG1615163

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	WG1613977
(S) a,a,a-Trifluorotoluene(FID)	91.8			77.0-120		01/31/2021 15:30	WG1613977

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	WG1613926
Toluene	U		0.00141	0.00542	1	01/30/2021 14:39	WG1613926
Ethylbenzene	U		0.000798	0.00271	1	01/30/2021 14:39	WG1613926
Total Xylenes	U		0.000953	0.00704	1	01/30/2021 14:39	WG1613926
(S) Toluene-d8	104			75.0-131		01/30/2021 14:39	WG1613926
(S) 4-Bromofluorobenzene	98.1			67.0-138		01/30/2021 14:39	WG1613926
(S) 1,2-Dichloroethane-d4	90.7			70.0-130		01/30/2021 14:39	WG1613926

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	WG1614200
C28-C40 Oil Range	1980		5.71	83.3	20	02/02/2021 16:57	WG1614200
(S) o-Terphenyl	0.000	J7		18.0-148		02/02/2021 16:57	WG1614200

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	WG1615133

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	WG1615163

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	WG1613977
(S) a,a,a-Trifluorotoluene(FID)	90.8			77.0-120		01/31/2021 15:51	WG1613977

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	WG1613926
Toluene	U		0.00142	0.00546	1	01/30/2021 14:58	WG1613926
Ethylbenzene	U		0.000805	0.00273	1	01/30/2021 14:58	WG1613926
Total Xylenes	U		0.000961	0.00710	1	01/30/2021 14:58	WG1613926
(S) Toluene-d8	101			75.0-131		01/30/2021 14:58	WG1613926
(S) 4-Bromofluorobenzene	103			67.0-138		01/30/2021 14:58	WG1613926
(S) 1,2-Dichloroethane-d4	93.5			70.0-130		01/30/2021 14:58	WG1613926

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	WG1614200
C28-C40 Oil Range	9.22		0.287	4.18	1	02/01/2021 12:01	WG1614200
(S) o-Terphenyl	56.6			18.0-148		02/01/2021 12:01	WG1614200

Collected date/time: 01/18/21 11:50

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	WG1615133

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	10.9	J	9.60	20.9	1	02/03/2021 02:30	WG1615163

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0226	0.104	1	01/31/2021 16:12	WG1613977
(S) a,a,a-Trifluorotoluene(FID)	87.8			77.0-120		01/31/2021 16:12	WG1613977

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000508	0.00109	1	01/30/2021 15:17	WG1613926
Toluene	U		0.00141	0.00544	1	01/30/2021 15:17	WG1613926
Ethylbenzene	U		0.000801	0.00272	1	01/30/2021 15:17	WG1613926
Total Xylenes	U		0.000957	0.00707	1	01/30/2021 15:17	WG1613926
(S) Toluene-d8	101			75.0-131		01/30/2021 15:17	WG1613926
(S) 4-Bromofluorobenzene	101			67.0-138		01/30/2021 15:17	WG1613926
(S) 1,2-Dichloroethane-d4	92.6			70.0-130		01/30/2021 15:17	WG1613926

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.72		1.68	4.17	1	02/01/2021 12:14	WG1614200
C28-C40 Oil Range	5.18		0.286	4.17	1	02/01/2021 12:14	WG1614200
(S) o-Terphenyl	64.2			18.0-148		02/01/2021 12:14	WG1614200

Collected date/time: 01/18/21 12:35

L1311641

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	WG1615133

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	WG1615163

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	WG1614454
(S) a,a,a-Trifluorotoluene(FID)	95.0			77.0-120		02/01/2021 10:50	WG1614454

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	WG1614108
Toluene	0.00738		0.00150	0.00576	1	01/31/2021 12:06	WG1614108
Ethylbenzene	0.00461		0.000850	0.00288	1	01/31/2021 12:06	WG1614108
Total Xylenes	0.0270		0.00101	0.00749	1	01/31/2021 12:06	WG1614108
(S) Toluene-d8	115			75.0-131		01/31/2021 12:06	WG1614108
(S) 4-Bromofluorobenzene	110			67.0-138		01/31/2021 12:06	WG1614108
(S) 1,2-Dichloroethane-d4	86.7			70.0-130		01/31/2021 12:06	WG1614108

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	WG1614200
C28-C40 Oil Range	2.28	J	0.295	4.31	1	02/01/2021 12:27	WG1614200
(S) o-Terphenyl	72.9			18.0-148		02/01/2021 12:27	WG1614200

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	WG1615133

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	U		9.60	20.9	1	02/03/2021 03:05	WG1615163

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0574	J	0.0226	0.104	1	01/31/2021 16:33	WG1613977
(S) a,a,a-Trifluorotoluene(FID)	90.6			77.0-120		01/31/2021 16:33	WG1613977

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000508	0.00109	1	01/30/2021 15:54	WG1613926
Toluene	U		0.00141	0.00544	1	01/30/2021 15:54	WG1613926
Ethylbenzene	U		0.000802	0.00272	1	01/30/2021 15:54	WG1613926
Total Xylenes	U		0.000957	0.00707	1	01/30/2021 15:54	WG1613926
(S) Toluene-d8	105			75.0-131		01/30/2021 15:54	WG1613926
(S) 4-Bromofluorobenzene	96.8			67.0-138		01/30/2021 15:54	WG1613926
(S) 1,2-Dichloroethane-d4	93.9			70.0-130		01/30/2021 15:54	WG1613926

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	80.8		1.68	4.17	1	02/01/2021 12:40	WG1614200
C28-C40 Oil Range	137		0.286	4.17	1	02/01/2021 12:40	WG1614200
(S) o-Terphenyl	50.2			18.0-148		02/01/2021 12:40	WG1614200

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	WG1615133

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	WG1615163

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	WG1614454
(S) a,a,a-Trifluorotoluene(FID)	94.1			77.0-120		02/01/2021 11:11	WG1614454

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	WG1613926
Toluene	U		0.0119	0.0457	8	01/30/2021 16:13	WG1613926
Ethylbenzene	0.0404		0.00674	0.0228	8	01/30/2021 16:13	WG1613926
Total Xylenes	0.116		0.00804	0.0594	8	01/30/2021 16:13	WG1613926
(S) Toluene-d8	103			75.0-131		01/30/2021 16:13	WG1613926
(S) 4-Bromofluorobenzene	102			67.0-138		01/30/2021 16:13	WG1613926
(S) 1,2-Dichloroethane-d4	92.6			70.0-130		01/30/2021 16:13	WG1613926

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	WG1614200
C28-C40 Oil Range	1130		5.87	85.7	20	02/01/2021 23:05	WG1614200
(S) o-Terphenyl	0.000	J7		18.0-148		02/01/2021 23:05	WG1614200

Collected date/time: 01/18/21 13:05

L1311641

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.3		1	02/03/2021 17:08	WG1615133

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		10.1	21.9	1	02/03/2021 03:41	WG1615163

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	0.386		0.0238	0.109	1	01/31/2021 16:53	WG1613977
(S) a,a,a-Trifluorotoluene(FID)	89.8			77.0-120		01/31/2021 16:53	WG1613977

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000555	0.00119	1	01/30/2021 16:32	WG1613926
Toluene	U		0.00155	0.00595	1	01/30/2021 16:32	WG1613926
Ethylbenzene	U		0.000877	0.00297	1	01/30/2021 16:32	WG1613926
Total Xylenes	U		0.00105	0.00773	1	01/30/2021 16:32	WG1613926
(S) Toluene-d8	99.8			75.0-131		01/30/2021 16:32	WG1613926
(S) 4-Bromofluorobenzene	103			67.0-138		01/30/2021 16:32	WG1613926
(S) 1,2-Dichloroethane-d4	94.3			70.0-130		01/30/2021 16:32	WG1613926

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	84.6		1.76	4.38	1	02/01/2021 22:41	WG1614200
C28-C40 Oil Range	52.3		0.300	4.38	1	02/01/2021 22:41	WG1614200
(S) o-Terphenyl	57.2			18.0-148		02/01/2021 22:41	WG1614200

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	WG1615133

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	WG1615163

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	WG1613977
(S) a,a,a-Trifluorotoluene(FID)	89.8			77.0-120		01/31/2021 17:14	WG1613977

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	WG1613926
Toluene	U		0.00139	0.00533	1	01/30/2021 16:51	WG1613926
Ethylbenzene	U		0.000786	0.00267	1	01/30/2021 16:51	WG1613926
Total Xylenes	U		0.000938	0.00693	1	01/30/2021 16:51	WG1613926
(S) Toluene-d8	102			75.0-131		01/30/2021 16:51	WG1613926
(S) 4-Bromofluorobenzene	97.8			67.0-138		01/30/2021 16:51	WG1613926
(S) 1,2-Dichloroethane-d4	95.8			70.0-130		01/30/2021 16:51	WG1613926

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	WG1614200
C28-C40 Oil Range	22.2		0.283	4.13	1	02/01/2021 22:16	WG1614200
(S) o-Terphenyl	51.1			18.0-148		02/01/2021 22:16	WG1614200

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	WG1615133

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	WG1615163

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	WG1613977
(S) a,a,a-Trifluorotoluene(FID)	88.7			77.0-120		01/31/2021 17:35	WG1613977

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	WG1613926
Toluene	U		0.00143	0.00548	1	01/30/2021 17:10	WG1613926
Ethylbenzene	U		0.000808	0.00274	1	01/30/2021 17:10	WG1613926
Total Xylenes	0.00195	J	0.000965	0.00713	1	01/30/2021 17:10	WG1613926
(S) Toluene-d8	103			75.0-131		01/30/2021 17:10	WG1613926
(S) 4-Bromofluorobenzene	99.2			67.0-138		01/30/2021 17:10	WG1613926
(S) 1,2-Dichloroethane-d4	96.7			70.0-130		01/30/2021 17:10	WG1613926

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	WG1614200
C28-C40 Oil Range	143		0.287	4.19	1	02/01/2021 13:32	WG1614200
(S) o-Terphenyl	111			18.0-148		02/01/2021 13:32	WG1614200

Total Solids by Method 2540 G-2011 [L1311641-01,02](#)

Method Blank (MB)

(MB) R3619354-1 02/03/21 13:29

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.000			

L1310751-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1310751-04 02/03/21 13:29 • (DUP) R3619354-3 02/03/21 13:29

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	84.9	83.7	1	1.41		10

Laboratory Control Sample (LCS)

(LCS) R3619354-2 02/03/21 13:29

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%	%	%	%	
Total Solids	50.0	50.1	100	85.0-115	

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Total Solids by Method 2540 G-2011

[L1311641-03,04,05,06,07,08,09,10,11,12](#)

Method Blank (MB)

(MB) R3619327-1 02/03/21 17:08

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

L1311641-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1311641-03 02/03/21 17:08 • (DUP) R3619327-3 02/03/21 17:08

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	94.3	93.5	1	0.888		10

Laboratory Control Sample (LCS)

(LCS) R3619327-2 02/03/21 17:08

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 300.0

[L1311641-01,02,03,04,05,06,07,08,09,10,11,12](#)

Method Blank (MB)

(MB) R3618848-1 02/02/21 22:37

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

L1311844-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1311844-07 02/03/21 06:58 • (DUP) R3618848-6 02/03/21 07:16

	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	1770	1800	5	1.70		20

Laboratory Control Sample (LCS)

(LCS) R3618848-2 02/02/21 22:55

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

	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
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	516	U	503	502	97.4	97.2	1	80.0-120			0.161	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

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	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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 mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	105			75.0-131
(S) 4-Bromofluorobenzene	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 mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.137	0.135	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				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

L1311641-07

Method Blank (MB)

(MB) R3618040-3 01/31/21 06:32

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	114			75.0-131
(S) 4-Bromofluorobenzene	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 mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.119	0.120	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				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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 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	67.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3618035-2 02/01/21 05:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	50.6	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 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	69.8			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3619808-2 02/04/21 11:38

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

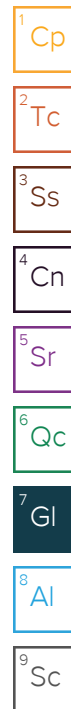
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.



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* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

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Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
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Florida	E87487	North Carolina ¹	DW21704
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Georgia ¹	923	North Dakota	R-140
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Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
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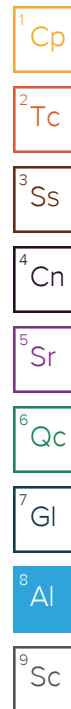
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Texas	T104704328-20-18
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¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable



Page : 1 of 5


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1.7 ± 0 = 1.7 *W*
AC

Analysis Request of Chain of Custody Record

Page : 2 of 45



Tetra Tech, Inc.

901 West Wall Street, Suite 100

Midland, Texas 79701

Tel (432) 682-4559

Fax (432) 682-3946

617082976

61311641

Client Name: Conoco Phillips

Site Manager: Christian Llull

Project Name: VGEU 02-20 WEST

Contact Info: Email: christian.llull@tetratech.com
Phone: (512) 338-1667

Project Location: 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

YEAR: 2021

DATE

TIME

MATRIX

WATER

SOIL

HCL

HNO₃

ICE

NONE

PRESERVATIVE METHOD

CONTAINERS

FILTERED (Y/N)

BTEX 8021B

BTEX 8280B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 824

GC/MS Semi. Vol. 8270C/825

PCBs 8082 / 608

NORM

PLM (Asbestos)

Chloride 300.0

Chloride Sulfate TDS

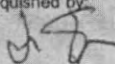
General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

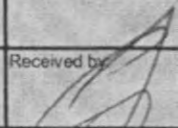
HOLD

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	BTEX 8280B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 824	GC/MS Semi. Vol. 8270C/825	PCBs 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD	
	BH-3 (4-5')	1/18/2021	10:30	X			X			1	N	X	X															X					
	BH-3 (6-7')	1/18/2021	10:35	X			X			1	N	X	X														X						
	BH-3 (9-10')	1/18/2021	10:40	X			X			1	N	X	X														X						
	BH-3 (15')	1/18/2021	10:45	X			X			1	N	X	X														X						
	BH-3 (20')	1/18/2021	10:50	X			X			1	N	X	X														X						
	BH-3 (25')	1/18/2021	10:55	X			X			1	N	X	X														X						
	BH-3 (30')	1/18/2021	11:00	X			X			1	N	X	X														X						
	BH-4 (0-1')	1/18/2021	11:05	X			X			1	N	X	X														X						
	BH-4 (2-3')	1/18/2021	11:10	X			X			1	N	X	X														X						
	BH-4 (4-5')	1/18/2021	11:15	X			X			1	N	X	X														X						

Relinquished by: 

Date: 1/20/21

Time: 1500

Received by: 

Date: 1/21

Time: 0900

LAB USE ONLY

Sample Temperature

REMARKS:

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

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(Circle) HAND DELIVERED **FEDEX** UPS Tracking #: _____

$$1.7 \pm 0 = 1.7 \mu\text{m}$$

Analysis Request of Chain of Custody Record


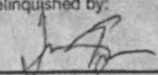
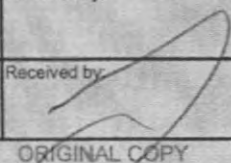
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Tetra Tech, Inc. 901 West Wall Street, Suite 100 Midland, Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946				<i>L1316YI</i> <i>61308926</i>																							
Client Name: Conoco Phillips				Site Manager: Christian Llull				ANALYSIS REQUEST (Circle or Specify Method No.) <div style="font-size: small;"> BTEX 8021B BTX 8260B TPH TX 1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8092 / 608 NORM PLM (Asbestos) Chloride 300.0 Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance TPH 8016R HOLD </div>																			
Project Name: VGEU 02-20 WEST				Contact Info: Email: christian.llull@tetrattech.com Phone: (512) 338-1667																							
Project Location: 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 # <small>(LAB USE ONLY)</small>	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)																
		YEAR: 2021		WATER	SOIL	HCL	HNO ₃	ICE	NONE																		
		DATE	TIME																								
	BH-4 (6-7')	1/18/2021	11:20	X				X		1	N	X	X														
	BH-4 (9-10')	1/18/2021	11:25	X				X		1	N	X	X														
	BH-5 (0-1')	1/18/2021	11:30	X				X		1	N	X	X														
	BH-5 (2-3')	1/18/2021	11:35	X				X		1	N	X	X														
	BH-5 (4-5')	1/18/2021	11:40	X				X		1	N	X	X														
	BH-5 (6-7')	1/18/2021	11:45	X				X		1	N	X	X														
	BH-5 (9-10')	1/18/2021	11:50	X				X		1	N	X	X														
	BH-6 (0-1')	1/18/2021	11:55	X				X		1	N	X	X														
	BH-6 (2-3')	1/18/2021	12:00	X				X		1	N	X	X														
	BH-6 (4-5')	1/18/2021	12:30	X				X		1	N	X	X														
Relinquished by: _____ Date: _____ Time: _____		Received by: _____ Date: _____ Time: _____		LAB USE ONLY <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																							
Relinquished by: _____ Date: _____ Time: _____		Received by: _____ Date: _____ Time: _____																									
Relinquished by: _____ Date: _____ Time: _____		Received by: _____ Date: _____ Time: _____																									
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(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____																											

$$1.7 \pm 0 = 1.7 \mu m$$

Analysis Request of Chain of Custody Record

Page: 4 of 45

 Tetra Tech, Inc.				901 West Wall Street, Suite 100 Midland, Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946				L1308976 L1311641																		
Client Name: Conoco Phillips				Site Manager: Christian Lull				ANALYSIS REQUEST (Circle or Specify Method No.)																		
Project Name: VGEU 02-20 WEST				Contact Info: Email: christian.lull@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)															HOLD
		YEAR: 2021		WATER	SOIL	HCL	HNO ₃	ICE	NONE																	
		DATE	TIME																							
	BH-6 (6-7')	1/18/2021	12:35	X			X			1	N	X	X												X	07
	BH-6 (9-10')	1/18/2021	12:40	X			X			1	N	X	X												X	08
	BH-7 (0-1')	1/18/2021	12:45	X			X			1	N	X	X													
	BH-7 (2-3')	1/18/2021	12:50	X			X			1	N	X	X													
	BH-7 (4-5')	1/18/2021	12:55	X			X			1	N	X	X													
	BH-7 (6-7')	1/18/2021	13:00	X			X			1	N	X	X												X	09
	BH-7 (9-10')	1/18/2021	13:05	X			X			1	N	X	X												X	10
	BH-8 (0-1')	1/18/2021	13:10	X			X			1	N	X	X													
	BH-8 (2-3')	1/18/2021	13:15	X			X			1	N	X	X													
	BH-8 (4-5')	1/18/2021	13:20	X			X			1	N	X	X													
Relinquished by: 		Date: 1/20/21 Time: 1500		Received by: 		Date: 1/21/21 Time: 1050		LAB USE ONLY Sample Temperature _____ REMARKS: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr. <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report																		
Relinquished by:		Date: Time:		Received by:		Date: Time:																				
Relinquished by:		Date: Time:		Received by:		Date: Time:																				

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record

Page : 5 of 5

[illegible]
$$1.7 \pm 0 = 1.7 \text{ mm}$$

L1308926 *COPTETRA* goes OOH Monday, 2/1 - 01-145

R1/R2

Please log all hold samples for V826oBTEX, GRO, DRORLA, CHLORIDE-300, TS. Log as R5 due 2/5.
Refer to 01-145 for hold samples.

Adjust RUSH multiplier for V826oBTEX, 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

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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

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 Llull
901 West Wall
Suite 100
Midland, TX 79701

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Entire Report Reviewed By:

A handwritten signature in blue ink that reads "Erica McNeese".

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 Cp² Tc³ Ss⁴ Cn

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

⁵ Sr⁶ Qc⁷ Gl⁸ Al

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

⁹ Sc

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

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

5 Sr

6 Qc

7 Gl

8 Al

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

9 Sc

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

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

5 Sr

6 Qc

7 Gl

8 Al

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

9 Sc

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

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

5 Sr

6 Qc

7 Gl

8 Al

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

9 Sc

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

SAMPLE SUMMARY

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

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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



Erica McNeese
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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	93.8		1	05/25/2021 19:42	WG1677024

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	10.3	J	9.81	21.3	1	06/02/2021 03:24	WG1680544

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		0.0231	0.107	1	05/28/2021 14:35	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	94.6			77.0-120		05/28/2021 14:35	WG1678821

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		0.000529	0.00113	1	05/26/2021 23:58	WG1677689
Toluene	U		0.00147	0.00567	1	05/26/2021 23:58	WG1677689
Ethylbenzene	U		0.000835	0.00283	1	05/26/2021 23:58	WG1677689
Total Xylenes	0.00113	J	0.000997	0.00737	1	05/26/2021 23:58	WG1677689
(S) Toluene-d8	105			75.0-131		05/26/2021 23:58	WG1677689
(S) 4-Bromofluorobenzene	91.1			67.0-138		05/26/2021 23:58	WG1677689
(S) 1,2-Dichloroethane-d4	69.8	J2		70.0-130		05/26/2021 23:58	WG1677689

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	14.7		1.72	4.27	1	05/27/2021 07:08	WG1677870
C28-C40 Oil Range	30.9		0.292	4.27	1	05/27/2021 07:08	WG1677870
(S) o-Terphenyl	64.6			18.0-148		05/27/2021 07:08	WG1677870

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

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	WG1677024

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	WG1680544

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	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	93.4			77.0-120		05/28/2021 14:58	WG1678821

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	WG1677689
Toluene	U		0.00140	0.00540	1	05/27/2021 00:17	WG1677689
Ethylbenzene	U		0.000796	0.00270	1	05/27/2021 00:17	WG1677689
Total Xylenes	U		0.000951	0.00702	1	05/27/2021 00:17	WG1677689
(S) Toluene-d8	106			75.0-131		05/27/2021 00:17	WG1677689
(S) 4-Bromofluorobenzene	89.9			67.0-138		05/27/2021 00:17	WG1677689
(S) 1,2-Dichloroethane-d4	68.4	J2		70.0-130		05/27/2021 00:17	WG1677689

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	WG1677870
C28-C40 Oil Range	3.79	J	0.285	4.16	1	05/27/2021 03:59	WG1677870
(S) o-Terphenyl	69.6			18.0-148		05/27/2021 03:59	WG1677870

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

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	WG1677026

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	WG1680544

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

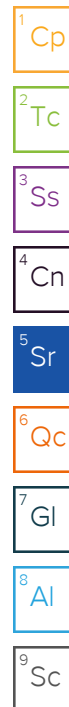
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0441	J	0.0220	0.102	1	05/28/2021 15:22	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	96.0			77.0-120		05/28/2021 15:22	WG1678821

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	WG1677689
Toluene	U		0.00134	0.00515	1	05/27/2021 00:36	WG1677689
Ethylbenzene	U		0.000759	0.00258	1	05/27/2021 00:36	WG1677689
Total Xylenes	U		0.000907	0.00670	1	05/27/2021 00:36	WG1677689
(S) Toluene-d8	109			75.0-131		05/27/2021 00:36	WG1677689
(S) 4-Bromofluorobenzene	91.4			67.0-138		05/27/2021 00:36	WG1677689
(S) 1,2-Dichloroethane-d4	69.8	J2		70.0-130		05/27/2021 00:36	WG1677689

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	WG1677870
C28-C40 Oil Range	1.58	J	0.278	4.06	1	05/27/2021 04:13	WG1677870
(S) o-Terphenyl	74.5			18.0-148		05/27/2021 04:13	WG1677870



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	WG1677026

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	WG1680544

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

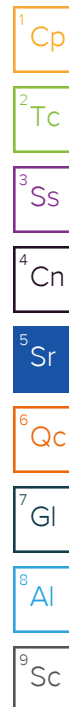
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0228	0.105	1	05/28/2021 15:46	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	95.7			77.0-120		05/28/2021 15:46	WG1678821

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	WG1677689
Toluene	U		0.00143	0.00549	1	05/27/2021 00:55	WG1677689
Ethylbenzene	U		0.000809	0.00274	1	05/27/2021 00:55	WG1677689
Total Xylenes	U		0.000966	0.00713	1	05/27/2021 00:55	WG1677689
(S) Toluene-d8	108			75.0-131		05/27/2021 00:55	WG1677689
(S) 4-Bromofluorobenzene	87.8			67.0-138		05/27/2021 00:55	WG1677689
(S) 1,2-Dichloroethane-d4	70.3			70.0-130		05/27/2021 00:55	WG1677689

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	WG1677870
C28-C40 Oil Range	29.8		0.287	4.19	1	05/27/2021 06:55	WG1677870
(S) o-Terphenyl	59.0			18.0-148		05/27/2021 06:55	WG1677870



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	98.0		1	05/26/2021 11:57	WG1677026

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		9.39	20.4	1	06/02/2021 04:30	WG1680544

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		0.0222	0.102	1	05/28/2021 16:10	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	94.3			77.0-120		05/28/2021 16:10	WG1678821

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		0.000487	0.00104	1	05/27/2021 01:14	WG1677689
Toluene	U		0.00135	0.00521	1	05/27/2021 01:14	WG1677689
Ethylbenzene	U		0.000768	0.00260	1	05/27/2021 01:14	WG1677689
Total Xylenes	U		0.000917	0.00677	1	05/27/2021 01:14	WG1677689
(S) Toluene-d8	109			75.0-131		05/27/2021 01:14	WG1677689
(S) 4-Bromofluorobenzene	91.0			67.0-138		05/27/2021 01:14	WG1677689
(S) 1,2-Dichloroethane-d4	78.9			70.0-130		05/27/2021 01:14	WG1677689

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	14.0		1.64	4.08	1	05/27/2021 07:22	WG1677870
C28-C40 Oil Range	35.6		0.280	4.08	1	05/27/2021 07:22	WG1677870
(S) o-Terphenyl	70.1			18.0-148		05/27/2021 07:22	WG1677870

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

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	97.4		1	05/26/2021 11:57	WG1677026

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		9.44	20.5	1	06/02/2021 04:59	WG1680544

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

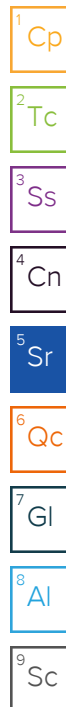
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.119		0.0223	0.103	1	05/28/2021 16:34	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	93.9			77.0-120		05/28/2021 16:34	WG1678821

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000492	0.00105	1	05/27/2021 01:33	WG1677689
Toluene	U		0.00137	0.00527	1	05/27/2021 01:33	WG1677689
Ethylbenzene	U		0.000776	0.00263	1	05/27/2021 01:33	WG1677689
Total Xylenes	0.00276	J	0.000927	0.00685	1	05/27/2021 01:33	WG1677689
(S) Toluene-d8	106			75.0-131		05/27/2021 01:33	WG1677689
(S) 4-Bromofluorobenzene	88.8			67.0-138		05/27/2021 01:33	WG1677689
(S) 1,2-Dichloroethane-d4	73.0			70.0-130		05/27/2021 01:33	WG1677689

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	188		8.26	20.5	5	05/27/2021 15:30	WG1677870
C28-C40 Oil Range	438		1.41	20.5	5	05/27/2021 15:30	WG1677870
(S) o-Terphenyl	67.2			18.0-148		05/27/2021 15:30	WG1677870



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	WG1677026

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	WG1680544

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	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		05/28/2021 19:20	WG1678821

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	WG1677689
Toluene	U	J3	0.0111	0.0428	8	05/27/2021 03:47	WG1677689
Ethylbenzene	0.0450	J3	0.00632	0.0214	8	05/27/2021 03:47	WG1677689
Total Xylenes	0.703	J3	0.00754	0.0557	8	05/27/2021 03:47	WG1677689
(S) Toluene-d8	107			75.0-131		05/27/2021 03:47	WG1677689
(S) 4-Bromofluorobenzene	97.0			67.0-138		05/27/2021 03:47	WG1677689
(S) 1,2-Dichloroethane-d4	80.1			70.0-130		05/27/2021 03:47	WG1677689

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	WG1677870
C28-C40 Oil Range	1240		2.84	41.4	10	05/27/2021 15:43	WG1677870
(S) o-Terphenyl	248	J1		18.0-148		05/27/2021 15:43	WG1677870

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	WG1677026

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	WG1680544

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	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120		05/28/2021 16:58	WG1678821

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	WG1677689
Toluene	U		0.00150	0.00575	1	05/27/2021 01:52	WG1677689
Ethylbenzene	U		0.000848	0.00288	1	05/27/2021 01:52	WG1677689
Total Xylenes	U		0.00101	0.00748	1	05/27/2021 01:52	WG1677689
(S) Toluene-d8	107			75.0-131		05/27/2021 01:52	WG1677689
(S) 4-Bromofluorobenzene	89.5			67.0-138		05/27/2021 01:52	WG1677689
(S) 1,2-Dichloroethane-d4	78.7			70.0-130		05/27/2021 01:52	WG1677689

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	WG1677870
C28-C40 Oil Range	16.6		0.295	4.30	1	05/27/2021 15:16	WG1677870
(S) o-Terphenyl	53.1			18.0-148		05/27/2021 15:16	WG1677870

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

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	WG1677026

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	WG1680544

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

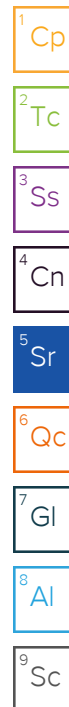
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	05/28/2021 17:22	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	94.9			77.0-120		05/28/2021 17:22	WG1678821

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	WG1677689
Toluene	U		0.00138	0.00532	1	05/27/2021 02:11	WG1677689
Ethylbenzene	U		0.000785	0.00266	1	05/27/2021 02:11	WG1677689
Total Xylenes	U		0.000937	0.00692	1	05/27/2021 02:11	WG1677689
(S) Toluene-d8	107			75.0-131		05/27/2021 02:11	WG1677689
(S) 4-Bromofluorobenzene	90.9			67.0-138		05/27/2021 02:11	WG1677689
(S) 1,2-Dichloroethane-d4	68.2	J2		70.0-130		05/27/2021 02:11	WG1677689

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	WG1677870
C28-C40 Oil Range	2.56	J	0.283	4.13	1	05/27/2021 04:26	WG1677870
(S) o-Terphenyl	71.8			18.0-148		05/27/2021 04:26	WG1677870



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	97.8		1	05/26/2021 11:57	WG1677026

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	17.0	J	9.41	20.5	1	06/02/2021 05:37	WG1680544

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		0.0222	0.102	1	05/28/2021 17:45	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	95.5			77.0-120		05/28/2021 17:45	WG1678821

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	0.00105	1	05/27/2021 02:30	WG1677689
Toluene	U		0.00136	0.00523	1	05/27/2021 02:30	WG1677689
Ethylbenzene	U		0.000771	0.00261	1	05/27/2021 02:30	WG1677689
Total Xylenes	U		0.000920	0.00680	1	05/27/2021 02:30	WG1677689
(S) Toluene-d8	108			75.0-131		05/27/2021 02:30	WG1677689
(S) 4-Bromofluorobenzene	87.4			67.0-138		05/27/2021 02:30	WG1677689
(S) 1,2-Dichloroethane-d4	73.4			70.0-130		05/27/2021 02:30	WG1677689

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.65	4.09	1	05/27/2021 04:40	WG1677870
C28-C40 Oil Range	0.908	J	0.280	4.09	1	05/27/2021 04:40	WG1677870
(S) o-Terphenyl	71.3			18.0-148		05/27/2021 04:40	WG1677870

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

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	95.6		1	05/26/2021 11:57	WG1677026

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	13.4	J	9.63	20.9	1	06/02/2021 05:56	WG1680544

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	05/28/2021 18:09	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	95.0			77.0-120		05/28/2021 18:09	WG1678821

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000511	0.00109	1	05/27/2021 02:49	WG1677689
Toluene	U		0.00142	0.00547	1	05/27/2021 02:49	WG1677689
Ethylbenzene	U		0.000806	0.00273	1	05/27/2021 02:49	WG1677689
Total Xylenes	U		0.000962	0.00711	1	05/27/2021 02:49	WG1677689
(S) Toluene-d8	109			75.0-131		05/27/2021 02:49	WG1677689
(S) 4-Bromofluorobenzene	89.4			67.0-138		05/27/2021 02:49	WG1677689
(S) 1,2-Dichloroethane-d4	76.8			70.0-130		05/27/2021 02:49	WG1677689

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.68	4.19	1	05/27/2021 04:53	WG1677870
C28-C40 Oil Range	0.458	J	0.287	4.19	1	05/27/2021 04:53	WG1677870
(S) o-Terphenyl	71.9			18.0-148		05/27/2021 04:53	WG1677870

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	92.5		1	05/26/2021 11:57	WG1677026

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	592		9.94	21.6	1	06/02/2021 06:06	WG1680544

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

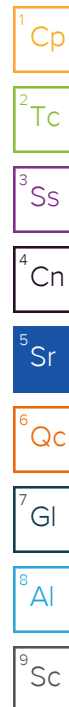
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0235	0.108	1	05/28/2021 18:33	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	92.8			77.0-120		05/28/2021 18:33	WG1678821

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000542	0.00116	1	05/27/2021 03:08	WG1677689
Toluene	U		0.00151	0.00581	1	05/27/2021 03:08	WG1677689
Ethylbenzene	U		0.000856	0.00290	1	05/27/2021 03:08	WG1677689
Total Xylenes	U		0.00102	0.00755	1	05/27/2021 03:08	WG1677689
(S) Toluene-d8	107			75.0-131		05/27/2021 03:08	WG1677689
(S) 4-Bromofluorobenzene	86.8			67.0-138		05/27/2021 03:08	WG1677689
(S) 1,2-Dichloroethane-d4	77.2			70.0-130		05/27/2021 03:08	WG1677689

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.78	J	1.74	4.32	1	05/27/2021 06:14	WG1677870
C28-C40 Oil Range	15.3		0.296	4.32	1	05/27/2021 06:14	WG1677870
(S) o-Terphenyl	58.2			18.0-148		05/27/2021 06:14	WG1677870



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	95.7		1	05/26/2021 11:50	WG1677027

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	397		9.61	20.9	1	06/02/2021 06:15	WG1680544

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

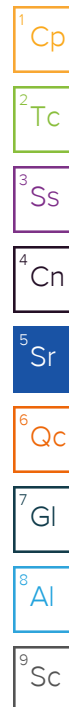
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0227	0.104	1	05/28/2021 18:57	WG1678821
(S) a,a,a-Trifluorotoluene(FID)	97.0			77.0-120		05/28/2021 18:57	WG1678821

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000509	0.00109	1	05/27/2021 03:27	WG1677689
Toluene	U		0.00142	0.00545	1	05/27/2021 03:27	WG1677689
Ethylbenzene	U		0.000803	0.00272	1	05/27/2021 03:27	WG1677689
Total Xylenes	U		0.000959	0.00708	1	05/27/2021 03:27	WG1677689
(S) Toluene-d8	108			75.0-131		05/27/2021 03:27	WG1677689
(S) 4-Bromofluorobenzene	89.0			67.0-138		05/27/2021 03:27	WG1677689
(S) 1,2-Dichloroethane-d4	74.9			70.0-130		05/27/2021 03:27	WG1677689

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.68	4.18	1	05/27/2021 05:07	WG1677870
C28-C40 Oil Range	1.92	J	0.286	4.18	1	05/27/2021 05:07	WG1677870
(S) o-Terphenyl	68.5			18.0-148		05/27/2021 05:07	WG1677870



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	96.4		1	05/26/2021 11:50	WG1677027

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	495		9.54	20.7	1	06/02/2021 06:25	WG1680544

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0225	0.104	1	05/27/2021 01:13	WG1677712
(S) a,a,a-Trifluorotoluene(FID)	94.2			77.0-120		05/27/2021 01:13	WG1677712

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000502	0.00107	1	05/26/2021 12:35	WG1677778
Toluene	U		0.00140	0.00537	1	05/26/2021 12:35	WG1677778
Ethylbenzene	U		0.000792	0.00269	1	05/26/2021 12:35	WG1677778
Total Xylenes	U		0.000946	0.00699	1	05/26/2021 12:35	WG1677778
(S) Toluene-d8	105			75.0-131		05/26/2021 12:35	WG1677778
(S) 4-Bromofluorobenzene	102			67.0-138		05/26/2021 12:35	WG1677778
(S) 1,2-Dichloroethane-d4	79.3			70.0-130		05/26/2021 12:35	WG1677778

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.67	4.15	1	05/27/2021 05:20	WG1677870
C28-C40 Oil Range	0.786	J	0.284	4.15	1	05/27/2021 05:20	WG1677870
(S) o-Terphenyl	70.1			18.0-148		05/27/2021 05:20	WG1677870

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

Collected date/time: 05/14/21 00:00

L1355917

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.1		1	05/26/2021 11:50	WG1677027

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	847		48.9	106	5	06/02/2021 06:53	WG1680544

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0231	0.106	1	05/27/2021 01:35	WG1677712
(S) a,a,a-Trifluorotoluene(FID)	93.9			77.0-120		05/27/2021 01:35	WG1677712

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000526	0.00113	1	05/26/2021 12:54	WG1677778
Toluene	U		0.00146	0.00563	1	05/26/2021 12:54	WG1677778
Ethylbenzene	U		0.000830	0.00282	1	05/26/2021 12:54	WG1677778
Total Xylenes	U		0.000991	0.00732	1	05/26/2021 12:54	WG1677778
(S) Toluene-d8	104			75.0-131		05/26/2021 12:54	WG1677778
(S) 4-Bromofluorobenzene	102			67.0-138		05/26/2021 12:54	WG1677778
(S) 1,2-Dichloroethane-d4	76.0			70.0-130		05/26/2021 12:54	WG1677778

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.71	4.25	1	05/27/2021 05:34	WG1677870
C28-C40 Oil Range	0.340	J	0.291	4.25	1	05/27/2021 05:34	WG1677870
(S) o-Terphenyl	66.7			18.0-148		05/27/2021 05:34	WG1677870

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

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	95.0		1	05/26/2021 11:50	WG1677027

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	14.2	J	9.68	21.1	1	06/02/2021 07:03	WG1680544

5 Sr

6 Qc

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	05/27/2021 01:57	WG1677712
(S) a,a,a-Trifluorotoluene(FID)	95.0			77.0-120		05/27/2021 01:57	WG1677712

7 Gl

8 Al

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		0.000516	0.00111	1	05/26/2021 13:13	WG1677778
Toluene	U		0.00144	0.00553	1	05/26/2021 13:13	WG1677778
Ethylbenzene	U		0.000815	0.00276	1	05/26/2021 13:13	WG1677778
Total Xylenes	U		0.000973	0.00719	1	05/26/2021 13:13	WG1677778
(S) Toluene-d8	98.6			75.0-131		05/26/2021 13:13	WG1677778
(S) 4-Bromofluorobenzene	101			67.0-138		05/26/2021 13:13	WG1677778
(S) 1,2-Dichloroethane-d4	70.6			70.0-130		05/26/2021 13:13	WG1677778

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	15.4		1.69	4.21	1	05/27/2021 06:28	WG1677870
C28-C40 Oil Range	31.9		0.288	4.21	1	05/27/2021 06:28	WG1677870
(S) o-Terphenyl	59.0			18.0-148		05/27/2021 06:28	WG1677870

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	WG1677027

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	WG1680544

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	WG1677712
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120		05/27/2021 02:19	WG1677712

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	WG1677778
Toluene	U		0.00140	0.00538	1	05/26/2021 13:32	WG1677778
Ethylbenzene	U		0.000794	0.00269	1	05/26/2021 13:32	WG1677778
Total Xylenes	U		0.000948	0.00700	1	05/26/2021 13:32	WG1677778
(S) Toluene-d8	103			75.0-131		05/26/2021 13:32	WG1677778
(S) 4-Bromofluorobenzene	101			67.0-138		05/26/2021 13:32	WG1677778
(S) 1,2-Dichloroethane-d4	71.9			70.0-130		05/26/2021 13:32	WG1677778

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	WG1677870
C28-C40 Oil Range	4.95		0.284	4.15	1	05/27/2021 05:47	WG1677870
(S) o-Terphenyl	66.1			18.0-148		05/27/2021 05:47	WG1677870

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

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	97.0		1	05/26/2021 11:50	WG1677027

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	15.1	<u>J</u>	9.48	20.6	1	06/02/2021 07:22	WG1680544

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

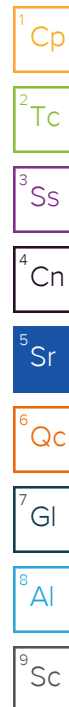
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	05/27/2021 02:41	WG1677712
(S) a,a,a-Trifluorotoluene(FID)	94.1			77.0-120		05/27/2021 02:41	WG1677712

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		0.000495	0.00106	1	05/26/2021 13:51	WG1677778
Toluene	U		0.00138	0.00530	1	05/26/2021 13:51	WG1677778
Ethylbenzene	U		0.000782	0.00265	1	05/26/2021 13:51	WG1677778
Total Xylenes	U		0.000934	0.00690	1	05/26/2021 13:51	WG1677778
(S) Toluene-d8	102			75.0-131		05/26/2021 13:51	WG1677778
(S) 4-Bromofluorobenzene	103			67.0-138		05/26/2021 13:51	WG1677778
(S) 1,2-Dichloroethane-d4	67.6	<u>J2</u>		70.0-130		05/26/2021 13:51	WG1677778

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	2.35	<u>J</u>	1.66	4.12	1	05/27/2021 06:01	WG1677870
C28-C40 Oil Range	3.37	<u>J</u>	0.282	4.12	1	05/27/2021 06:01	WG1677870
(S) o-Terphenyl	71.1			18.0-148		05/27/2021 06:01	WG1677870



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	97.0		1	05/26/2021 11:50	WG1677027

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	06/02/2021 07:31	WG1680544

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	05/27/2021 03:04	WG1677712
(S) a,a,a-Trifluorotoluene(FID)	93.9			77.0-120		05/27/2021 03:04	WG1677712

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	05/26/2021 14:10	WG1677778
Toluene	U		0.00138	0.00531	1	05/26/2021 14:10	WG1677778
Ethylbenzene	U		0.000782	0.00265	1	05/26/2021 14:10	WG1677778
Total Xylenes	U		0.000934	0.00690	1	05/26/2021 14:10	WG1677778
(S) Toluene-d8	98.5			75.0-131		05/26/2021 14:10	WG1677778
(S) 4-Bromofluorobenzene	102			67.0-138		05/26/2021 14:10	WG1677778
(S) 1,2-Dichloroethane-d4	72.7			70.0-130		05/26/2021 14:10	WG1677778

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.66	4.12	1	05/27/2021 05:53	WG1677874
C28-C40 Oil Range	U		0.282	4.12	1	05/27/2021 05:53	WG1677874
(S) o-Terphenyl	67.3			18.0-148		05/27/2021 05:53	WG1677874

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

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	93.4		1	05/26/2021 11:50	WG1677027

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	107		9.85	21.4	1	06/02/2021 07:41	WG1680544

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	05/27/2021 03:26	WG1677712
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120		05/27/2021 03:26	WG1677712

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000533	0.00114	1	05/26/2021 14:29	WG1677778
Toluene	U		0.00148	0.00571	1	05/26/2021 14:29	WG1677778
Ethylbenzene	U		0.000842	0.00286	1	05/26/2021 14:29	WG1677778
Total Xylenes	U		0.00101	0.00742	1	05/26/2021 14:29	WG1677778
(S) Toluene-d8	100			75.0-131		05/26/2021 14:29	WG1677778
(S) 4-Bromofluorobenzene	103			67.0-138		05/26/2021 14:29	WG1677778
(S) 1,2-Dichloroethane-d4	71.0			70.0-130		05/26/2021 14:29	WG1677778

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.54		1.72	4.28	1	05/27/2021 19:12	WG1677874
C28-C40 Oil Range	15.7		0.293	4.28	1	05/27/2021 19:12	WG1677874
(S) o-Terphenyl	69.1			18.0-148		05/27/2021 19:12	WG1677874

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

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	WG1677027

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) 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	WG1678508

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	WG1677712
(S) a,a,a-Trifluorotoluene(FID)	93.0			77.0-120		05/27/2021 03:48	WG1677712

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	0.000522	0.00112	1	05/26/2021 14:47	WG1677778
Toluene	U	J3	0.00145	0.00559	1	05/26/2021 14:47	WG1677778
Ethylbenzene	U	J3	0.000824	0.00280	1	05/26/2021 14:47	WG1677778
Total Xylenes	U	J3	0.000984	0.00727	1	05/26/2021 14:47	WG1677778
(S) Toluene-d8	106			75.0-131		05/26/2021 14:47	WG1677778
(S) 4-Bromofluorobenzene	104			67.0-138		05/26/2021 14:47	WG1677778
(S) 1,2-Dichloroethane-d4	83.3			70.0-130		05/26/2021 14:47	WG1677778

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	WG1677874
C28-C40 Oil Range	2260		5.80	84.7	20	05/29/2021 04:01	WG1677874
(S) o-Terphenyl	0.000	J7		18.0-148		05/29/2021 04:01	WG1677874

Total Solids by Method 2540 G-2011 [L1355917-01,02](#)

Method Blank (MB)

(MB) R3659332-1 05/25/21 19:42

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	98.6	98.5	1	0.164		10

Laboratory Control Sample (LCS)

(LCS) R3659332-2 05/25/21 19:42

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

[L1355917-03,04,05,06,07,08,09,10,11,12](#)

Method Blank (MB)

(MB) R3659778-1 05/26/21 11:57

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.000			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

L1355917-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1355917-11 05/26/21 11:57 • (DUP) R3659778-3 05/26/21 11:57

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	95.6	95.3	1	0.285		10

Laboratory Control Sample (LCS)

(LCS) R3659778-2 05/26/21 11:57

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%	%	%	%	
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

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

L1355917-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1355917-13 05/26/21 11:50 • (DUP) R3659775-3 05/26/21 11:50

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	95.7	95.8	1	0.0797		10

⁷Gl

⁸Al

Laboratory Control Sample (LCS)

(LCS) R3659775-2 05/26/21 11:50

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

⁹Sc

Method Blank (MB)

(MB) R3660951-1 05/27/21 20:58

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

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) mg/kg	DUP Result (dry) mg/kg	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) mg/kg	DUP Result (dry) mg/kg	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 mg/kg	LCS Result mg/kg	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) 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	597	U	551	650	92.3	109	1	80.0-120			16.4	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

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

L1355917-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1355917-01 06/02/21 03:24 • (DUP) R3662059-3 06/02/21 03:33

	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	10.3	11.2	1	9.04	U	20

L1355917-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1355917-10 06/02/21 05:37 • (DUP) R3662059-6 06/02/21 05:46

	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	17.0	14.7	1	14.3	U	20

Laboratory Control Sample (LCS)

(LCS) R3662059-2 06/02/21 03:02

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

	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
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	533	10.3	561	539	103	99.2	1	80.0-120			3.89	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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 mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	105			75.0-131
(S) 4-Bromofluorobenzene	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 mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	1.06	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 mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	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 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	0.132	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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.140	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 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	76.3			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3659822-2 05/27/21 03:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	50.7	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				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
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 ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
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 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

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

* 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.

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

05-200

K-037

Analysis Request of Chain of Custody Record

Page 1 of 4

**Tetra Tech, Inc.**900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

1355917

Client Name:	ConocoPhillips	Site Manager:	Christian Llull
Project Name:	VGEU 02-20 West Release		
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:	Devin Dominguez
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX			PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	BTEX 8260B / TPH TX1005 (Ext to TPH 8015M (GRO - PAH 8270C	Total Metals Ag As B	TCLP Metals Ag As B	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate	General Water Chem	Anion/Cation Balance	TPH 8015R	Hold				
		YEAR: 2021		WATER	SOIL	HCL	HNO ₃	ICE	None																								
		DATE	TIME																														
01	BH-10 (0'-1')	5/14/2021			X			X			1	N	X	X										X									
02	BH-10 (2'-3')	5/14/2021			X			X			1	N	X	X										X									
03	BH-10 (3'-4')	5/14/2021			X			X			1	N	X	X										X									
	BH-10 (4'-5')	5/14/2021			X			X			1	N																					X
	BH-10 (7'-8')	5/14/2021			X			X			1	N																					X
04	BH-11 (0'-1')	5/14/2021			X			X			1	N	X	X										X									
	BH-11 (2'-3')	5/14/2021			X			X			1	N																					X
05	BH-11 (3'-4')	5/14/2021			X			X			1	N	X	X										X									
06	BH-11 (4'-5')	5/14/2021			X			X			1	N	X	X										X									
	BH-11 (7'-8')	5/14/2021			X			X			1	N																					X

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	5/19/21	9:00		5-19-21	9:20
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	5-19-21	15:00	SWA	5-19-21	15:00
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
				5/20/21	0800

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

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471-5 SWA TC-0.37=402
A30X

Analysis Request of Chain of Custody Record

Page 2 of 4



Tetra Tech, Inc.

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

1355917

Client Name:	ConocoPhillips	Site Manager:	Christian Llull
Project Name:	VGEU 02-20 West Release		
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:	Devin Dominguez
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	BTEX 8260B / TPH TX1005 (Ext to TPH 8015M (GRO - PAH 8270C	Total Metals Ag As B	TCLP Metals Ag As B	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate	General Water Chem	Anion/Cation Balance	TPH 8015R	TDS	Hardness	Hold					
		YEAR: 2021		WATER	SOIL	HCL	HNO ₃	ICE	None																										
		DATE	TIME																																
07	BH-11 (9'-10')	5/14/2021			X			X		1	N	X	X										X												
	BH-11 (14'-15')	5/14/2021			X			X		1	N																								X
08	BH-12 (0-1')	5/14/2021			X			X		1	N	X	X										X												
09	BH-12 (2'-3')	5/14/2021			X			X		1	N	X	X										X												
	BH-12 (3'-4')	5/14/2021			X			X		1	N																								X
10	BH-12 (4'-5')	5/14/2021			X			X		1	N	X	X										X												X
	BH-12 (7'-8')	5/14/2021			X			X		1	N																								X
11	BH-12 (9'-10')	5/14/2021			X			X		1	N	X	X										X												
	BH-12 (14'-15')	5/14/2021			X			X		1	N																								X
12	BH-13 (0-1')	5/14/2021			X			X		1	N	X	X										X												

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	5/19/21	9:00		5-19-21	9:20
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	5-19-21	15:00	SWA	5-19-21	15:00
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
				5/20/21	0800

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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4/1/2.5
A3 BT

Analysis Request of Chain of Custody Record

Page 3 of 4



Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland, Texas 79701
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Fax (432) 682-3946

1355911

Client Name:	ConocoPhillips	Site Manager:	Christian Lull
Project Name:	VGEU 02-20 West Release		
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:	Devin Dominguez
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	BTEX 8260B / TPH TX1005 (Ext to TPH 8015M (GRO - PAH 8270C	Total Metals Ag As B	TCLP Metals Ag As B	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / GC/MS Semi. Vol. 8270C / 608	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate	General Water Chem	Anion/Cation Balance	TPH 8015R																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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Relinquished by:	Date:	Time:	Received by:	Date:	Time:
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	5-19-21	Kiw		5-19-21	Kiw
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
				5/20/21	0800

LAB USE ONLY	REMARKS:
	<input checked="" type="checkbox"/> STANDARD
	<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr
	<input type="checkbox"/> Rush Charges Authorized
Sample Temperature	<input type="checkbox"/> Special Report Limits or TRRP Report
(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____	

ORIGINAL COPY

4/1/5
A305

Analysis Request of Chain of Custody Record

Page 4 of 4



Tetra Tech, Inc.

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

1755917

Client Name:	ConocoPhillips	Site Manager:	Christian Lull
Project Name:	VGEU 02-20 West Release		
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:	Devin Dominguez
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
 (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	BTEX 8260B / TPH TX1005 (Ext to TPH 8015M (GRO - PAH 8270C	Total Metals Ag As B	TCLP Metals Ag As B	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Sulfate	General Water Chem	Anion/Cation Balance	TPH 8015R				Hold																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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	5-19-21	15:00		5-19-21	15:00
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
				5/20/21	0800

LAB USE ONLY	REMARKS:
	<input checked="" type="checkbox"/> STANDARD
	<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr
	<input type="checkbox"/> Rush Charges Authorized
Sample Temperature	<input type="checkbox"/> Special Report Limits or TRRP Report
(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____	

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 A30T



ANALYTICAL REPORT

June 09, 2021

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 Llull
901 West Wall
Suite 100
Midland, TX 79701

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Entire Report Reviewed By:

A handwritten signature in blue ink that reads "Erica McNeese".

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 National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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



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

¹ Cp² Tc³ Ss⁴ Cn

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

⁵ Sr⁶ Qc⁷ Gl⁸ Al

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

⁹ Sc

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



Erica McNeese
Project Manager

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ 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	WG1680775

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	WG1682565

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	WG1680332
(S) a,a,a-Trifluorotoluene(FID)	90.9			77.0-120		05/31/2021 22:58	WG1680332

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	B J	0.000531	0.00114	1	05/30/2021 22:35	WG1680224
Toluene	0.00219	J	0.00148	0.00568	1	05/30/2021 22:35	WG1680224
Ethylbenzene	0.00171	J	0.000838	0.00284	1	05/30/2021 22:35	WG1680224
Total Xylenes	0.00418	J	0.00100	0.00739	1	05/30/2021 22:35	WG1680224
(S) Toluene-d8	109			75.0-131		05/30/2021 22:35	WG1680224
(S) 4-Bromofluorobenzene	88.0			67.0-138		05/30/2021 22:35	WG1680224
(S) 1,2-Dichloroethane-d4	78.9			70.0-130		05/30/2021 22:35	WG1680224

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	WG1680017
C28-C40 Oil Range	28.7		0.293	4.27	1	06/03/2021 16:06	WG1680017
(S) o-Terphenyl	65.6			18.0-148		06/03/2021 16:06	WG1680017

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	WG1680776

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	WG1682565

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	WG1680332
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	93.0			77.0-120		05/31/2021 23:20	WG1680332

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	WG1680224
Toluene	U		0.00153	0.00590	1	05/30/2021 22:54	WG1680224
Ethylbenzene	U		0.000869	0.00295	1	05/30/2021 22:54	WG1680224
Total Xylenes	U		0.00104	0.00767	1	05/30/2021 22:54	WG1680224
(S) <i>Toluene-d8</i>	107			75.0-131		05/30/2021 22:54	WG1680224
(S) <i>4-Bromofluorobenzene</i>	91.6			67.0-138		05/30/2021 22:54	WG1680224
(S) <i>1,2-Dichloroethane-d4</i>	93.3			70.0-130		05/30/2021 22:54	WG1680224

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	WG1680017
C28-C40 Oil Range	908		5.97	87.2	20	06/03/2021 18:36	WG1680017
(S) <i>o</i> -Terphenyl	0.000	J7		18.0-148		06/03/2021 18:36	WG1680017

Collected date/time: 05/25/21 11:00

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.7		1	06/02/2021 09:20	WG1680776

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		10.5	22.8	1	06/04/2021 06:05	WG1682565

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		0.0247	0.114	1	05/31/2021 23:42	WG1680332
(S) a,a,a-Trifluorotoluene(FID)	93.2			77.0-120		05/31/2021 23:42	WG1680332

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	0.000825	J	0.000598	0.00128	1	05/31/2021 08:14	WG1680328
Toluene	0.00333	J	0.00166	0.00640	1	05/31/2021 08:14	WG1680328
Ethylbenzene	0.00127	J	0.000944	0.00320	1	05/31/2021 08:14	WG1680328
Total Xylenes	0.00615	J	0.00113	0.00832	1	05/31/2021 08:14	WG1680328
(S) Toluene-d8	107			75.0-131		05/31/2021 08:14	WG1680328
(S) 4-Bromofluorobenzene	86.9			67.0-138		05/31/2021 08:14	WG1680328
(S) 1,2-Dichloroethane-d4	76.5			70.0-130		05/31/2021 08:14	WG1680328

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	3.45	J	1.83	4.56	1	06/03/2021 15:25	WG1680017
C28-C40 Oil Range	8.82		0.312	4.56	1	06/03/2021 15:25	WG1680017
(S) o-Terphenyl	57.3			18.0-148		06/03/2021 15:25	WG1680017

Collected date/time: 05/25/21 11:30

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.8		1	06/02/2021 09:20	WG1680776

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	U		9.92	21.6	1	06/04/2021 06:14	WG1682565

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0234	0.108	1	06/01/2021 00:04	WG1680332
(S) a,a,a-Trifluorotoluene(FID)	93.6			77.0-120		06/01/2021 00:04	WG1680332

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000540	0.00116	1	05/31/2021 08:33	WG1680328
Toluene	0.00163	J	0.00150	0.00578	1	05/31/2021 08:33	WG1680328
Ethylbenzene	U		0.000853	0.00289	1	05/31/2021 08:33	WG1680328
Total Xylenes	0.00198	J	0.00102	0.00752	1	05/31/2021 08:33	WG1680328
(S) Toluene-d8	106			75.0-131		05/31/2021 08:33	WG1680328
(S) 4-Bromofluorobenzene	88.1			67.0-138		05/31/2021 08:33	WG1680328
(S) 1,2-Dichloroethane-d4	73.7			70.0-130		05/31/2021 08:33	WG1680328

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	6.78		1.74	4.31	1	06/03/2021 15:39	WG1680017
C28-C40 Oil Range	15.0		0.295	4.31	1	06/03/2021 15:39	WG1680017
(S) o-Terphenyl	62.3			18.0-148		06/03/2021 15:39	WG1680017

Collected date/time: 05/25/21 12:00

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.1		1	06/02/2021 09:20	WG1680776

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	10.5	J	9.88	21.5	1	06/04/2021 06:24	WG1682565

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0233	0.107	1	06/01/2021 00:26	WG1680332
(S) a,a,a-Trifluorotoluene(FID)	92.9			77.0-120		06/01/2021 00:26	WG1680332

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000536	0.00115	1	05/31/2021 08:52	WG1680328
Toluene	0.00168	J	0.00149	0.00574	1	05/31/2021 08:52	WG1680328
Ethylbenzene	U		0.000847	0.00287	1	05/31/2021 08:52	WG1680328
Total Xylenes	0.00247	J	0.00101	0.00747	1	05/31/2021 08:52	WG1680328
(S) Toluene-d8	104			75.0-131		05/31/2021 08:52	WG1680328
(S) 4-Bromofluorobenzene	94.1			67.0-138		05/31/2021 08:52	WG1680328
(S) 1,2-Dichloroethane-d4	91.0			70.0-130		05/31/2021 08:52	WG1680328

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	13.2		1.73	4.30	1	06/03/2021 16:20	WG1680017
C28-C40 Oil Range	33.2		0.294	4.30	1	06/03/2021 16:20	WG1680017
(S) o-Terphenyl	72.4			18.0-148		06/03/2021 16:20	WG1680017

Collected date/time: 05/25/21 12:30

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.1		1	06/02/2021 09:20	WG1680776

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		10.7	23.2	1	06/04/2021 06:33	WG1682565

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		0.0252	0.116	1	06/01/2021 00:48	WG1680332
(S) a,a,a-Trifluorotoluene(FID)	92.9			77.0-120		06/01/2021 00:48	WG1680332

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		0.000619	0.00132	1	05/31/2021 09:12	WG1680328
Toluene	0.00225	J	0.00172	0.00662	1	05/31/2021 09:12	WG1680328
Ethylbenzene	U		0.000976	0.00331	1	05/31/2021 09:12	WG1680328
Total Xylenes	0.00278	J	0.00117	0.00861	1	05/31/2021 09:12	WG1680328
(S) Toluene-d8	107			75.0-131		05/31/2021 09:12	WG1680328
(S) 4-Bromofluorobenzene	90.1			67.0-138		05/31/2021 09:12	WG1680328
(S) 1,2-Dichloroethane-d4	86.0			70.0-130		05/31/2021 09:12	WG1680328

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	6.33		1.87	4.65	1	06/03/2021 15:53	WG1680017
C28-C40 Oil Range	20.0		0.318	4.65	1	06/03/2021 15:53	WG1680017
(S) o-Terphenyl	77.6			18.0-148		06/03/2021 15:53	WG1680017

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

Collected date/time: 05/25/21 13:00

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.6		1	06/02/2021 09:20	WG1680776

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		10.2	22.1	1	06/04/2021 07:11	WG1682565

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		0.0240	0.110	1	06/01/2021 01:09	WG1680332
(S) a,a,a-Trifluorotoluene(FID)	92.9			77.0-120		06/01/2021 01:09	WG1680332

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		0.000565	0.00121	1	05/31/2021 09:31	WG1680328
Toluene	0.00191	J	0.00157	0.00605	1	05/31/2021 09:31	WG1680328
Ethylbenzene	U		0.000891	0.00302	1	05/31/2021 09:31	WG1680328
Total Xylenes	0.00276	J	0.00106	0.00786	1	05/31/2021 09:31	WG1680328
(S) Toluene-d8	109			75.0-131		05/31/2021 09:31	WG1680328
(S) 4-Bromofluorobenzene	87.9			67.0-138		05/31/2021 09:31	WG1680328
(S) 1,2-Dichloroethane-d4	82.8			70.0-130		05/31/2021 09:31	WG1680328

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	2.65	J	1.78	4.42	1	06/03/2021 15:12	WG1680017
C28-C40 Oil Range	5.63	B	0.303	4.42	1	06/03/2021 15:12	WG1680017
(S) o-Terphenyl	66.0			18.0-148		06/03/2021 15:12	WG1680017

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

Collected date/time: 05/25/21 13:30

L1358911

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.4		1	06/02/2021 09:20	WG1680776

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		10.5	22.9	1	06/06/2021 01:59	WG1682615

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		0.0248	0.114	1	06/01/2021 01:31	WG1680332
(S) a,a,a-Trifluorotoluene(FID)	93.5			77.0-120		06/01/2021 01:31	WG1680332

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		0.000602	0.00129	1	05/31/2021 09:50	WG1680328
Toluene	0.00367	J	0.00168	0.00645	1	05/31/2021 09:50	WG1680328
Ethylbenzene	U		0.000950	0.00322	1	05/31/2021 09:50	WG1680328
Total Xylenes	0.00338	J	0.00113	0.00838	1	05/31/2021 09:50	WG1680328
(S) Toluene-d8	108			75.0-131		05/31/2021 09:50	WG1680328
(S) 4-Bromofluorobenzene	87.9			67.0-138		05/31/2021 09:50	WG1680328
(S) 1,2-Dichloroethane-d4	76.8			70.0-130		05/31/2021 09:50	WG1680328

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	4.99		1.84	4.58	1	06/03/2021 14:58	WG1680017
C28-C40 Oil Range	8.02		0.313	4.58	1	06/03/2021 14:58	WG1680017
(S) o-Terphenyl	62.0			18.0-148		06/03/2021 14:58	WG1680017

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

Total Solids by Method 2540 G-2011 [L1358911-01](#)

Method Blank (MB)

(MB) R3662015-1 06/01/21 14:27

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	%		%	%
Total Solids	0.000			

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

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	<u>DUP Qualifier</u>	DUP RPD Limits
	%	%		%		%
Total Solids	84.3	84.9	1	0.616		10

Laboratory Control Sample (LCS)

(LCS) R3662015-2 06/01/21 14:27

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

⁷Gl

⁸Al

⁹Sc

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

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

L1358911-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1358911-02 06/02/21 09:20 • (DUP) R3662583-3 06/02/21 09:20

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	91.8	91.7	1	0.0475		10

⁷Gl

⁸Al

Laboratory Control Sample (LCS)

(LCS) R3662583-2 06/02/21 09:20

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

⁹Sc

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

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

L1358029-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1358029-03 06/04/21 04:01 • (DUP) R3663266-3 06/04/21 04:10

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
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

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

Laboratory Control Sample (LCS)

(LCS) R3663266-2 06/04/21 03:32

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

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	500	71.0	575	589	101	104	1	80.0-120			2.42	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

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

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3663330-2 05/31/21 19:18

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	97.6			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3663330-1 05/31/21 18:34

Analyte	Spike Amount mg/kg	LCS Result mg/kg	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) 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	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				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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	⬇	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 mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	111			75.0-131
(S) 4-Bromofluorobenzene	87.9			67.0-138
(S) 1,2-Dichloroethane-d4	78.6			70.0-130

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 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	0.106	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				

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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.160	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				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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 mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	0.652	⬇	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 mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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) 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 %
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				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
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 ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
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 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

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

* 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.

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Tetra Tech, Inc.

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

Site Manager: Christian Lull

Contact Info: Email: christian.llull@tetrattech.com
Phone: (512) 338-1667

Project #: 212C-MD-02305

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

Sampler Signature: Andrew Garcia

Comments: COPTETRA Acctnum

ANALYSIS REQUEST
(Circle or Specify Method No.)

[illegible]

Relinquished by:	Date:	Time:
Andrew Garcia	5/26/2021	09:00 AM

Received by:	Date:	Time:
<i>[Signature]</i>	5-20-21	7:12

Relinquished by:  Date: 5-26-21 Time: 17:00

Received by: Swat Date: 5-26-21 Time: 17:00

Relinquished by: _____ Date: _____ Time: _____

Received by: Olivia L... Date: 5/27/21 Time: 10:30

LAB USE
ONLY

Sample Temperature

$$0.2 + 2 = 2.2$$

REMARKS:

☒ Standard

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

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client:	CORTETRA	61358911
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

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.

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". The signature is written in a cursive, flowing style.

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

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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 (8-9) (H220656-02)

BTX 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 BTX	<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	
Chloride	32.0	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*	158	10.0	02/23/2022	ND	213	106	200	1.86	
EXT DRO >C28-C36	120	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



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 (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, 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	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*	18.3	10.0	02/23/2022	ND	210	105	200	3.13	
DRO >C10-C28*	1200	10.0	02/23/2022	ND	213	106	200	1.86	
EXT DRO >C28-C36	355	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)

BTX 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	
Ethylbenzene*	0.121	0.050	02/24/2022	ND	2.29	115	2.00	1.40	GC-NC1
Total Xylenes*	0.960	0.150	02/24/2022	ND	7.12	119	6.00	1.17	GC-NC1
Total BTX	1.08	0.300	02/24/2022	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 188 % 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	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
GRO C6-C10*	130	10.0	02/23/2022	ND	210	105	200	3.13	
DRO >C10-C28*	2370	10.0	02/23/2022	ND	213	106	200	1.86	
EXT DRO >C28-C36	503	10.0	02/23/2022	ND					

Surrogate: 1-Chlorooctane 143 % 66.9-136

Surrogate: 1-Chlorooctadecane 192 % 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 - 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	
Ethylbenzene*	0.610	0.050	02/25/2022	ND	2.29	115	2.00	1.40	GC-NC1
Total Xylenes*	3.06	0.150	02/25/2022	ND	7.12	119	6.00	1.17	GC-NC1
Total BTEx	3.67	0.300	02/25/2022	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 233 % 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	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*	201	10.0	02/23/2022	ND	210	105	200	3.13	
DRO >C10-C28*	2140	10.0	02/23/2022	ND	213	106	200	1.86	
EXT DRO >C28-C36	414	10.0	02/23/2022	ND					

Surrogate: 1-Chlorooctane 123 % 66.9-136

Surrogate: 1-Chlorooctadecane 115 % 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 - 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	
Ethylbenzene*	0.802	0.050	02/24/2022	ND	2.29	115	2.00	1.40	GC-NC1
Total Xylenes*	3.90	0.150	02/24/2022	ND	7.12	119	6.00	1.17	GC-NC1
Total BTEx	4.70	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
GRO C6-C10*	223	10.0	02/23/2022	ND	210	105	200	3.13	
DRO >C10-C28*	2190	10.0	02/23/2022	ND	213	106	200	1.86	
EXT DRO >C28-C36	431	10.0	02/23/2022	ND					

Surrogate: 1-Chlorooctane 160 % 66.9-136

Surrogate: 1-Chlorooctadecane 185 % 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 - 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	
Ethylbenzene*	0.598	0.050	02/24/2022	ND	2.29	115	2.00	1.40	GC-NC1
Total Xylenes*	2.68	0.150	02/24/2022	ND	7.12	119	6.00	1.17	GC-NC1
Total BTEX	3.28	0.300	02/24/2022	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 230 % 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
GRO C6-C10*	182	10.0	02/23/2022	ND	210	105	200	3.13	
DRO >C10-C28*	2100	10.0	02/23/2022	ND	213	106	200	1.86	
EXT DRO >C28-C36	418	10.0	02/23/2022	ND					

Surrogate: 1-Chlorooctane 133 % 66.9-136

Surrogate: 1-Chlorooctadecane 221 % 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 - 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	GC-NC1	
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*	0.194	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) 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	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*	23.8	10.0	02/23/2022	ND	210	105	200	3.13	
DRO >C10-C28*	340	10.0	02/23/2022	ND	213	106	200	1.86	
EXT DRO >C28-C36	45.6	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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Celey D. Keene, Lab Director/Quality Manager

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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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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Page 01 of 02

[illegible]

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Page 02 of 02

[illegible]



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

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.

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". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

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
Chloride	32.0	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*	200	50.0	05/25/2022	ND	204	102	200	0.0987	QM-07
DRO >C10-C28*	4860	50.0	05/25/2022	ND	208	104	200	1.27	QM-07
EXT DRO >C28-C36	1060	50.0	05/25/2022	ND					

Surrogate: 1-Chlorooctane 121 % 66.9-136

Surrogate: 1-Chlorooctadecane 140 % 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 - 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	
Toluene*	0.332	0.050	05/25/2022	ND	2.07	103	2.00	5.53	
Ethylbenzene*	0.294	0.050	05/25/2022	ND	1.97	98.7	2.00	6.26	
Total Xylenes*	4.60	0.150	05/25/2022	ND	6.15	102	6.00	6.65	
Total BTEX	5.23	0.300	05/25/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 250 % 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	32.0	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
GRO C6-C10*	284	50.0	05/25/2022	ND	204	102	200	0.0987	
DRO >C10-C28*	4360	50.0	05/25/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	851	50.0	05/25/2022	ND					

Surrogate: 1-Chlorooctane 112 % 66.9-136

Surrogate: 1-Chlorooctadecane 313 % 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 - 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	
Toluene*	0.136	0.050	05/25/2022	ND	2.07	103	2.00	5.53	
Ethylbenzene*	0.121	0.050	05/25/2022	ND	1.97	98.7	2.00	6.26	
Total Xylenes*	2.69	0.150	05/25/2022	ND	6.15	102	6.00	6.65	
Total BTEX	2.95	0.300	05/25/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 160 % 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
GRO C6-C10*	145	50.0	05/25/2022	ND	204	102	200	0.0987	
DRO >C10-C28*	2800	50.0	05/25/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	557	50.0	05/25/2022	ND					

Surrogate: 1-Chlorooctane 101 % 66.9-136

Surrogate: 1-Chlorooctadecane 187 % 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 - 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	
Ethylbenzene*	0.062	0.050	05/24/2022	ND	1.97	98.7	2.00	6.26	
Total Xylenes*	0.730	0.150	05/24/2022	ND	6.15	102	6.00	6.65	
Total BTEX	0.793	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
GRO C6-C10*	38.9	10.0	05/25/2022	ND	204	102	200	0.0987	
DRO >C10-C28*	1440	10.0	05/25/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	287	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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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)

BTX 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*	0.108	0.050	05/24/2022	ND	2.07	103	2.00	5.53	
Ethylbenzene*	0.177	0.050	05/24/2022	ND	1.97	98.7	2.00	6.26	
Total Xylenes*	1.24	0.150	05/24/2022	ND	6.15	102	6.00	6.65	
Total BTX	1.53	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
GRO C6-C10*	41.4	10.0	05/25/2022	ND	204	102	200	0.0987	
DRO >C10-C28*	1400	10.0	05/25/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	287	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	
Ethylbenzene*	0.076	0.050	05/24/2022	ND	1.97	98.7	2.00	6.26	
Total Xylenes*	0.407	0.150	05/24/2022	ND	6.15	102	6.00	6.65	
Total BTEX	0.483	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	
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*	21.6	10.0	05/25/2022	ND	204	102	200	0.0987	
DRO >C10-C28*	997	10.0	05/25/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	219	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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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	
Toluene*	0.500	0.050	05/24/2022	ND	2.07	103	2.00	5.53	
Ethylbenzene*	0.894	0.050	05/24/2022	ND	1.97	98.7	2.00	6.26	
Total Xylenes*	2.34	0.150	05/24/2022	ND	6.15	102	6.00	6.65	
Total BTEX	3.74	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	
Chloride	32.0	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*	54.0	10.0	05/25/2022	ND	204	102	200	0.0987	
DRO >C10-C28*	1100	10.0	05/25/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	227	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	
Toluene*	4.06	0.200	05/24/2022	ND	2.07	103	2.00	5.53	
Ethylbenzene*	13.3	0.200	05/24/2022	ND	1.97	98.7	2.00	6.26	
Total Xylenes*	27.6	0.600	05/24/2022	ND	6.15	102	6.00	6.65	
Total BTEX	44.9	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
GRO C6-C10*	366	50.0	05/25/2022	ND	204	102	200	0.0987	
DRO >C10-C28*	2590	50.0	05/25/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	496	50.0	05/25/2022	ND					

Surrogate: 1-Chlorooctane 116 % 66.9-136

Surrogate: 1-Chlorooctadecane 181 % 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 (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		
Toluene*	8.44	0.500	05/24/2022	ND	2.07	103	2.00	5.53		
Ethylbenzene*	20.9	0.500	05/24/2022	ND	1.97	98.7	2.00	6.26		
Total Xylenes*	37.9	1.50	05/24/2022	ND	6.15	102	6.00	6.65		
Total BTEX	67.2	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
GRO C6-C10*	728	50.0	05/25/2022	ND	204	102	200	0.0987	
DRO >C10-C28*	3580	50.0	05/25/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	638	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



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 (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	
Toluene*	0.383	0.050	05/24/2022	ND	2.07	103	2.00	5.53	
Ethylbenzene*	1.25	0.050	05/24/2022	ND	1.97	98.7	2.00	6.26	
Total Xylenes*	2.48	0.150	05/24/2022	ND	6.15	102	6.00	6.65	
Total BTEx	4.11	0.300	05/24/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 122 % 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*	58.9	10.0	05/25/2022	ND	204	102	200	0.0987	
DRO >C10-C28*	1000	10.0	05/25/2022	ND	208	104	200	1.27	
EXT DRO >C28-C36	191	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



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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 (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, 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*	54.2	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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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
 Reported: 05/25/2022
 Project Name: VGEU 02-20 FLOWLINE RELEASE
 Project Number: 212C-MD-02305 - WEST
 Project Location: COP - LEA CO NM

Sampling Date: 05/24/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

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	
Ethylbenzene*	0.067	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	
DRO >C10-C28*	86.8	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, 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*	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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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
 Reported: 05/25/2022
 Project Name: VGEU 02-20 FLOWLINE RELEASE
 Project Number: 212C-MD-02305 - WEST
 Project Location: COP - LEA CO NM

Sampling Date: 05/24/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: BH - 18 A (44'-45') (H222202-15)

BTX 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 BTX	<0.300	0.300	05/24/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 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	32.0	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*	45.4	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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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 (49'-50') (H222202-16)

BTX 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 BTX	<0.300	0.300	05/24/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 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*	16.0	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 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	
Chloride	32.0	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*	53.7	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)

BTX 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 BTX	<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	32.0	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	05/25/2022	ND	204	102	200	0.0987	
DRO >C10-C28*	20.2	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



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 - 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)

BTX 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 BTX	<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*	<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, 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	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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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Conoco Phillips		P.O. #:		BILL TO										ANALYSIS REQUEST																			
Project Manager: Ryan Dikeston		Company: Tetra Tech																															
Address:		Attn: Ryan Dikeston																															
City:		Address: by email																															
Phone #:		City:																															
Project #: 212C-MD-02305		State: Zip:																															
Project Name: VGEH 02-20 West Phase Release		Phone #:																															
Project Location: Lee County, MN		Fax #:																															
Sampler Name: Celina Birkedal		MATRIX		PRESERV.		SAMPLING																											
FOR LAB USE ONLY																																	
Lab I.D.		Sample I.D.																															
H000002		BH-17A (14'-15')		5		5/24/12		TPH		BTEX		Chlorides																					
2		BH-17A (24'-25')		1																													
3		BH-17A (29'-30')																															
4		BH-17A (34'-35')																															
5		BH-17A (39'-40')																															
6		BH-17A (44'-45')																															
7		BH-17A (49'-50')																															
8		BH-18A (14'-15')																															
9		BH-18A (19'-20')																															
10																																	
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Relinquished By: Celina Birkedal		Time: 1413		Received By: S. D. Dikeston																													
Date: 5/24/12		Time: 1413		Received By: S. D. Dikeston																													
Turnaround Time: Standard		Bacteria (only) <input checked="" type="checkbox"/>		Sample Condition <input checked="" type="checkbox"/>		Observed Temp. °C 3.50		Corrected Temp. °C 3.10																									
Thermometer ID #113		Cool Intact <input checked="" type="checkbox"/>		Observed Temp. °C 3.10																													
Correction Factor -0.5°C		No <input checked="" type="checkbox"/>																															



213

5-24-22
SM



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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

3/5

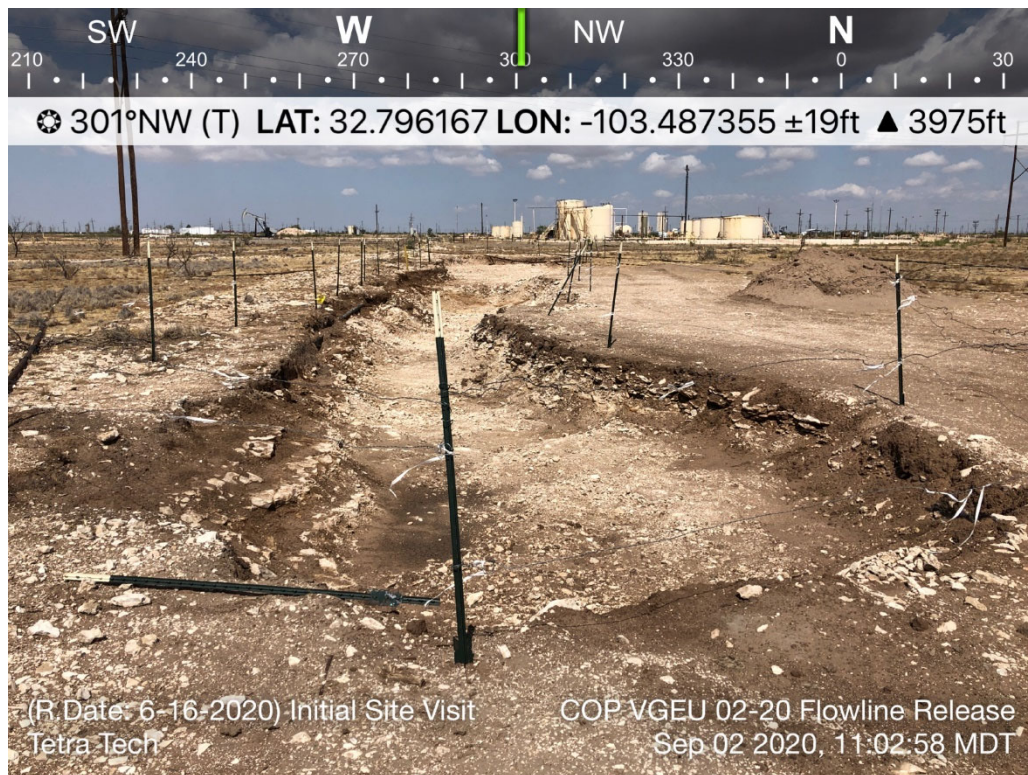
[illegible]

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



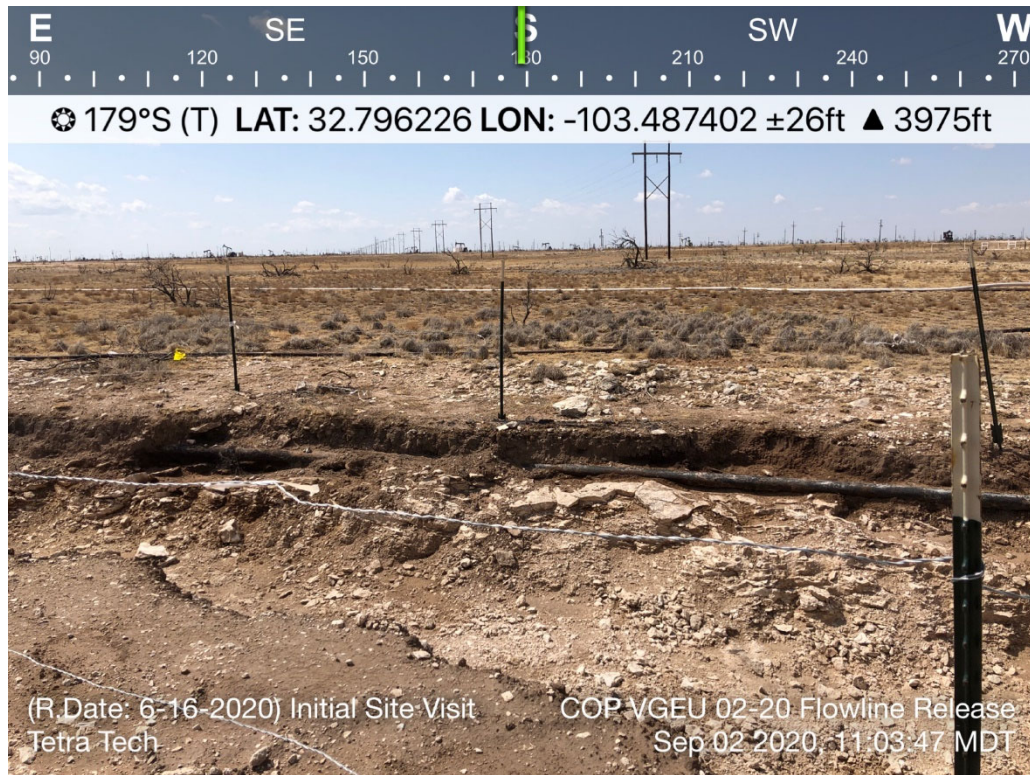
TETRA TECH, INC. PROJECT NO. 212C-MD-02305	DESCRIPTION	View of the western portion of the VGEU 02-20 West flowline release area, looking southeast.	4
	SITE NAME	ConocoPhillips VGEU 02-20 West Release	9/02/2020



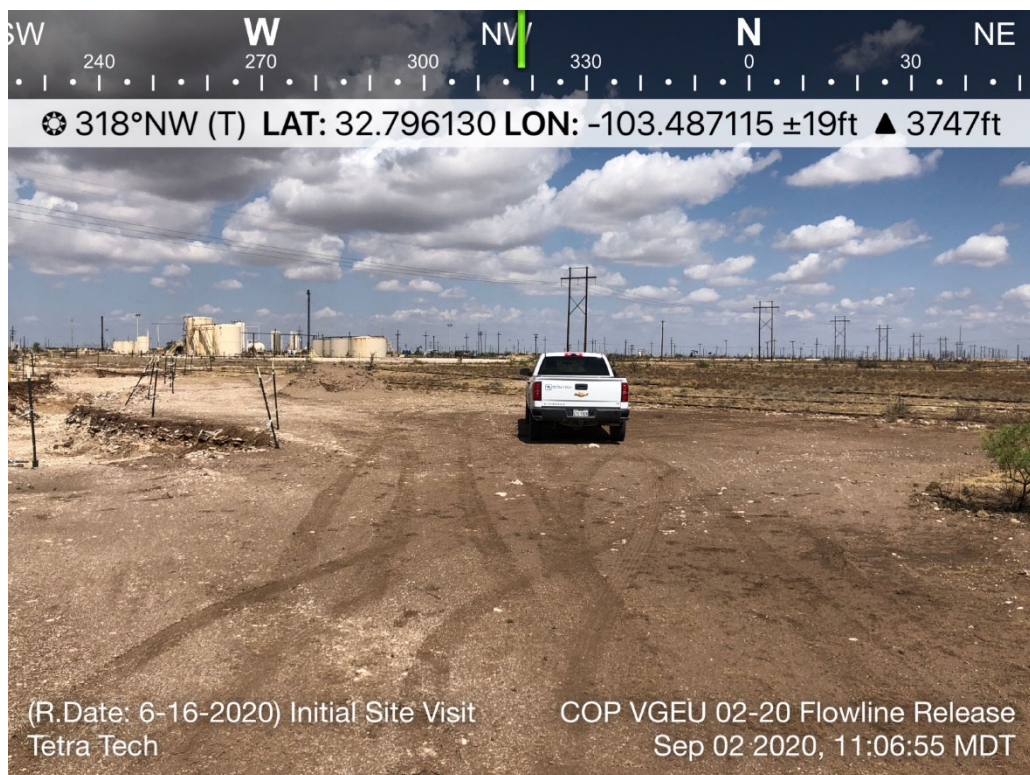
TETRA TECH, INC. PROJECT NO. 212C-MD-02305	DESCRIPTION	View of the western portion of the VGEU 02-20 West flowline release area, looking west.	5
	SITE NAME	ConocoPhillips VGEU 02-20 West Release	9/02/2020



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		TETRA TECH		LOG OF BORING BH-1				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 <u>▽</u> Dry ft Upon Completion of Drilling <u>▽</u> Dry ft Remarks:		
MATERIAL DESCRIPTION												DEPTH (ft)	REMARKS	
-- Previously excavated to approximately 4' bgs.												4	BH-1 (4-5') BH-1 (6-7') BH-1 (9-10') BH-1 (15')	
-ML- SILT: Light grey, very dense, cemented, with occasional chert.												7		
-ML- SILT: Light tan, very dense, cemented, with occasional chert.												13		
-- Becoming brittle at 10' bgs.												15		
-SM- SILTY SAND: Reddish brown, medium dense, dry.												15		

Bottom of borehole at 15.0 feet.

Sampler Types: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> Split Spoon Shelby Bulk Sample Grab Sample </div> <div style="width: 50%;"> Acetate Liner Vane Shear California Test Pit </div> </div>	Operation Types: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> Mud Rotary Continuous Flight Auger Wash Rotary </div> <div style="width: 50%;"> Hand Auger Air Rotary Direct Push Core Barrel </div> </div>	Notes: Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.
---	--	--

Logger: John Thurston

Drilling Equipment: Air Rotary

Driller: Scarborough Drilling

212C-MD-02305		TETRA TECH		LOG OF BORING BH-2				Page 1 of 1	
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 ∇ <u>Dry</u> ft Upon Completion of Drilling ∇ <u>Dry</u> ft Remarks:		
MATERIAL DESCRIPTION												DEPTH (ft)	REMARKS	
-- Previously excavated to approximately 2' bgs.												2	BH-2 (2-3') BH-2 (4-5') BH-2 (6-7') BH-2 (9-10') BH-2 (15')	
												5		
												10		
												15		

Bottom of borehole at 15.0 feet.

Sampler Types: Split Spoon Shelby Bulk Sample Grab Sample	Acetate Liner Vane Shear California Test Pit	Operation Types: Mud Rotary Continuous Flight Auger Wash Rotary	Hand Auger Air Rotary Direct Push Core Barrel	Notes: Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.
Logger: John Thurston		Drilling Equipment: Air Rotary		Driller: Scarborough Drilling

212C-MD-02305		TETRA TECH		LOG OF BORING BH-3				Page 1 of 2	
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			
												While Drilling <u>▽</u> Dry ft Upon Completion of Drilling <u>▽</u> Dry ft Remarks:				
			ExStik	PID				LL	PI			MATERIAL DESCRIPTION				
												-- Previously excavated to approximately 2' bgs.				
5												-ML- SILT: Light tan, very dense, cemented, dry.	2		BH-3 (2-3')	
												-SM- SILTY SAND: Reddish brown, medium dense, dry.	5		BH-3 (4-5')	
			1250												BH-3 (6-7')	
10			790	0.7										10		BH-3 (9-10')
												-SM- SILTY SAND: Dark red-brown, medium dense, dry.				
15			346	0.6												BH-3 (15')
20			388	1.6												BH-3 (20')
25																BH-3 (25')

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 type="checkbox"/> California <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: 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
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212C-MD-02305		TETRA TECH		LOG OF BORING BH-3				Page 2 of 2						
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 While Drilling ∇ <u>Dry</u> ft Upon Completion of Drilling ∇ <u>Dry</u> ft Remarks:		
			ExStik	PID					LL			PI	MATERIAL DESCRIPTION	DEPTH (ft)
30													30	BH-3 (30')
Bottom of borehole at 30.0 feet.														
Sampler Types: Split Spoon Shelby Bulk Sample Grab Sample		Acetate Liner Vane Shear California Test Pit		Operation Types: Mud Rotary Continuous Flight Auger Wash Rotary		Hand Auger Air Rotary Direct Push Core Barrel		Notes: Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.						
Logger: John Thurston				Drilling Equipment: Air Rotary				Driller: Scarborough Drilling						

212C-MD-02305		TETRA TECH		LOG OF BORING BH-4				Page 1 of 1								
Project Name: VGEU 02-20 West Flowline Release																
Borehole Location: GPS: 32.796534, -103.487717					Surface Elevation: 3977 ft											
Borehole Number: BH-4				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 ∇ Dry ft Upon Completion of Drilling ∇ Dry ft Remarks:				
			ExStik	PID				LL	PI			MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS		
5			77	3									-SM-	SILTY SAND: Brown, medium dense, dry.	1	BH-4 (0-1')
			55	9									-ML-	SILT: Light grey, very dense, cemented, dry.	3	BH-4 (2-3')
			378	5											6	BH-4 (4-5')
			79										-ML-	SILT: Light grey/tan, very dense, cemented, dry.	7	BH-4 (6-7')
													-ML-	SILT: Light tan, very dense, cemented, dry.	10	BH-4 (9-10")
10			56										Bottom of borehole at 10.0 feet.			

Sampler Types:	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> Split Spoon Shelby Bulk Sample Grab Sample </div> <div style="width: 50%;"> Acetate Liner Vane Shear California Test Pit </div> </div>	Operation Types:	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> Mud Rotary Continuous Flight Auger Wash Rotary </div> <div style="width: 50%;"> Hand Auger Air Rotary Direct Push Core Barrel </div> </div>	Notes: Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.
Logger: John Thurston		Drilling Equipment: Air Rotary		Driller: Scarborough Drilling

212C-MD-02305	TETRA TECH	LOG OF BORING BH-5	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
												While Drilling	Upon Completion of Drilling		
			ExStik	PID				LL	PI			While Drilling <u>▽</u> Dry ft Upon Completion of Drilling <u>▽</u> 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.	14.9		
												-SM- SILTY SAND: Tan, medium dense, dry.	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 type="checkbox"/> California <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: 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		TETRA TECH		LOG OF BORING BH-6				Page 1 of 1											
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 <u>▽</u> Dry ft Upon Completion of Drilling <u>▽</u> Dry ft Remarks:							
MATERIAL DESCRIPTION												DEPTH (ft)	REMARKS						
<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <p>-SM- SILTY SAND: Brown, medium dense, dry.</p> <p>-GM- CALICHE: Light tan, very dense, cemented, dry.</p> <p>-ML- SILT: Light grey/tan, very dense, cemented, dry.</p> </div> <div style="width: 50%; text-align: center;"> </div> </div>																			
5			88	3															
			195	9															
			126	5															
10																			
Bottom of borehole at 10.0 feet.																			
Sampler Types:		<input checked="" type="checkbox"/> Split Spoon <input type="checkbox"/> Acetate Liner <input type="checkbox"/> Shelby <input type="checkbox"/> Vane Shear <input type="checkbox"/> Bulk Sample <input type="checkbox"/> California <input type="checkbox"/> Grab Sample <input type="checkbox"/> Test Pit				Operation Types:				<input type="checkbox"/> Hand Auger <input type="checkbox"/> Air Rotary <input type="checkbox"/> Direct Push <input type="checkbox"/> Core Barrel <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Continuous Flight Auger <input type="checkbox"/> Wash Rotary				Notes: Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.					
Logger: John Thurston					Drilling Equipment: Air Rotary					Driller: Scarborough Drilling									

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212C-MD-02305		TETRA TECH		LOG OF BORING BH-8				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-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		DEPTH (ft)	REMARKS
												While Drilling	Upon Completion of Drilling		
			ExStik	PID				LL	PI			While Drilling <u>▽</u> Dry ft Upon Completion of Drilling <u>▽</u> Dry ft Remarks:			
												MATERIAL DESCRIPTION			
			84	5								-SM- SILTY SAND: Brown, medium dense, dry, occasional limestone.			BH-8 (0-1')
			42	5								-GM- CALICHE: Light tan, very dense, cemented, dry.	3		BH-8 (2-3')
5			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.			BH-8 (9-10')
15												-ML- SILT: Light tan, very dense, cemented, dry, sandy.	14.9		

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"/> California <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 checked="" type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the remarks column above. Surface elevations are estimated from Google Earth data.
Logger: John Thurston		Drilling Equipment: Air Rotary		Driller: Scarborough Drilling

Revised 5-16-12 (RHM)

212C-MD-02305		TETRA TECH		LOG OF BORING BH-17/BH-17A				Page 1 of 2	
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 <u>▽</u> DRY ft Upon Completion of Drilling <u>▽</u> DRY ft				
												Remarks:				
												DEPTH (ft)	REMARKS			
5												-GM- CALICHE: Tan, dense, with minimal gravel.				BH-17 (6-7') BH-17 (8-9') BH-17 (10-11') BH-17 (12-13') BH-17A (14-15') BH-17A (19-20') BH-17A (24-25') BH-17A (29-30')
												-SW- SAND: Reddish brown, loose, with no gravel.			12	
												-SM- SILTY SAND: Light tan, medium dense, fine to very fine-grained, with some caliche.			15	
30																

Sampler Types: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input checked="" type="checkbox"/> Split Spoon <input type="checkbox"/> Shelby <input type="checkbox"/> Bulk Sample <input type="checkbox"/> Grab Sample </div> <div style="width: 50%;"> <input type="checkbox"/> Acetate Liner <input type="checkbox"/> Vane Shear <input type="checkbox"/> Discrete Sample <input type="checkbox"/> Test Pit </div> </div>	Operation Types: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Continuous Flight Auger <input type="checkbox"/> Wash Rotary </div> <div style="width: 50%;"> <input type="checkbox"/> Hand Auger <input type="checkbox"/> Air Rotary <input type="checkbox"/> Direct Push <input type="checkbox"/> Core Barrel </div> </div>	Notes: Surface elevation is an estimated value from Google Earth data. Laboratory analyzed sample intervals are shown in the "Remarks" column above.
Logger: Joe Tyler/Colton Bickerstaff	Drilling Equipment: Air Rotary	Driller: Scarborough Drilling

Revised 5-16-12 (RHM)

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212C-MD-02305		TETRA TECH		LOG OF BORING BH-18/BH-18A				Page 2 of 2											
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 <input checked="" type="checkbox"/> DRY ft Upon Completion of Drilling <input checked="" type="checkbox"/> DRY ft Remarks:							
MATERIAL DESCRIPTION												DEPTH (ft)	REMARKS						
35																			
40																			
45																			
50																			

Bottom of borehole at 50.0 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.
Logger: Joe Tyler/Colton Bickerstaff		Drilling Equipment: Air Rotary		Driller: Scarborough Drilling

212C-MD-02305		TETRA TECH		LOG OF BORING BH-19				Page 1 of 1						
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 <u>▽</u> DRY ft Upon Completion of Drilling <u>▽</u> DRY ft Remarks:		
												MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
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.		

Sampler Types:	<input checked="" type="checkbox"/> Split Spoon <input type="checkbox"/> Shelby <input type="checkbox"/> Bulk Sample <input checked="" 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"/> Hand Auger <input type="checkbox"/> Air Rotary <input 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.
Logger: Joe Tyler	Drilling Equipment: Air Rotary			Driller: Scarborough Drilling	

212C-MD-02305		TETRA TECH		LOG OF BORING BH-20				Page 1 of 1	
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 <u>▽</u> DRY ft Upon Completion of Drilling <u>▽</u> DRY ft			
												Remarks:			
												DEPTH (ft)	REMARKS		
5	[Wavy Line]	[X]						LL	PI		[Dotted Pattern]	-ML- SILT: Light tan, very dense, with abundant caliche.			BH-20 (0-1')
															BH-20 (2-3')
															BH-20 (4-5')
															BH-20 (6-7')
															BH-20 (9-10')
10	[Wavy Line]	[X]						LL	PI		[Dotted Pattern]	-SM- SILTY SAND: Light tan to light brown, fine-grained, with trace caliche.			BH-20 (14-15')
15	[Wavy Line]	[X]						LL	PI		[Dotted Pattern]				15

Bottom of borehole at 15.0 feet.

Sampler Types: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> Split Spoon Shelby Bulk Sample Grab Sample </div> <div style="width: 50%;"> Acetate Liner Vane Shear Discrete Sample Test Pit </div> </div>	Operation Types: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> Mud Rotary Continuous Flight Auger Wash Rotary </div> <div style="width: 50%;"> Hand Auger Air Rotary Direct Push Core Barrel </div> </div>	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
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APPENDIX F

Regulatory Correspondence

Form C-141

Page 5

State of New Mexico
Oil Conservation Division

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

Llull, Christian

From: Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>
Sent: Monday, April 04, 2022 9:03 AM
To: Llull, 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

<http://www.emnrd.state.nm.us/OCD/>



From: Llull, Christian <Christian.Llull@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

Tetra Tech | *Leading with Science®* | OGA

8911 N. Capital of Texas Highway | Bldg. 2, Suite 2310 | Austin, TX 78759 | tetrattech.com

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Llull, 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; Llull, 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
<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>; Llull, Christian <christian.llull@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 <OCDOnline@state.nm.us>

Sent: Monday, November 15, 2021 12:38 PM

To: Llull, Christian <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

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

APPENDIX G

NMSLO Seed Mixture Details



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

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

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



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%
Totals for Area of Interest		1.7	100.0%

Map Unit Descriptions

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

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

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

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

Custom Soil Resource Report

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

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

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

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

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

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

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

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

Custom Soil Resource Report

Lea County, New Mexico**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
Grasses:			
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
Forbs:			
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
Shrubs:			
Fourwing saltbush	VNS, Southern	2.0	D
Common winterfat	VNS, Southern	1.0	F
Apache plume	VNS, Southern	0.75	F
Total PLS/acre		17.75	

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