



May 16, 2023

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

**Re: Release Characterization and Remediation Closure Report
Maverick Permian, LLC
MCA 2C Injection Header Flange Release and MCA 2C Header East Line Release
Unit Letter J, Section 28, Township 17 South, Range 32 East
Lea County, New Mexico
Incident IDs: nRM1930950727 and nAPP2117456525**

Dear Sir or Madam,

Tetra Tech, Inc. (Tetra Tech) was initially contracted by ConocoPhillips to assess two releases that occurred at the Maljamar Cooperative Agreement (MCA) 2C Production and Water Injection Header, located in Unit Letter J, Section 28, Township 17 South, Range 32 East, in Lea County, New Mexico (Site). The releases occurred at coordinates 32.803723°, -103.769483° and 32.803770°, -103.769476° as shown in **Figures 1** and **2**. Maverick Permian, LLC (Maverick) acquired this site from ConocoPhillips in 2022 and contracted Tetra Tech to continue working on the site remediation. This Closure Report covers both incidents, which were remediated concurrently.

BACKGROUND

MCA 2C Injection Header Flange Release (nRM1930950727)

According to the State of New Mexico C-141 Initial Report provided in **Appendix A**, the **nRM1930950727** release was discovered on October 2, 2019. The release occurred as the result of a leak from a gasket on the header flange valve causing a release of approximately 12.3 barrels (bbls) of crude oil and 110.7 bbls of produced water, of which 1 bbl of crude oil and 7 bbls of produced water were reported recovered during initial response activities. The release notification was received by the New Mexico Oil Conservation District (NMOCD) on November 5, 2019. The NMOCD assigned this release Remediation Permit (RP) number **1RP-5779** and Incident Identification (ID) **nRM1930950727**.

MCA 2C Header East Line Release (nAPP2117456525)

According to the State of New Mexico C-141 Initial Report provided in **Appendix B**, the **nAPP2117456525** release was discovered on June 15, 2021. The release occurred as the result of an injection line developing a leak at the header, below ground level, at the riser releasing approximately 9 barrels (bbls) of produced water, of which 0 bbl of produced water was reported as recovered during the initial response activities. The NMOCD

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received the release notification on June 24, 2021, and subsequently assigned the Site the Incident Identification (ID) **nAPP2117456525**.

SITE CHARACTERIZATION

Tetra Tech performed a site characterization 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). According to the Bureau of Land Management (BLM) the Site is in an area of low karst potential.

The Site is within a New Mexico oil and gas production area. According to the New Mexico Office of the State Engineers (NMOSE) database, there are 2 wells within a ½ mile (800-meter) radius of the Site with an average depth to groundwater at 99 feet (ft) below ground surface (bgs). The site characterization data is included in **Appendix C**.

REGULATORY FRAMEWORK

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 New Mexico Administrative Code (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 (BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

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

Closure Criteria for Soils Impacted by a Release

Constituent	Site RRALs
Chloride	10,000 mg/kg
TPH	2,500 mg/kg
Benzene	10 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:

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Reclamation Requirements

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

MCA 2C INJECTION HEADER FLANGE RELEASE (NRM1930950727) INITIAL RESPONSE AND ASSESSMENT ACTIVITIES

Initial Site Assessment and Analytical Results

An initial site assessment was conducted by ConocoPhillips (COP) in October 2019 when COP personnel collected soil samples from forty-five accessible locations (SP-1 through SP-45) throughout the release extent interior. The borings were installed to a maximum depth of 2 feet below ground surface (bgs). **Figure 3** depicts the release extent and the October 2019 sampling locations.

A total of 90 soil samples were collected from these boring locations and submitted to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for chloride via EPA Method SM4500Cl-B. Laboratory analytical reports and chain-of-custody documentation were previously submitted to the NMOCD under Incident ID **nRM1930950727** in the Release Characterization and Remediation Work Plan dated July 14, 2021.

During the initial assessment event, analytical results associated with the majority of sample locations exceeded the reclamation requirement of 600 mg/kg chloride. However, of the 45 sample locations, the analytical results associated with 9 of the sample locations (SP #5, SP #12, SP #13, SP #25, SP #27, SP #29, SP #31, SP #32 and SP #42) were below 600 mg/kg for chloride in both the surface and 2 feet bgs sample depths. Results from the October 2019 soil screening event are summarized in **Table 1**. Neither horizontal nor vertical delineation of the release was achieved during this assessment.

Initial Response and Remedial Activities

In accordance with 19.15.29.8. B. (4) NMAC “the responsible party may commence remediation immediately after discovery of a release”, COP elected to begin remediation of the southern end of the footprint in early 2020. Portions of the release extent footprint found adjacent to the MCA #480 lease pad were excavated by COP personnel with heavy equipment to approximately 1 foot below ground surface (bgs) to remove the visually impacted soils. **Figure 3** depicts the excavated area.

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Additional Site Assessment

In order to achieve horizontal and vertical delineation of the nRM1930950727 release extent, Tetra Tech personnel conducted soil sampling from March to July 2020 on behalf of COP. Due to the abundance of surface flowlines and subsurface injection lines running across and through the release area footprint, a drilling rig was not able to safely access the release extent footprint and drill for delineation. Therefore, the site assessment activities consisted of digging a series of test pits within the release extent footprint with a mini excavator for vertical delineation, as well as completing borings for horizontal delineation around the release extent perimeter using a hand auger. These assessment activities were conducted in conjunction with additional assessment activities in the area, thus, sample location nomenclature is non-consecutive.

For the additional delineation, a total of four (4) test pits (or trenches) were completed within the interior of the nRM1930950727 release extent. Trenches T-5 & T-6 were completed in the southern portion of the footprint and T-7 & T-8 were completed in the northern portion of the footprint.

A series of auger holes (AH) were completed as shown in **Figure 4A** to complete horizontal delineation. These auger holes were installed along and around the perimeter of the release extent (to the north, east, south, and west, respectively) to a depth of 4 ft bgs to achieve horizontal delineation. The auger holes were completed alongside the trench locations and named accordingly. For instance, AH-5E and AH-5W are locations that provide horizontal delineation on the east and west sides of T-5, respectively. **Figure 4A** depicts the release extent and the May 2020 sampling locations. In some areas, additional step-out locations were required for horizontal delineation. These locations are designated with a numeral following the cardinal direction (*i.e.*, AH-5W-2).

A total of 41 soil samples were collected from these various trench and boring locations and submitted to Pace Analytical National Center for Testing & Innovation (Pace) in Nashville, Tennessee to be analyzed for a combination of chloride via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B.

Summary of Assessment and Characterization

During the additional assessment event in 2020, the analytical results associated with boring locations T-5 through T-8, AH-5S, AH-5W-2, AH-7W, AH-7E, and AH-8W were reported at concentrations greater than RRALs for TPH and/or chloride in the minority of the sample intervals. Analytical results associated with boring locations AH-5S-2, AH-5W, AH-5E, AH-6W, AH-6E, AH-7W-2, AH-7E-2, AH-8W-2, AH-8E, and AH-8N were below the RRALs for TPH, BTEX, and chloride. Soil sampling events are summarized in **Table 2** and **Table 3**. Laboratory analytical reports and chain-of-custody documentation were previously submitted to the NMOCD under Incident ID **nRM1930950727** in the Release Characterization and Remediation Work Plan dated July 14, 2021.

T-7 was installed within the release footprint to specifically clarify the vertical extent of the release in the nRM1930950727 footprint. The analytical results associated with the 17.5' sample at T-7 is the vertical

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delineation point for this release and the reported concentrations are less than the most stringent RRALs for chloride, TPH, and BTEX.

The horizontal extent of the release footprint was defined through several iterations of hand auger borings. The analytical results associated with the AH-5S location exceeded the RRAL for TPH, however, AH-5S-2 was completed as an additional southern delineation point and was below the applicable RRALs. AH-6E, AH-7E-2, and AH-8E bound the release to the east. After several iterative boring locations, the release extent is bound to the west by locations AH-5W, AH-6W, AH-7W-2, and AH-8W-2. AH-8N bounds the release to the north. These borings meet the requirements for horizontal delineation per 19.15.29.11(A)(5)(b) NMAC.

The analytical results associated with samples collected around the release extent in the upper four (4) feet were below the reclamation RRALs for total TPH (GRO + DRO + ORO), BTEX and/or chloride in all samples.

MCA 2C HEADER EAST LINE RELEASE (NAPP2117456525) INITIAL RESPONSE AND ASSESSMENT ACTIVITIES

Initial Response

In accordance with 19.15.29.8.B.(4) NMAC that states “the responsible party may commence remediation immediately after discovery of a release”, COP elected to begin remediation of the impacted area associated with the NAPP2117456525 release in 2021. The on-pad area of the release footprint and off-pad areas in the pasture were hand dug and scraped to approximately 6 inches bgs to remove visually impacted soils. Approximately 38 cubic yards (CY) of impacted material was removed from the footprint and disposed of at the R360 Halfway Facility in Hobbs, New Mexico.

Site Assessment

In order to achieve horizontal and vertical delineation of the NAPP2117456525 release extent, Tetra Tech personnel conducted soil sampling on February 15 and 16, 2022 on behalf of COP. Due to the abundance of surface flowlines and subsurface injection lines running across and through the release area footprint, a drilling rig was not able to safely access the release extent footprint and drill for delineation. Therefore, the site assessment activities consisted of trenching a series of test pits within the release extent footprint with a mini excavator for vertical delineation, as well as completing borings for horizontal delineation around the release extent perimeter using a hand auger. A total of four (4) trenches (T-1 through T-4) were installed within the observed release footprint to a depth of 12 ft bgs in order to achieve vertical delineation of the release extent. A total of nine (9) borings (AH-1 through AH-9) were installed along the perimeter of the observed release footprint to achieve horizontal delineation. The trench and boring locations are shown in **Figure 4B**.

A total of 42 soil samples were collected from the four trench and nine borehole locations, then submitted to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for a combination of chlorides via Standard Method 4500CL-B, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B.

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Summary of Sampling Results

Laboratory analytical results from the February 2022 assessment activities are summarized in **Table 2** and **Table 3**. The analytical results associated with samples collected from interior trench locations T-1 through T-4 reported concentrations greater than the Site reclamation requirements for soil in the upper four feet. Analytical results associated with the remainder of the samples collected from below four feet reported concentrations less than the RRALs for TPH, BTEX, and chloride. Based on the groundwater determination as described in the site characterization (greater than 50 feet below ground surface), the analytical results collected from the trench floors stand as a vertical definition. Analytical results associated with the 0-1 interval from perimeter location AH-8 exceeded the reclamation requirement for TPH. Boring AH-9 was completed to delineate the impact found in AH-8. All other analytical results from the perimeter boring locations were below Site reclamation requirements. The analytical results within the perimeter sample locations determine the lateral extent of this release and are 600 mg/kg chloride or less. Laboratory analytical reports and chain-of-custody documentation were previously submitted to the NMOCD under Incident ID **nAPP2117456525** in the Release Characterization and Remediation Work Plan dated March 2, 2022.

REMEDIATION WORK PLANS AND APPROVALS

Tetra Tech prepared the Release Characterization and Remediation Work Plans (Work Plans) for both releases on behalf of the former operator (ConocoPhillips). Maverick acquired the site from ConocoPhillips in June of 2022.

The Work Plan for incident **nRM1930950727** was submitted to NMOCD on July 14, 2021, and approved on November 8, 2021. A subsequent extension request was granted to June 30, 2022. However, just prior to the extension deadline, Maverick acquired the site. The proposed reclamation and remediation areas and depths from that work Plan are depicted in **Figure 5A**.

The Work Plan for incident **nAPP2117456525** was submitted to NMOCD on March 2, 2022, and approved on March 29, 2022. On behalf of Maverick, Tetra Tech requested an extension on June 21, 2022, but the Request was denied by the NMOCD on June 22, 2022. The proposed reclamation and remediation areas and depths from that work Plan are depicted in **Figure 5B**.

REMEDIATION AND CONFIRMATION SAMPLING

Based on the soil assessment and delineation results for the two releases and the approved remediation work plans, the areas of impact had significant overlap. Therefore, the remediation areas for both incidents were conducted as one field remediation project. Excavation activities commenced on March 7, 2023, and concluded on April 6, 2023.

Maverick's subcontractor, SDR Enterprises, Inc. (SDR) performed the excavation remediation work. SDR used a hydrovac to determine the exact locations of underground pipelines running through the remediation zone.

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They then used heavy equipment to excavate soil to within 2 feet of identified underground flowlines. The remaining soil was excavated by hand and the uncovered pipelines were supported with cribbing until the excavation was backfilled with clean soil.

SDR excavated a total area of 1,246 square yards. The entire area was excavated to a minimum depth of 2 feet below ground surface (bgs). Based on the previously obtained site data, as well as confirmation samples obtained during remediation, approximately 40 percent of the area (497 square yards) was excavated to a total depth of 4 feet bgs. A total of 1,280 CY of soil was excavated and transported to R360 CRI in Hobbs, New Mexico, for disposal. **Figure 6** depicts the areas and depths excavated during the remediation work.

Upon reaching the final lateral and vertical excavation extents of the excavation, Tetra Tech collected 81 confirmation samples, including 24 floor samples and 56 side wall samples from the excavated areas. Additionally, one floor confirmation sample was taken at the T-7 location, to confirm that Reclamation Requirements would not be exceeded from depths of 3 to 4 feet. The confirmation sample locations are shown in **Figures 7A** and **7B**. Collected confirmation samples were placed into laboratory-provided sample containers, and transferred to Cardinal Laboratories in Hobbs, New Mexico under chain-of-custody documentation. The soil samples were analyzed for chloride by Method SM4500 CL-B, TPH by Method 8015M, and BTEX by Method 8021B. Laboratory analytical results for submitted confirmation samples are summarized in **Table 4**.

Floor samples FS-1, FS-11, and FS-14 and sidewall samples NSW-2, ESW-9, ESW-9-A, WSW-12, WSW-13, WSW-13-A, and WSW-14 reported concentrations of Chloride and/or TPH as greater than Reclamation requirements. Additional lateral or vertical excavation was undertaken at these locations prior to reaching the final limits of excavation and final confirmation samples were then taken which reported concentrations as less than Reclamation Requirements as shown in **Table 4**. In the case of floor samples, the excavation was extended from 2 feet bgs to 4 feet bgs, and the final sample is designated with “-A” after the sample number. Likewise, when sidewall samples exceeded reclamation requirements, the excavation was extended laterally until reclamation requirements were achieved, and an additional sample was taken to confirm the result. These final “clean” samples are also designated with “-A” or “-B”. In two locations, ESW-9, and WSW-13, it took two additional attempts at excavation and sampling, hence the final “clean” sample is designated with “-B”. Because all samples obtained at a depth of 4 feet bgs achieved Reclamation Requirements, clean margins were demonstrated to the most stringent remediation requirements.

Between April 3 and April 6, 2023, subsequent to the receipt of final confirmation sampling results, SDR completed backfilling of the excavated areas with 1,200 CY of clean topsoil obtained from the Seth Boyd Pit and trucked to the Site.

Confirmation sampling results are summarized in **Table 4** and laboratory analytical data packages including chain of custody documentation are included in **Appendix D**. Photographic Documentation showing the excavated areas and final grading after backfilling is provided in **Appendix E**.

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CONCLUSIONS

Based on the results of the excavation and confirmation sampling, the impacted soil within the footprint of both releases identified as incidents nRM1930950727 and nAPP2117456525 has been removed and properly disposed of offsite and the excavated area has been backfilled with clean material. Therefore, Site reclamation/remediation requirements have been achieved for both releases. The backfilled areas have been graded and seeded to aid in vegetation growth to complete reclamation. The NMSLO Sandy (S) seed mixture was used as shown in **Appendix F**. If you have any questions concerning the remediation activities for the Site, please call me at (832) 251-2093 or Steve at (713) 806-8871.

Sincerely,



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



Stephen Jester
Program Manager
Tetra Tech, Inc.

Cc:

Mr. Bryce Wagoner – Maverick Natural Resources
Ms. Shelly Tucker - BLM

Site Remediation Closure Report
Maverick Permian, LLC
MCA 2C Injection Header Flange and Header East Line Releases
Incident IDs: nRM1930950727 and nAPP2117456525

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LIST OF ATTACHMENTS

Figures:

- Figure 1 – Overview Map
- Figure 2 – Topographic Map
- Figure 3 – Approximate Release Extent and Initial Response (NRM1930950727)
- Figure 4A – Site Assessment Map (NRM1930950727)
- Figure 4B – Site Assessment Map (NAPP2117456525)
- Figure 5A – Proposed Remediation Extent (NRM1930950727)
- Figure 5B – Proposed Remediation Extent (NAPP2117456525)
- Figure 6 – Excavation Extents (NRM1930950727 & NAPP2117456525)
- Figure 7A – Confirmation Sampling Locations – North (NRM1930950727 & NAPP2117456525)
- Figure 7B – Confirmation Sampling Locations – South (NRM1930950727 & NAPP2117456525)

Tables:

- Table 1 – Summary of Analytical Results – Initial Soil Assessment – NRM1930950727
- Table 2 – Summary of Analytical Results – Additional Shallow Soil Assessment NRM1930950727 & NAPP2117456525
- Table 3 - Summary of Analytical Results – Additional Deep Soil Assessment NRM1930950727 & NAPP2117456525
- Table 4 – Summary of Analytical Results – Soil Confirmation Samples NRM1930950727 & NAPP2117456525

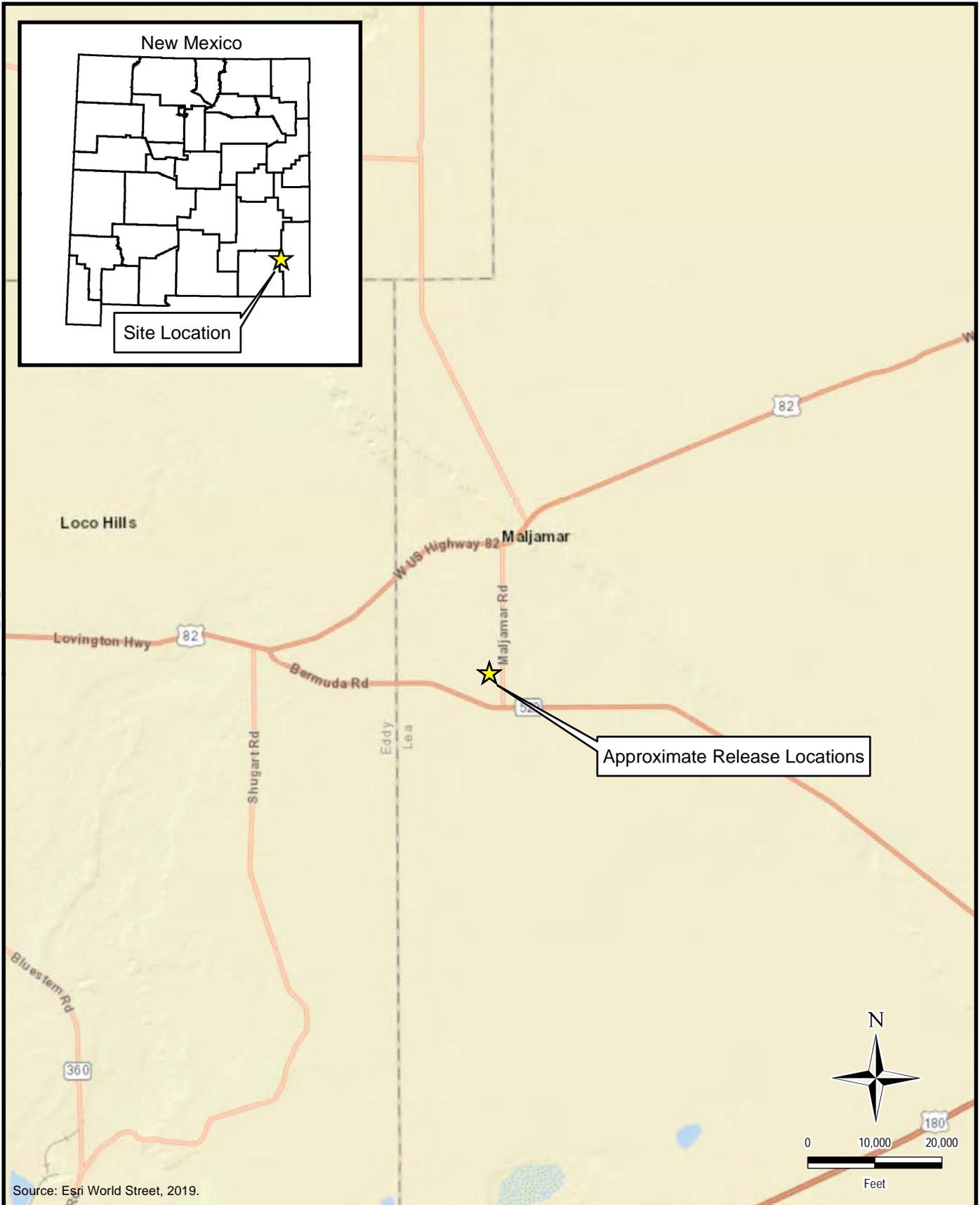
Appendices:

- Appendix A – C-141 Form nRM1930950727
- Appendix B – C-141 Form nAPP2117456525
- Appendix C – Site Characterization Data
- Appendix D – Laboratory Analytical Data
- Appendix E – Photographic Documentation
- Appendix F – NMSLO Seed Mixture Details

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FIGURES



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Source: Esri World Street, 2019.



TETRA TECH

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MAVERICK PERMIAN, LLC

NRM1930950727 & NAPP2117456525
(32.8037°, -103.7694°)
LEA COUNTY, NEW MEXICO

**MCA 2C INJECTION HEADER FLANGE & HEADER EAST LINE RELEASES
OVERVIEW MAP**

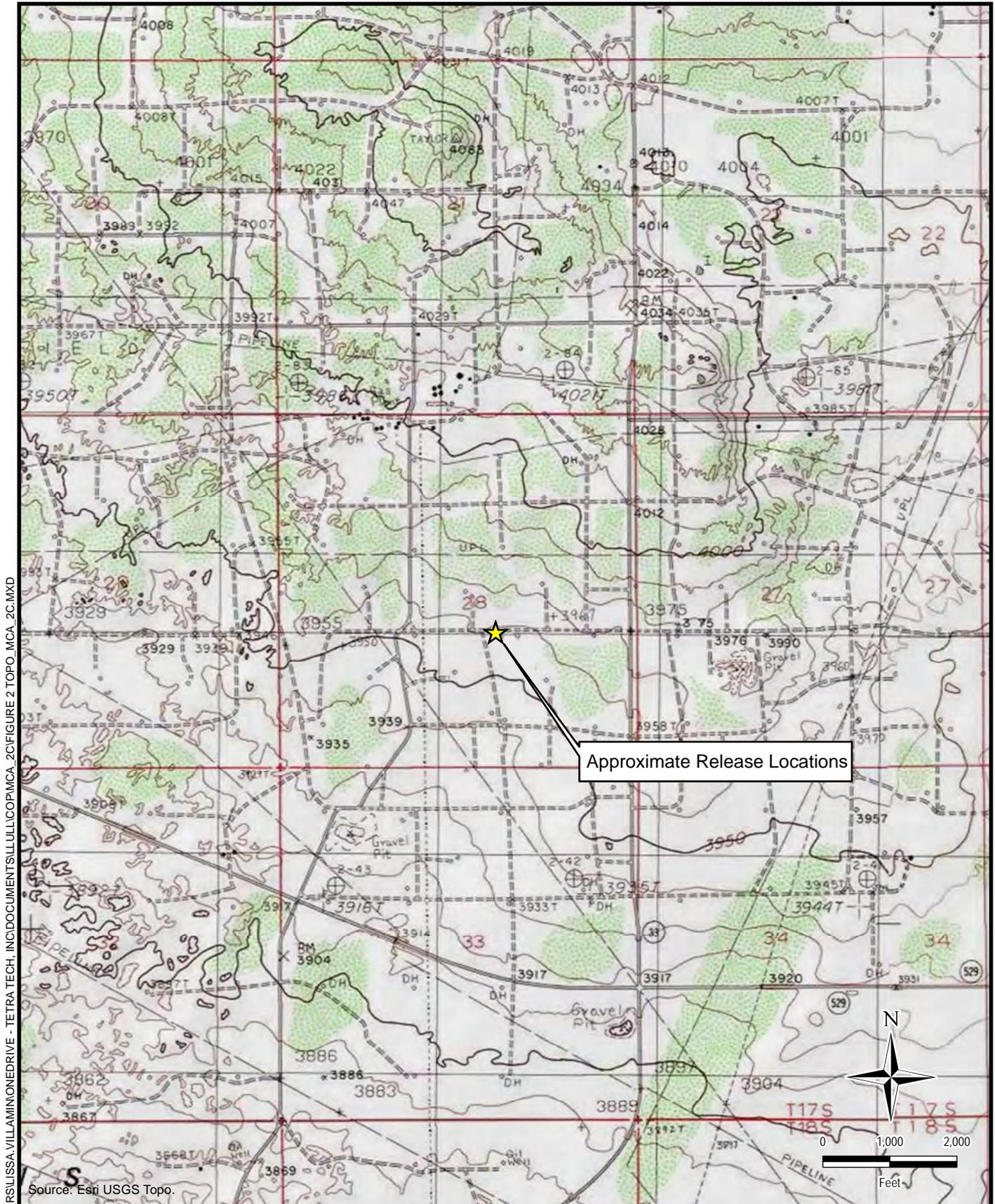
PROJECT NO.: 212C-HN-02235

DATE: APRIL 24, 2022

DESIGNED BY: LMV

Figure No.

1



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Source: Esri USGS Topo.



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 (32.8037° , -103.7694°)
 LEA COUNTY, NEW MEXICO

**MCA 2C INJECTION HEADER FLANGE AND HEADER EAST LINE RELEASES
 TOPOGRAPHIC MAP**

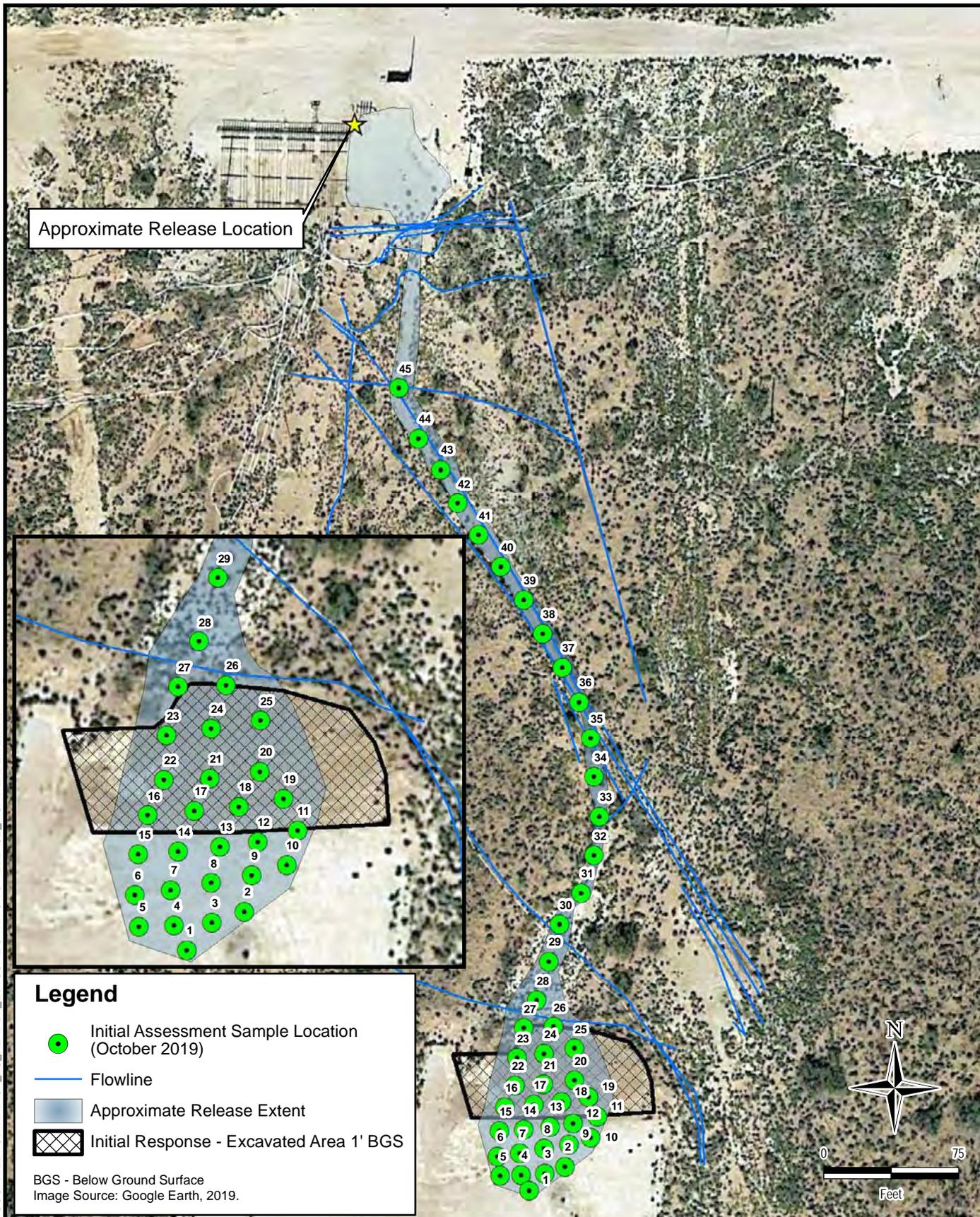
PROJECT NO.: 212C-HN-02235

DATE: APRIL 24, 2022

DESIGNED BY: LMV

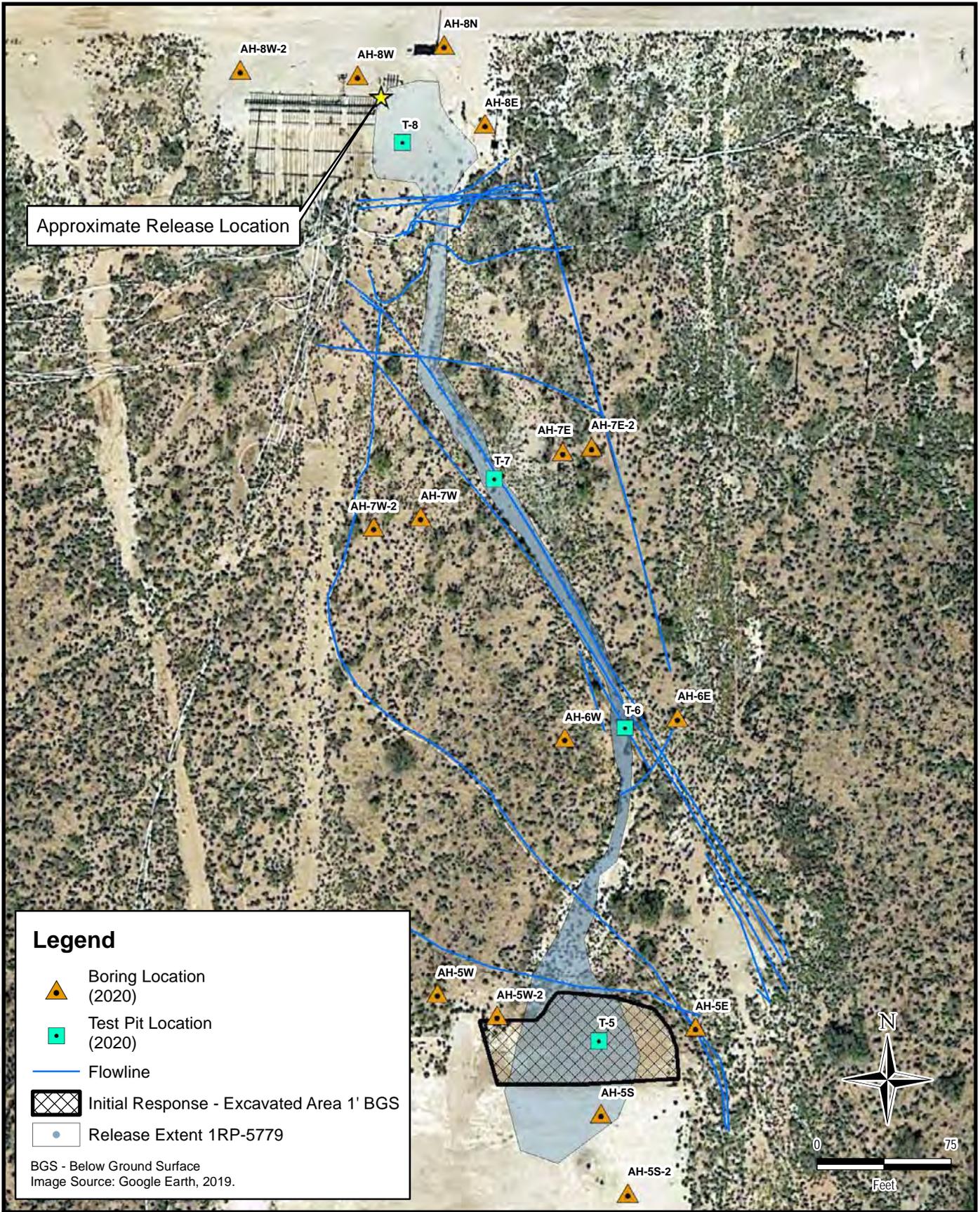
Figure No.

2



DOCUMENT PATH: D:\CONOCOPHILLIPS\MCA_2C_HEADER_E\FIGURE 3-1RP-5779 RELEASE_MCA_HEADER E.MXD

 <p>www.tetrattech.com 901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946</p>	<p>MAVERICK PERMIAN, LLC</p> <p>NRM1930650727 (1RP-5779) (32.803741°, -103.769477°) LEA COUNTY, NEW MEXICO</p>	<p>PROJECT NO.: 212C-HN-02235</p> <p>DATE: JUNE 30, 2021</p> <p>DESIGNED BY: AAM</p>
	<p>MCA 2-C HEADER FLANGE RELEASE APPROXIMATE RELEASE EXTENT AND INITIAL RESPONSE</p>	



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Legend

-  Boring Location (2020)
 -  Test Pit Location (2020)
 -  Flowline
 -  Initial Response - Excavated Area 1' BGS
 -  Release Extent 1RP-5779
- BGS - Below Ground Surface
Image Source: Google Earth, 2019.



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NRM1930650727 (1RP-5779)
(32.803741°, -103.769477°)
LEA COUNTY, NEW MEXICO

**MCA 2-C HEADER FLANGE RELEASE
SITE ASSESSMENT MAP**

PROJECT NO.: 212C-HN-02235

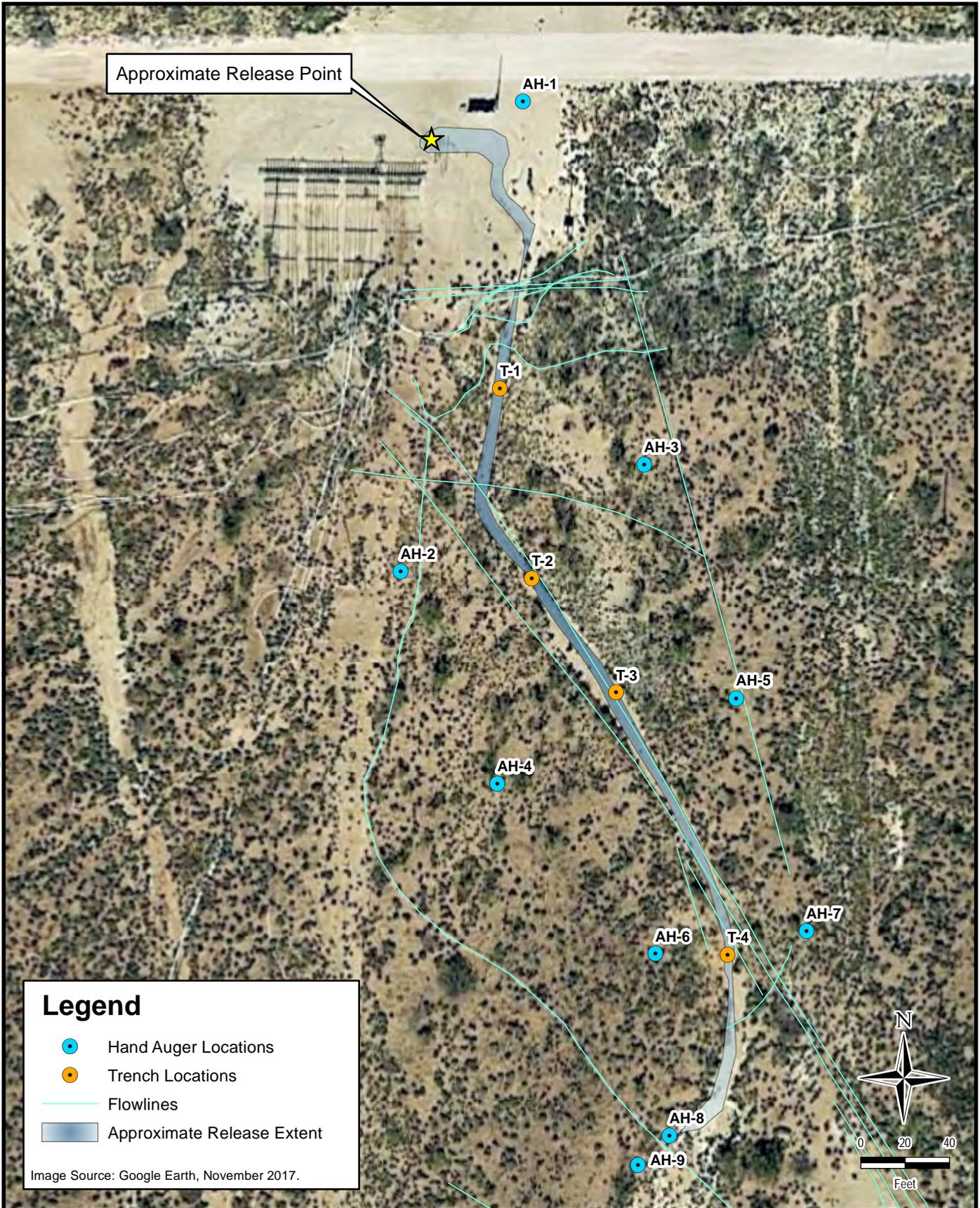
DATE: APRIL 24, 2023

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Figure No.

4A

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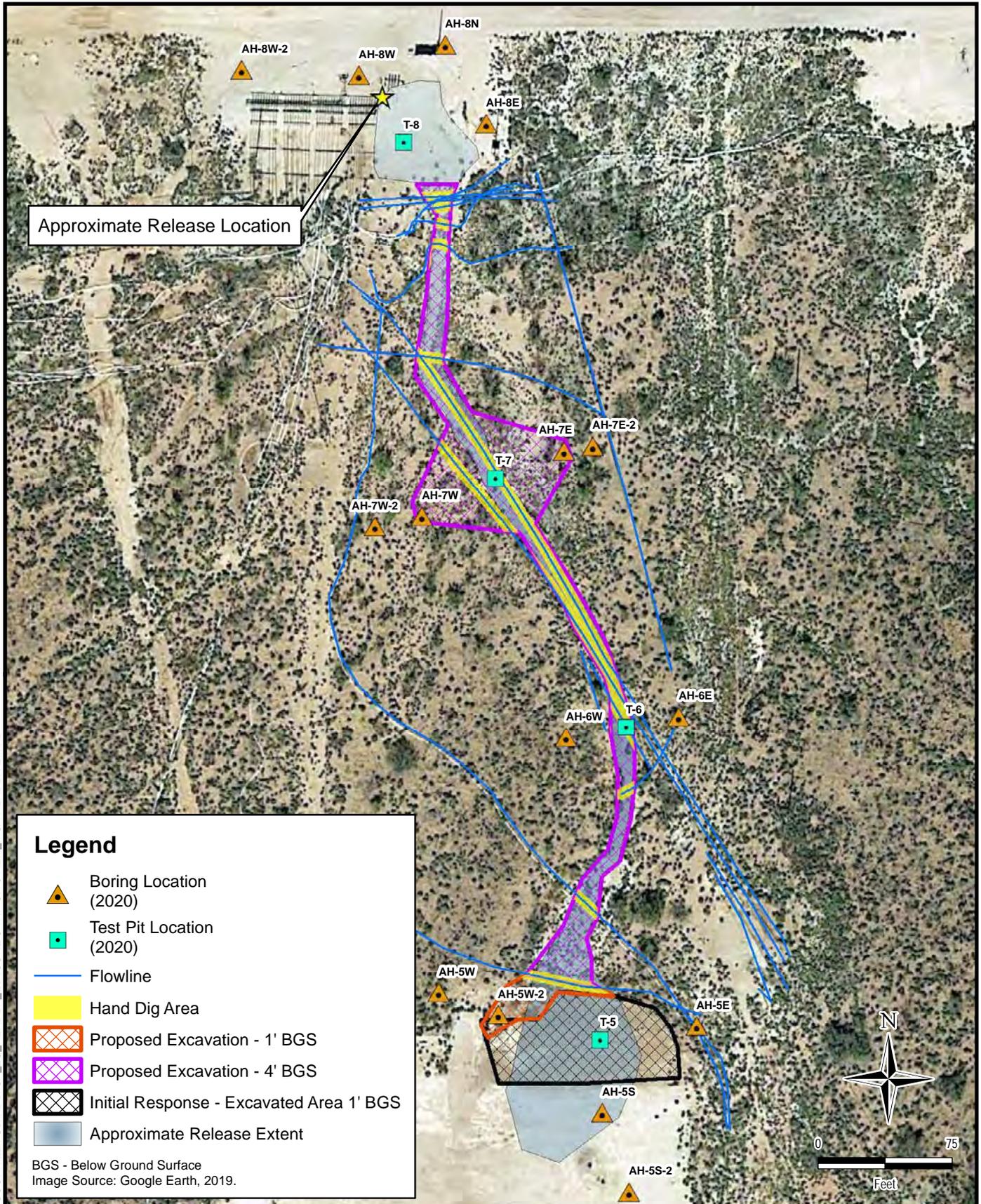


Legend

- Hand Auger Locations
- Trench Locations
- Flowlines
- Approximate Release Extent

Image Source: Google Earth, November 2017.

 www.tetrattech.com 901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946	MAVERICK PERMIAN, LLC NAPP2117456525 (32.803770°, -103.769476°) LEA COUNTY, NEW MEXICO	PROJECT NO.: 212C-HN-02235 DATE: APRIL 24, 2023 DESIGNED BY: LMV
	MCA 2C HEADER EAST LINE RELEASE SITE ASSESSMENT MAP	Figure No. 4B



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXDMCA_2C_HEADER_E\FIGURE 5 1RP-5779 REM_MCA_HEADER E.MXD

Legend

- Boring Location (2020)
- Test Pit Location (2020)
- Flowline
- Hand Dig Area
- Proposed Excavation - 1' BGS
- Proposed Excavation - 4' BGS
- Initial Response - Excavated Area 1' BGS
- Approximate Release Extent

BGS - Below Ground Surface
Image Source: Google Earth, 2019.



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MAVERICK PERMIAN, LLC

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LEA COUNTY, NEW MEXICO

**MCA 2-C HEADER FLANGE RELEASE
PROPOSED REMEDIATION EXTENTS**

PROJECT NO.: 212C-HN-02235

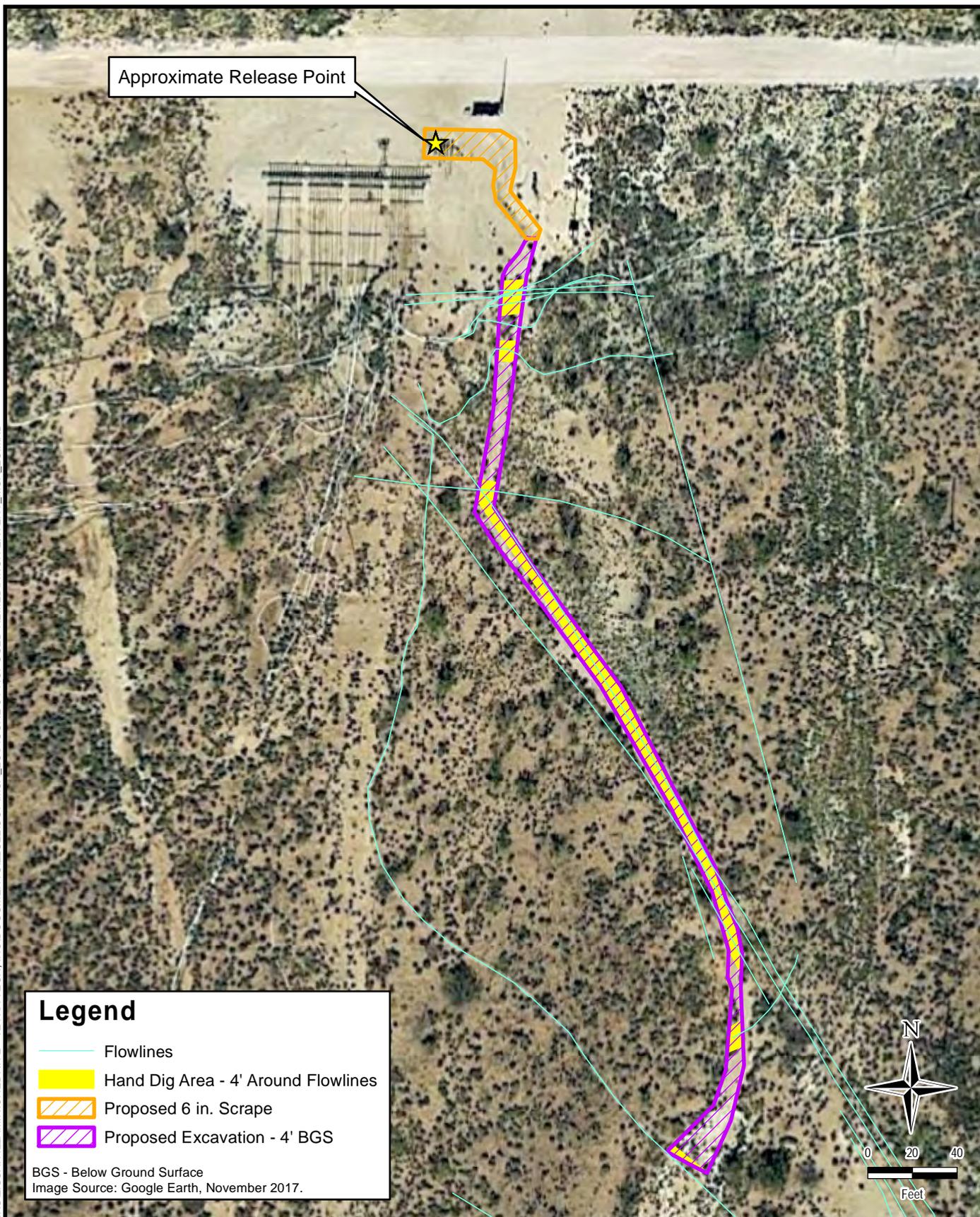
DATE: APRIL 24, 2023

DESIGNED BY: AAM

Figure No.

5A

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Legend

- Flowlines
- Hand Dig Area - 4' Around Flowlines
- Proposed 6 in. Scrape
- Proposed Excavation - 4' BGS

BGS - Below Ground Surface
Image Source: Google Earth, November 2017.

Tt TETRA TECH

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(32.803770°, -103.769476°)
LEA COUNTY, NEW MEXICO

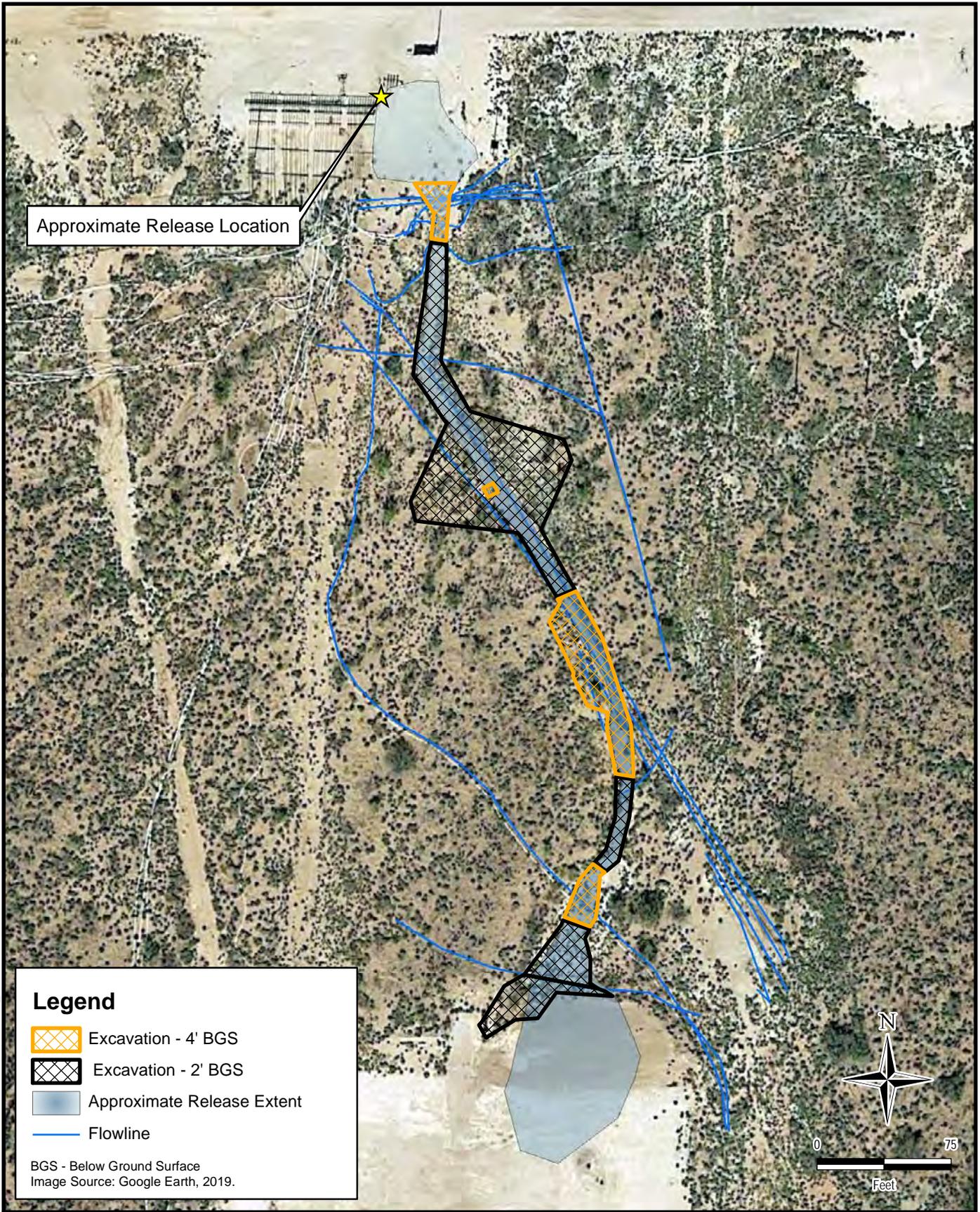
**MCA 2C HEADER EAST LINE RELEASE
PROPOSED REMEDIATION EXTENT**

PROJECT NO.: 212C-HN-02235

DATE: APRIL 24, 2023

DESIGNED BY: LMV

Figure No.
5B



Legend

-  Excavation - 4' BGS
-  Excavation - 2' BGS
-  Approximate Release Extent
-  Flowline

BGS - Below Ground Surface
Image Source: Google Earth, 2019.

DOCUMENT PATH: D:\MAVERICK\MXD\FIGURE 6 - 1RP-5779 ACSP - MCA HEADER E.MXD



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

MAVERICK PERMIAN, LLC

NRM1930950727 & NAPP2117456525
(32.8037°, -103.7694°)
LEA COUNTY, NEW MEXICO

**MCA 2C INJECTION HEADER FLANGE & HEADER EAST LINE RELEASES
EXCAVATION EXTENTS**

PROJECT NO.: 212C-HN-02235

DATE: MAY 11, 2023

DESIGNED BY: AAM

Figure No.

6



DOCUMENT PATH: D:\MAVERICK\WDMCA_2C\FIGURE 7A CSP 1RP-5779 ACSP_MCA HEADER E.MXD

Legend

- Floor Confirmation Sample Location
- Sidewall Confirmation Sample Location
- Excavation - 4' BGS (2,651 cu ft)
- Excavation - 2' BGS (8,453 cu ft)
- Approximate Release Extent
- Flowline

BGS - Below Ground Surface
Image Source: Google Earth, 2019.



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(32.8037°, -103.7694°)
LEA COUNTY, NEW MEXICO

**MCA 2C INJECTION HEADER FLANGE & HEADER EAST LINE RELEASES
CONFIRMATION SAMPLING LOCATIONS**

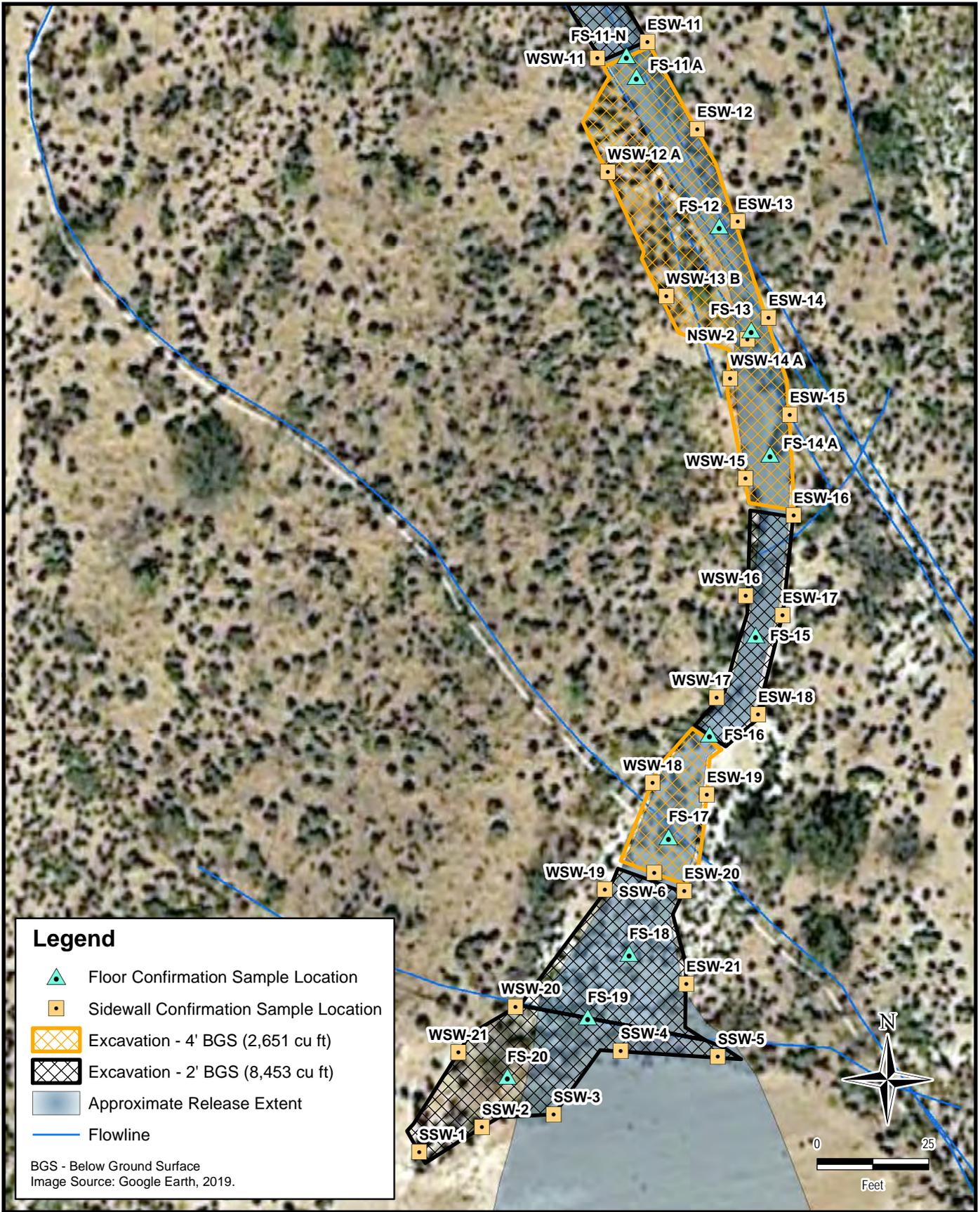
PROJECT NO.: 212C-HN-02235

DATE: MAY 16, 2023

DESIGNED BY: AAM

Figure No.

7A



DOCUMENT PATH: D:\MAVERICK\WDMCA_2C\FIGURE 7B CSP 1RP-5779 ACSP_MCA HEADER E.MXD

<p>TETRA TECH</p> <p>www.tetrattech.com</p> <p>901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946</p>	<p>MAVERICK PERMIAN, LLC</p> <p>NRM1930950727 & NAPP2117456525 (32.8037°, -103.7694°) LEA COUNTY, NEW MEXICO</p>	<p>PROJECT NO.: 212C-HN-02235</p> <p>DATE: MAY 16, 2023</p> <p>DESIGNED BY: AAM</p>
	<p>MCA 2C INJECTION HEADER FLANGE & HEADER EAST LINE RELEASES CONFIRMATION SAMPLING LOCATIONS</p>	
		<p>Figure No. 7B</p>

Site Remediation Closure Report
Maverick Permian, LLC
MCA 2C Injection Header Flange and Header East Line Releases
Incident IDs: nRM1930950727 and nAPP2117456525

May 16, 2023

TABLES

TABLE 1
 SUMMARY OF ASSESSMENT ANALYTICAL RESULTS
 INITIAL SOIL ASSESSMENT - nRM193095727
 MAVERICK NATURAL RESOURCES
 MCA 2C INJECTION HEADER FLANGE RELEASE
 LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth Interval	Chloride ^{1,2}	
		feet bgs	mg/kg	Q
Surface Soil Reclamation Requirements³			600	
SP #1	10/23/2019	Surface	16,000	
		2	32	
SP #2	10/23/2019	Surface	864	
		2	368	
SP #3	10/23/2019	Surface	27,600	
		2	64	
SP #4	10/23/2019	Surface	64	
		2	2,720	
SP #5	10/23/2019	Surface	48	
		2	224	
SP #6	10/23/2019	Surface	32	
		2	2,720	
SP #7	10/23/2019	Surface	48	
		2	8,640	
SP #8	10/23/2019	Surface	544	
		2	800	
SP #9	10/23/2019	Surface	12,800	
		2	32	
SP #10	10/23/2019	Surface	7,040	
		2	32	
SP #11	10/23/2019	Surface	1,890	
		2	16	
SP #12	10/23/2019	Surface	16	
		2	32	
SP #13	10/23/2019	Surface	80	
		2	16	
SP #14	10/23/2019	Surface	5,520	
		2	16	
SP #15	10/23/2019	Surface	34,000	QM-07
		2	16	

Sample ID	Sample Date	Sample Depth Interval	Chloride ^{1,2}	
		feet bgs	mg/kg	Q
Surface Soil Reclamation Requirements³			600	
SP #16	10/23/2019	Surface	18,400	
		2	656	
SP #17	10/23/2019	Surface	9,730	
		2	112	
SP #18	10/23/2019	Surface	14,600	
		2	80	
SP #19	10/23/2019	Surface	8,130	
		2	96	
SP #20	10/23/2019	Surface	336	
		2	4,560	
SP #21	10/23/2019	Surface	896	
		2	64	
SP #22	10/23/2019	Surface	64	
		2	1,730	
SP #23	10/23/2019	Surface	3,680	
		2	320	
SP #24	10/23/2019	Surface	3,080	
		2	336	
SP #25	10/23/2019	Surface	64	
		2	448	
SP #26	10/23/2019	Surface	640	
		2	1,740	
SP #27	10/23/2019	Surface	< 16.0	
		2	< 16.0	
SP #28	10/23/2019	Surface	4,880	
		2	1,550	
SP #29	10/23/2019	Surface	16	
		2	16	
SP #30	10/23/2019	Surface	224	
		2	2,520	

Sample ID	Sample Date	Sample Depth Interval	Chloride ^{1,2}	
		feet bgs	mg/kg	Q
Surface Soil Reclamation Requirements³			600	
SP #31	10/23/2019	Surface	32	
		2	208	
SP #32	10/23/2019	Surface	16	
		2	224	
SP #33	10/23/2019	Surface	3,560	
		2	3,040	
SP #34	10/23/2019	Surface	2,440	
		2	1,090	
SP #35	10/23/2019	Surface	256	
		2	1,760	
SP #36	10/23/2019	Surface	1,100	
		2	2,360	
SP #37	10/23/2019	Surface	8,260	
		2	816	
SP #38	10/23/2019	Surface	96	
		2	768	
SP #39	10/23/2019	Surface	144	
		2	1,410	
SP #40	10/23/2019	Surface	256	
		2	1,170	
SP #41	10/23/2019	Surface	160	
		2	608	
SP #42	10/23/2019	Surface	128	
		2	448	
SP #43	10/23/2019	Surface	160	
		2	880	
SP #44	10/23/2019	Surface	1,630	
		2	880	
SP #45	10/23/2019	Surface	1,780	QM-07
		2	752	

NOTES:

- bgs Below ground surface
- 1 EPA Method 300.0
- 2 Method SM4500Cl-B
- 3 19.15.29 NMAC Surface Soil Reclamation Requirements

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
SHALLOW SOIL ASSESSMENT - NRM1930950727 & NAPP2117456525
MAVERICK NATURAL RESOURCES
MCA 2C INJECTION HEADER FLANGE AND HEADER EAST LINE RELEASES
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride ¹		BTEX ²								TPH ³							
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX	GRO		DRO		EXT DRO	Total TPH	
			ppm	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q
Shallow Soil Reclamation Requirements			-	-	600		10		-		-		-		50	-		-		-		100
MCA 2C Injection Header Flange Release (NRM1930950727)																						
AH-5E	3/5/2020	0-1	50	0.0	2.5	J	< 0.00104		< 0.00521		< 0.00261		< 0.00678		-	0.0312	B J	9		33.3		42.3
	3/5/2020	3-4	34	0.0	209		< 0.00106		< 0.00529		< 0.00264		< 0.00687		-	< 0.106		3.18	J	8.05		11.2
AH-5S	3/5/2020	0-1	220	0.0	38.2		< 0.00103		< 0.00515		< 0.00258		< 0.00670		-	0.0321	B J	133		391		524
	3/5/2020	3-4	270	-	84.6		< 0.00110		< 0.00552		< 0.00276		< 0.00717		-	< 0.110		309		793		1102
AH-5S-2	7/8/2020	0-1	147	0.0	11.8	J	< 0.00141		< 0.00707		< 0.00354		< 0.00920		-	0.0282	J	< 4.83		4.44	B J	4.47
	7/8/2020	2-3	168	0.0	< 21.4		< 0.00107		< 0.00534		< 0.00267		< 0.00695		-	< 0.107		4.78		13.8		18.6
AH-5W	3/5/2020	0-1	36	0.0	19.2		< 0.00102		< 0.00511		< 0.00256		< 0.00665		-	0.0273	B J	23.8		63.4		87.2
	3/5/2020	3-4	1290	-	33.7		< 0.00104		< 0.00520		< 0.00260		< 0.00676		-	0.0362	B J	18.5		6.18		24.7
AH-5W-2	7/23/2020	0-1	75.5	2.7	11.4	J	< 0.00105		< 0.00526		< 0.00263		< 0.00683		-	0.0239	J	21.45		95.5		117
	7/23/2020	2-3	124	2.1	33.3		< 0.00102		< 0.00512		< 0.00256		< 0.00665		-	< 0.102		14.2		46.7		60.9
AH-6E	3/5/2020	0-1	35	0.0	1.38	J	< 0.00104		< 0.00522		< 0.00261		< 0.00679		-	0.0323	B J	2.54	J	9.51		12.1
	3/5/2020	3-4	109	-	3.41	J	< 0.00105		< 0.00523		< 0.00262		< 0.00680		-	0.0247	B J	< 4.19		3.52	J	3.54
AH-6W	3/5/2020	0-1	20	0.0	1.27	J	< 0.00107		< 0.00535		< 0.00268		< 0.00696		-	0.0324	B J	< 4.28		3	J	3.03
	3/5/2020	3-4	130	-	24		< 0.00108		< 0.00542		< 0.00271		< 0.00705		-	0.0788	B J	< 4.34		4.33	J	4.41
AH-7E	7/8/2020	0-1	36	0.0	3.69	J	< 0.00106		< 0.00528		< 0.00264		< 0.00686		-	0.0548	B J	9.98		28		38
	7/8/2020	3-4	1250	0.0	1780		< 0.00115		< 0.00574		< 0.00287		< 0.00746		-	0.0422	B J	7.51		16.9		24.5
AH-7E-2	7/8/2020	0-1	74	0.0	< 24.6		< 0.00146		< 0.00730		< 0.00365		< 0.00949		-	< 0.123		9.48		49.5		59
	7/8/2020	2-3	101	0.0	< 20.2		< 0.00101		< 0.00504		< 0.00252		< 0.00655		-	< 0.101		1.86	J	9.44		11.3
AH-7W	3/5/2020	0-1	50	0.0	3.62	J	< 0.00106		< 0.00529		< 0.00264		< 0.00688		-	0.0546	B J	16.4		53.2		69.7
	3/5/2020	3-4	365	0.0	1950		< 0.00114		< 0.00571		< 0.00286		< 0.00743		-	0.0493	B J	8.71		18.5		27.3
AH-7W-2	7/8/2020	0-1	97	0.0	< 20.1		< 0.00100		< 0.00502		< 0.00251		< 0.00652		-	0.0251	J	3.57	J	23.9		27.5
	7/8/2020	2-3	91	0.0	< 23.3		< 0.00133		< 0.00667		< 0.00333		< 0.00866		-	0.0304	J	2.8	J	14.7		17.5
AH-8N	3/6/2020	0-1	68	0.1	40.3		< 0.00103		< 0.00514		< 0.00257		< 0.00668		-	0.0408	B J	2.19	J	7.68		9.91
	3/6/2020	3-4	450	0.0	174		< 0.00105		< 0.00525		< 0.00262		< 0.00682		-	0.0377	B J	< 4.20		3.3	J	3.34
AH-8E	3/6/2020	0-1	780	0.0	381		< 0.00106		< 0.00528		< 0.00264		< 0.00687		-	0.044	B J	10.3		30.8		41.1
	3/6/2020	3-4	350	0.0	71		< 0.00112		< 0.00559		< 0.00280		< 0.00727		-	0.0439	B J	10.6		31.3		41.9
AH-8W	3/6/2020	0-1	400	1.4	158		< 0.00112		< 0.00561		< 0.00280		< 0.00729		-	0.0381	B J	726		1260		1986
	3/6/2020	3-4	324	0.0	40.3		< 0.00112		< 0.00559		< 0.00280		< 0.00727		-	0.0422	B J	2.09	J	2.72	J	4.85
AH-8W-2	7/8/2020	0-1	222	0.0	16.6	J	< 0.00101		< 0.00504		< 0.00252		< 0.00655		-	< 0.101		7.36		40.1		47.5
	7/8/2020	2-3	389	0.0	53.9		0.000717	J	0.00141	J	< 0.00256		0.00102	J	0.00315	< 0.102		7.58		37.6		45.2
T-5	3/5/2020	1 - 2	200	0.0	38		< 0.00105		< 0.00526		< 0.00263		< 0.00684		-	0.035	B J	< 4.21		4.04	J	4.08
	3/5/2020	3 - 4	539	0.1	628		< 0.00114		< 0.00571		< 0.00285		< 0.00742		-	0.0649	B J	< 4.39		3.13	J	3.19
T-6	3/5/2020	1-2	-	2.3	569		< 0.00111		< 0.00553		< 0.00277		< 0.00719		-	0.0265	B J	1250		969		2219
	3/5/2020	3-4	1250	0.6	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T-7	3/5/2020	1-2	-	2.9	1110		< 0.00110		< 0.00550		< 0.00275		< 0.00715		-	0.0522	B J	2.45	J	8.45		11
	3/5/2020	3-4	1500	0.2	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/28/2023	3-4	-	-	532	-	< 0.050		< 0.050		< 0.050		< 0.050		-	< 10		< 10		< 10		-
T-8	3/6/2020	1-2	1900	0.1	1080		< 0.00115		< 0.00574		< 0.00287		< 0.00746		-	0.0556	B J	324		633		957
	3/6/2020	3-4	-	0.0	1580		< 0.00111		< 0.00557		< 0.00278		< 0.00724		-	0.0442	B J	416		725		1141

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
SHALLOW SOIL ASSESSMENT - NRM1930950727 & NAPP2117456525
MAVERICK NATURAL RESOURCES
MCA 2C INJECTION HEADER FLANGE AND HEADER EAST LINE RELEASES
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth feet bgs	Field Screening Results		Chloride ¹		BTEX ²								TPH ³					
			Chloride	PID	Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX	GRO		DRO		EXT DRO	Total TPH (GRO+DRO+EXT DRO)	
			ppm	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q
Shallow Soil Reclamation Requirements			-	-	600		10		-		-		-		50	-	-	-	100	
MCA 2C Header East Line Release (nAPP2117456525)																				
AH-1	2/15/2022	0-1	107	-	80		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
	2/15/2022	2-3	116	-	112		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0	14.3	14.3
AH-2	2/15/2022	0-1	155	-	80		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
	2/15/2022	2-3	514	-	256		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
AH-3	2/15/2022	0-1	70.5	-	32		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		14.6		14.6
	2/15/2022	2-3	499	-	224		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
AH-4	2/15/2022	0-1	41.5	-	48		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
	2/15/2022	2-3	562	-	272		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
AH-5	2/15/2022	0-1	59.4	-	32		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
	2/15/2022	2-3	53.6	-	16		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
AH-6	2/15/2022	0-1	66.7	-	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
	2/15/2022	2-3	30	-	32		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
AH-7	2/15/2022	0-1	42.5	-	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
	2/15/2022	2-3	232	-	128		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
AH-8	2/15/2022	0-1	134	-	80		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		188	101	289
	2/15/2022	2-3	581	-	304		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
AH-9	2/21/2022	0-1	-	-	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
	2/16/2022	0-1	2620	-	2200		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
TD-1	2/16/2022	2-3	2240	-	2200		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
	2/16/2022	0-1	1180	-	994		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
TD-2	2/16/2022	2-3	2500	-	2440		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
	2/16/2022	0-1	-	-	480		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		37.9		37.9
TD-3	2/16/2022	2-3	-	-	1090		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
	2/16/2022	0-1	-	-	1840		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
TD-4	2/16/2022	0-1	-	-	1840		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-
	2/16/2022	2-3	-	-	1580		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-

NOTES:

- 1: Method SM4500Cl-B
- 2: Method 8021B
- 3: Method 8015M
- TPH: Total Petroleum Hydrocarbons
- GRO: Gasoline range organics
- DRO: Diesel range organics
- bgs: Below ground surface

QUALIFIERS:

- B The same analyte was found in the associated blank
- J The identification of the analyte is acceptable; the reported value is an estimate
- J3 The associated batch QC was outside of the established quality control range for precision
- T8 Sample was received past or too close to the method holding time expiration
- V3 The internal standard exhibited poor recovery due to matrix interference; Results are biased high.

TABLE 3
SUMMARY OF ANALYTICAL RESULTS
DEEP SOIL ASSESSMENT - NRM1930950727 & NAPP2117456525
MAVERICK NATURAL RESOURCES
MCA 2C INJECTION HEADER FLANGE AND HEADER EAST LINE RELEASES
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth feet bgs	Field Screening Results		Chloride ¹		BTEX ²								TPH ³							
			Chloride	PID	Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX	GRO		DRO		EXT DRO	Total TPH (GRO+DRO+EXT DRO)			
			ppm	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q
Recommended Remediation Action Levels			-	-	10000		10							50							2500	
MCA 2C Injection Header Flange Release (nRM1930950727)																						
T-5	3/5/2020	5-6	2500	0.0	2630		< 0.00110		< 0.00551		< 0.00276		< 0.00717		-	0.067	J	< 1.78		7.83		7.9
	3/5/2020	7-8	250	0.0	233		< 0.00110		< 0.00552		< 0.00276		< 0.00717		-	0.0347	B J	< 4.42		1.56	J	1.59
T-6	3/5/2020	7-8	976	0.1	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/5/2020	9-10	823	-	722		< 0.00107		< 0.00535		< 0.00268		< 0.00696		-	0.0251	J	215		156		371
T-7	3/5/2020	5-6	-	0.0	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/5/2020	7-8	1300	-	NS		NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	-	-
	3/5/2020	9-10	1320	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T-8	3/5/2020	17.5	-	-	446		< 0.00105		< 0.00523		< 0.00262		< 0.00680		-	0.0392	B J	1.76	J	1.61	J	3.41
	3/6/2020	7-8	1300	-	1360		< 0.00108		< 0.00538		< 0.00269		< 0.00699		-	0.0372	B J	6.49		7.75		14.3
	3/6/2020	9-10	1250	0.0	1320		< 0.00109		< 0.00545		< 0.00273		< 0.00709		-	0.0379	B J	24.2		44.4		68.6
MCA 2C Header East Line Release (nAPP2117456525)																						
TD-1	2/16/2022	4-5	5740	-	7280		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
	2/16/2022	6-7	2140	-	2080		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
	2/16/2022	9-10	1860	-	1120		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
	2/16/2022	11-12	952	-	992		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
TD-2	2/16/2022	4-5	3900	-	3840		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
	2/16/2022	6-7	2590	-	2640		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
	2/16/2022	9-10	1150	-	101		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
TD-3	2/16/2022	11-12	833	-	832		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
	2/16/2022	4-5	-	-	1300		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		96.9		47		144
	2/16/2022	6-7	-	-	1470		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		114		11.1		125
	2/16/2022	9-10	-	-	992		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		117		23.8		141
TD-4	2/16/2022	11-12	-	-	1200		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		27.8		< 10.0		27.8
	2/16/2022	4-5	-	-	3520	QM-07	< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
	2/16/2022	6-7	-	-	1200		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
	2/16/2022	9-10	-	-	1220		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
2/16/2022	11-12	-	-	1460		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-	

NOTES:

- 1: Method SM4500Cl-B
- 2: Method 8021B
- 3: Method 8015M
- TPH: Total Petroleum Hydrocarbons
- GRO: Gasoline range organics
- DRO: Diesel range organics
- bgs: Below ground surface

QUALIFIERS:

- B The same analyte was found in the associated blank
- J The identification of the analyte is acceptable; the reported value is an estimate
- J3 The associated batch QC was outside of the established quality control range for precision
- T8 Sample was received past or too close to the method holding time expiration
- V3 The internal standard exhibited poor recovery due to matrix interference; Results are biased high.

TABLE 4
SUMMARY OF ANALYTICAL RESULTS
CONFIRMATION SAMPLING - NRM1930950727 & NAPP2117456525
MAVERICK NATURAL RESOURCES
MCA 2C INJECTION HEADER FLANGE AND HEADER EAST LINE RELEASES
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth feet bgs	Field Screening Results		Chloride ¹		BTEX ²								TPH ³								
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO C ₆ - C ₁₀		DRO > C ₁₀ - C ₂₈		EXT DRO > C ₂₈ - C ₃₆		Total TPH (GRO+DRO+EXT DRO)
			ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
Reclamation Requirements (NMAC 19.15.29.13)					600		10						50								100		
FS-1	3/16/2023	2			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		97.2		119		216.2
FS-1-A	3/24/2023	4			64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		56.4		65.6		122
FS-2	3/27/2023	4			384.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-3	3/17/2023	2			96.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-4	3/17/2023	2			96.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-5	3/20/2023	2			96.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-6	3/21/2023	2			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-7	3/21/2023	2			112.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-8	3/21/2023	2			128.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-9	3/21/2023	2			80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-10	3/22/2023	2			112.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		39.7		27.5		67.2
FS-11	3/24/2023	2			208.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		65.9		70		135.9
FS-11-A	3/28/2023	4			128.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-12	3/24/2023	2			400.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-13	3/24/2023	2			64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		39.9		43.1		83
FS-14	3/23/2023	2			80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		139		112		251
FS-14-A	3/27/2023	4			176.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-15	3/23/2023	2			208.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		36.6		22.9		59.5
FS-16	3/23/2023	2			224.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		29.8		13.2		43
FS-17	3/24/2023	4			736.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-18	3/23/2023	2			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-19	3/23/2023	2			128.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-20	3/24/2023	2			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
T-7	3/28/2023	4			532.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
NSW-1	3/27/2023	2			384.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
NSW-2	3/24/2023	1			1,920		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
FS-11-N	3/27/2023	3			128.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-1	3/27/2023	2			240.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-2	3/16/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-3	3/16/2023	1			16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-4	3/20/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-5	3/20/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-6	3/21/2023	1			<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-7	3/21/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-8	3/22/2023	1			64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-9	3/22/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		69.9		48.2		118.1
ESW-9-A	3/24/2023	1			1,470		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-9-B	3/28/2023	1			192.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-10	3/22/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-11	3/22/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-12	3/22/2023	1			16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-13	3/22/2023	1			112.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-14	3/22/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-15	3/23/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-16	3/23/2023	1			16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-17	3/23/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30

TABLE 4
SUMMARY OF ANALYTICAL RESULTS
CONFIRMATION SAMPLING - NRM1930950727 & NAPP2117456525
MAVERICK NATURAL RESOURCES
MCA 2C INJECTION HEADER FLANGE AND HEADER EAST LINE RELEASES
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth feet bgs	Field Screening Results		Chloride ¹		BTEX ²								TPH ³								
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO C ₆ - C ₁₀		DRO > C ₁₀ - C ₂₈		EXT DRO > C ₂₈ - C ₃₆		Total TPH (GRO+DRO+EXT DRO)
			ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
ESW-18	3/23/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-19	3/23/2023	1			16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		35.9		21.9		57.8
ESW-20	3/23/2023	1			80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
ESW-21	3/23/2023	1			592.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
SSW-1	3/24/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
SSW-2	3/24/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
SSW-3	3/24/2023	1			80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		10.9		<10.0		10.9
SSW-4	3/24/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
SSW-5	3/24/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
SSW-6	3/24/2023	1			48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-1	3/16/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-2	3/16/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-3	3/16/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-4	3/20/2023	1			144.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		32.5		<10.0		63.4
WSW-5	3/20/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-6	3/21/2023	1			<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-7	3/21/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-8	3/21/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-9	3/22/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-10	3/22/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-11	3/22/2023	1			16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-12	3/22/2023	1			112.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		221		172		393
WSW-12-A	3/24/2023	1			16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-13	3/22/2023	1			144.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		161		106		267
WSW-13-A	3/24/2023	1			64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		108		71.9		179.9
WSW-13-B	3/28/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-14	3/23/2023	1			160.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		511		281		792
WSW-14-A	3/24/2023	1			80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-15	3/23/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		50.6		31.4		82
WSW-16	3/23/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-17	3/23/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-18	3/23/2023	1			160.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-19	3/23/2023	1			48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-20	3/23/2023	1			144.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30
WSW-21	3/24/2023	1			32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		<30

NOTES:
 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 values indicate exceedance of Remediation Reclamation Requirements (NMAC 19.15.29.13)
 Gold highlight represents soil horizons that were removed during deepening of excavation floors.

Site Remediation Closure Report
Maverick Permian, LLC
MCA 2C Injection Header Flange and Header East Line Releases
Incident IDs: nRM1930950727 and nAPP2117456525

May 16, 2023

APPENDIX A: C-141 FORM NRM1930950727

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	NRM1930950727
District RP	1RP-5779
Facility ID	fCOH0815142265
Application ID	pRM1930950218

Release Notification

Responsible Party

Responsible Party ConocoPhillips Company	OGRID 217817
Contact Name Gustavo Fejervary	Contact Telephone 432/210-7037
Contact email g.fejervary@cop.com	Incident # <i>(assigned by OCD)</i>
Contact mailing address	5735 SW 7000 Andrews, TX 79714

Location of Release Source

Latitude 32.80360 Longitude -103.77100
(NAD 83 in decimal degrees to 5 decimal places)

Site Name MCA-2C Injection Header	Site Type Injection Header
Date Release Discovered 10/2/19	API# <i>(if applicable)</i>

Unit Letter	Section	Township	Range	County
J	28	17S	R32E	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) 12.3	Volume Recovered (bbls) 1
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 110.7	Volume Recovered (bbls) 7
	Is the concentration of total dissolved solids (TDS) 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 **Gasket on the Header leaked on the flange valve.**

State of New Mexico
Oil Conservation Division

Incident ID	NRM1930950727
District RP	1RP-5779
Facility ID	fCOH0815142265
Application ID	pRM1930950218

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? it was more than 25 bbls. $((40' \times 50' \times 2') + (450' \times 7' \times 3') + (118' \times 100' \times 4')) \times 13.57\% = 123 \text{ BBLS}$ 13.57% = SOIL SATURATION AFTER 0.5" RAIN IN LAST 24 HRS
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? It was given on 10/3/19 to district 1 email address and Bradford Billings	

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>Gustavo Fejervary</u>	Title: <u>Environmental Coordinator</u>
Signature: 	Date: <u>10/11/19</u>
email: <u>g.fejervary@cop.com</u>	Telephone: <u>432/210-7037</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>11/5/2019</u>

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

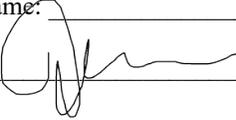
State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature:  _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

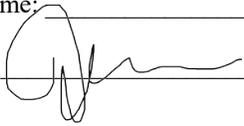
Remediation Plan Checklist: *Each of the following items must be included in the plan.*

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

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

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

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

Printed Name: _____ Title: _____
 Signature:  _____ Date: _____
 email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

- Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Page 6

Incident ID	
District RP	
Facility ID	
Application ID	

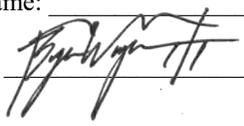
Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____
 Signature:  Date: _____
 email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Site Remediation Closure Report
Maverick Permian, LLC
MCA 2C Injection Header Flange and Header East Line Releases
Incident IDs: nRM1930950727 and nAPP2117456525

May 16, 2023

APPENDIX B: C-141 FORM NAPP2117456525

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	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

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 type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	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

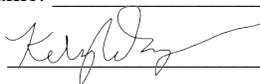
State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

<input type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input 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: _____ Title: _____ Signature:  _____ Date: _____ email: _____ Telephone: _____
<u>OCD Only</u> Received by: <u>Ramona Marcus</u> _____ Date: <u>6/28/2021</u> _____

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 33424

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 33424
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
marcus	None	6/28/2021

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

<p><u>Characterization Report Checklist:</u> Each of the following items must be included in the report.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. <input type="checkbox"/> Field data <input type="checkbox"/> Data table of soil contaminant concentration data <input type="checkbox"/> Depth to water determination <input type="checkbox"/> Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release <input type="checkbox"/> Boring or excavation logs <input type="checkbox"/> Photographs including date and GIS information <input type="checkbox"/> Topographic/Aerial maps <input type="checkbox"/> Laboratory data including chain of custody
--

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature:  _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: _____ Title: _____

Signature:  _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

- Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature:  _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

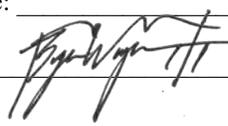
Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____
 Signature:  Date: _____
 email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Site Remediation Closure Report
Maverick Permian, LLC
MCA 2C Injection Header Flange and Header East Line Releases
Incident IDs: nRM1930950727 and nAPP2117456525

May 16, 2023

APPENDIX C: SITE CHARACTERIZATION DATA



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
RA 12721 POD2	RA	LE		1	1	4	28	17S	32E	615055	3630407	256	124	75	49
RA 12721 POD3	RA	LE		2	3	4	28	17S	32E	615417	3629979	304	115		
RA 12721 POD5	RA	LE		2	4	4	28	17S	32E	615650	3629961	502	130	124	6
RA 12721 POD1	RA	LE		3	2	3	28	17S	32E	614645	3630141	565	125		
RA 12721 POD4	RA	LE		1	1	2	33	17S	32E	615055	3629589	628	140		

Average Depth to Water: **99 feet**
 Minimum Depth: **75 feet**
 Maximum Depth: **124 feet**

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 615207

Northing (Y): 3630200

Radius: 800

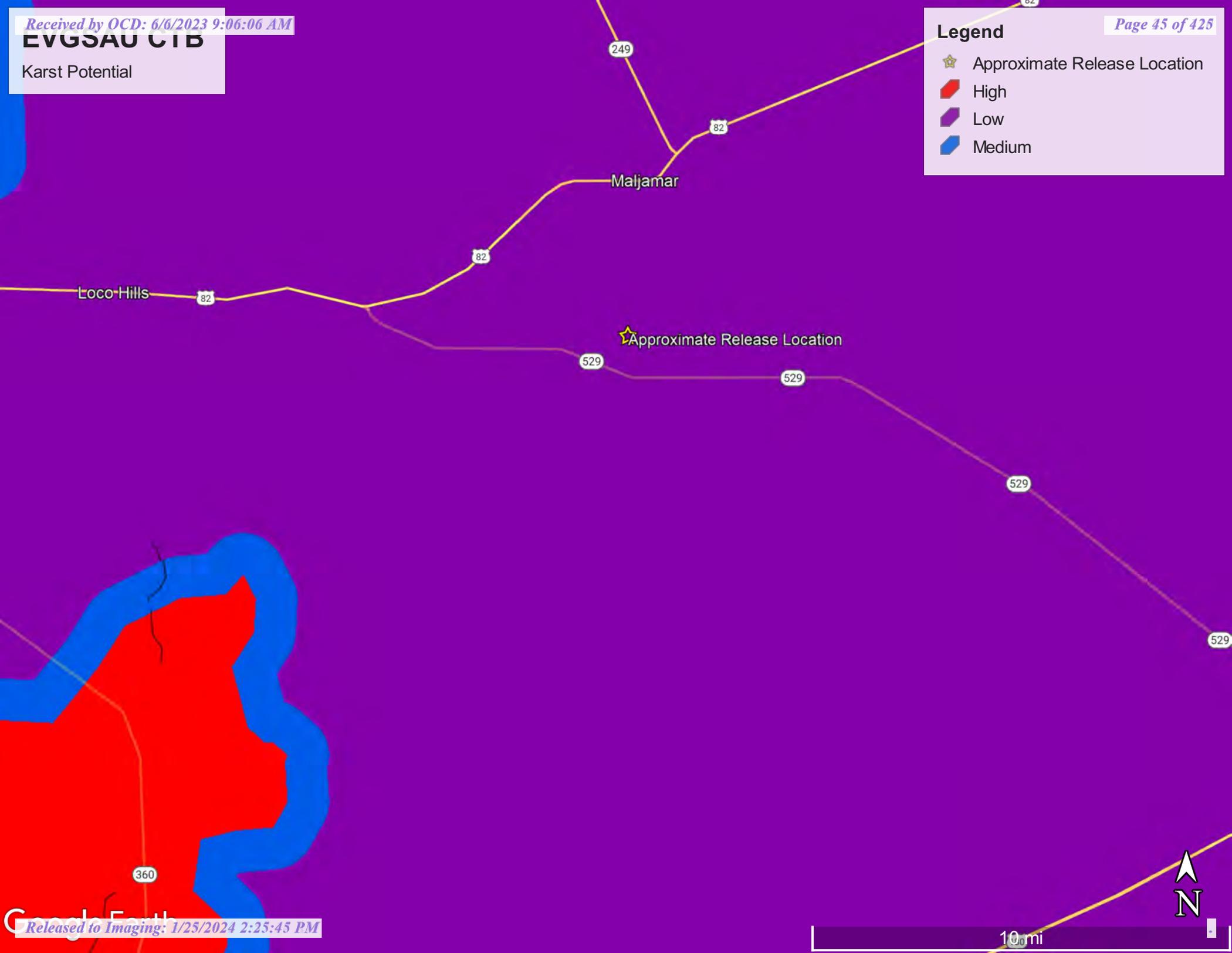
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

EVGSAU CTB

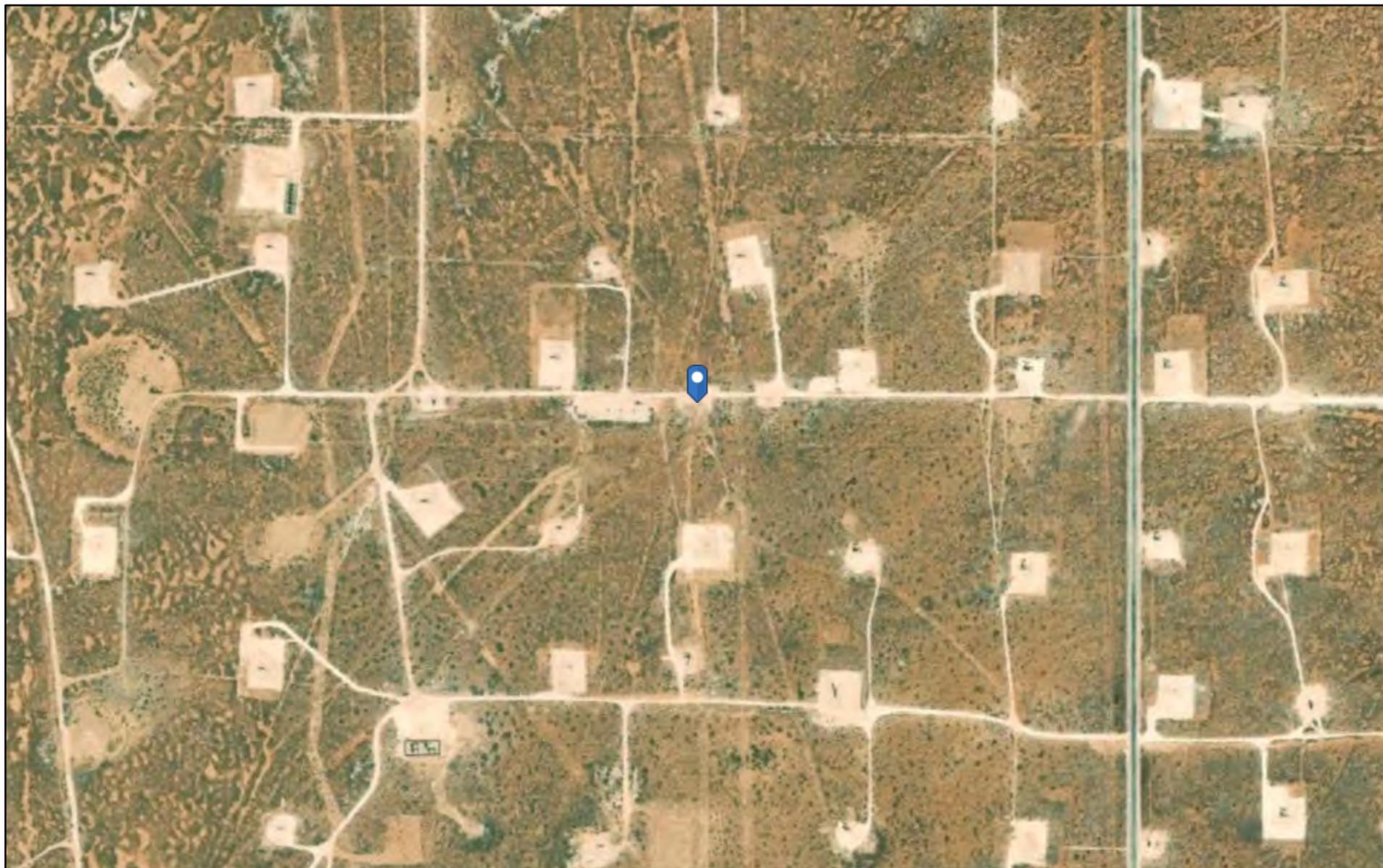
Karst Potential

Legend

-  Approximate Release Location
-  High
-  Low
-  Medium

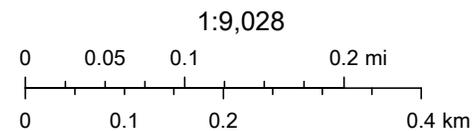


OCD Water Bodies



2/22/2022, 4:14:57 PM

- ★ OCD District Offices
- PLJV Probable Playas
- OSE Water-bodies
- OSE Streams



OCD, Maxar

Site Remediation Closure Report
Maverick Permian, LLC
MCA 2C Injection Header Flange and Header East Line Releases
Incident IDs: nRM1930950727 and nAPP2117456525

May 16, 2023

APPENDIX D: LABORATORY ANALYTICAL DATA

APPENDIX D

Laboratory Analytical Data

Part 1

Shallow and Deep Soil Assessments

nRM1930950727

Part 2

Shallow and Deep Soil Assessments

nAPP2117456525

Part 3

Confirmation Soil Samples

nRM1930950727 and nAPP2117456525

APPENDIX D

Laboratory Analytical Data

Part 1

Shallow and Deep Soil Assessments

nRM1930950727



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

October 30, 2019

JUSTIN WRIGHT

Conoco Phillips - Hobbs

P. O. BOX 325

Hobbs, NM 88240

RE: MCA 2C HEADER

Enclosed are the results of analyses for samples received by the laboratory on 10/25/19 11:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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.

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:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #1 - SURFACE (H903659-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16000	16.0	10/28/2019	ND	416	104	400	0.00	

Sample ID: SP #1 - 2' (H903659-02)

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	10/28/2019	ND	416	104	400	0.00	

Sample ID: SP #2 - SURFACE (H903659-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	864	16.0	10/28/2019	ND	416	104	400	0.00	

Sample ID: SP #2 - 2' (H903659-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	10/28/2019	ND	416	104	400	0.00	

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Analytical Results For:

Conoco Phillips - Hobbs
 JUSTIN WRIGHT
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 Hobbs NM, 88240
 Fax To: (575) 297-1477

Received:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #3 - SURFACE (H903659-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	27600	16.0	10/28/2019	ND	416	104	400	0.00	

Sample ID: SP #3 - 2' (H903659-06)

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	10/28/2019	ND	416	104	400	0.00	

Sample ID: SP #4 - SURFACE (H903659-07)

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	10/28/2019	ND	416	104	400	0.00	

Sample ID: SP #4 - 2' (H903659-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2720	16.0	10/28/2019	ND	416	104	400	0.00	

Sample ID: SP #5 - SURFACE (H903659-09)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/29/2019	ND	416	104	400	3.92	

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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:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #5 - 2' (H903659-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #6 - SURFACE (H903659-11)

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	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #6 - 2' (H903659-12)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2720	16.0	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #7 - SURFACE (H903659-13)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #7 - 2' (H903659-14)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8640	16.0	10/29/2019	ND	416	104	400	3.92	

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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:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #8 - SURFACE (H903659-15)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #8 - 2' (H903659-16)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #9 - SURFACE (H903659-17)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12800	16.0	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #9 - 2' (H903659-18)

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	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #10 - SURFACE (H903659-19)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7040	16.0	10/29/2019	ND	416	104	400	3.92	

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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:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #10 - 2' (H903659-20)

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	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #11 - SURFACE (H903659-21)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1890	16.0	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #11 - 2' (H903659-22)

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	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #12 - SURFACE (H903659-23)

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	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #12 - 2' (H903659-24)

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	10/29/2019	ND	416	104	400	3.92	

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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:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #13 - SURFACE (H903659-25)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #13 - 2' (H903659-26)

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	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #14 - SURFACE (H903659-27)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5520	16.0	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #14 - 2' (H903659-28)

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	10/29/2019	ND	416	104	400	3.92	

Sample ID: SP #15 - SURFACE (H903659-29)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	34000	16.0	10/29/2019	ND	416	104	400	0.00	QM-07

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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:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #15 - 2' (H903659-30)

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	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #16 - SURFACE (H903659-31)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18400	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #16 - 2' (H903659-32)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #17 - SURFACE (H903659-33)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9730	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #17 - 2' (H903659-34)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	10/29/2019	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Conoco Phillips - Hobbs
 JUSTIN WRIGHT
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 Fax To: (575) 297-1477

Received:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #18 - SURFACE (H903659-35)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14600	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #18 - 2' (H903659-36)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #19 - SURFACE (H903659-37)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8130	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #19 - 2' (H903659-38)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #20 - SURFACE (H903659-39)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	10/29/2019	ND	416	104	400	0.00	

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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:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #20 - 2' (H903659-40)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4560	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #21 - SURFACE (H903659-41)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #21 - 2' (H903659-42)

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	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #22 - SURFACE (H903659-43)

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	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #22 - 2' (H903659-44)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1730	16.0	10/29/2019	ND	416	104	400	0.00	

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Received:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #23 - SURFACE (H903659-45)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3680	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #23 - 2' (H903659-46)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #24 - SURFACE (H903659-47)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3080	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #24 - 2' (H903659-48)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	10/29/2019	ND	416	104	400	0.00	

Sample ID: SP #25 - SURFACE (H903659-49)

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	10/30/2019	ND	400	100	400	3.92	

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Received:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #25 - 2' (H903659-50)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #26 - SURFACE (H903659-51)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #26 - 2' (H903659-52)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1740	16.0	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #27 - SURFACE (H903659-53)

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	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #27 - 2' (H903659-54)

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	10/30/2019	ND	400	100	400	3.92	

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Received:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #28 - SURFACE (H903659-55)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4880	16.0	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #28 - 2' (H903659-56)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1550	16.0	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #29 - SURFACE (H903659-57)

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	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #29 - 2' (H903659-58)

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	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #30 - SURFACE (H903659-59)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	10/30/2019	ND	400	100	400	3.92	

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Received:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #30 - 2' (H903659-60)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2520	16.0	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #31 - SURFACE (H903659-61)

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	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #31 - 2' (H903659-62)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #32 - SURFACE (H903659-63)

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	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #32 - 2' (H903659-64)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	10/30/2019	ND	400	100	400	3.92	

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Analytical Results For:

Conoco Phillips - Hobbs
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 Fax To: (575) 297-1477

Received:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #33 - SURFACE (H903659-65)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3560	16.0	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #33 - 2' (H903659-66)

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	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #34 - SURFACE (H903659-67)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2440	16.0	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #34 - 2' (H903659-68)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1090	16.0	10/30/2019	ND	400	100	400	3.92	

Sample ID: SP #35 - SURFACE (H903659-69)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	10/30/2019	ND	432	108	400	3.77	

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Analytical Results For:

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Received:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #35 - 2' (H903659-70)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1760	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #36 - SURFACE (H903659-71)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #36 - 2' (H903659-72)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2360	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #37 - SURFACE (H903659-73)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8260	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #37 - 2' (H903659-74)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	10/30/2019	ND	432	108	400	3.77	

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Analytical Results For:

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Received:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #38 - SURFACE (H903659-75)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #38 - 2' (H903659-76)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	768	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #39 - SURFACE (H903659-77)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #39 - 2' (H903659-78)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1410	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #40 - SURFACE (H903659-79)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	10/30/2019	ND	432	108	400	3.77	

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Received:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #40 - 2' (H903659-80)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1170	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #41 - SURFACE (H903659-81)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #41 - 2' (H903659-82)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #42 - SURFACE (H903659-83)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #42 - 2' (H903659-84)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	10/30/2019	ND	432	108	400	3.77	

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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:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #43 - SURFACE (H903659-85)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #43 - 2' (H903659-86)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	880	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #44 - SURFACE (H903659-87)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1630	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #44 - 2' (H903659-88)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	880	16.0	10/30/2019	ND	432	108	400	3.77	

Sample ID: SP #45 - SURFACE (H903659-89)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1780	16.0	10/30/2019	ND	432	108	400	0.00	QM-07

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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:	10/25/2019	Sampling Date:	10/23/2019
Reported:	10/30/2019	Sampling Type:	Soil
Project Name:	MCA 2C HEADER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

Sample ID: SP #45 - 2' (H903659-90)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	10/30/2019	ND	432	108	400	0.00	

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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

06 of 22 pages

Company Name: ConocoPhillips

BILL TO

ANALYSIS REQUEST

Project Manager: Justin Wright

P.O. #:

Address:

Company: ConocoPhillips

City: Hobbs

St NM Zip: #

Attn:

Phone #: 575-631-9092

Fax #:

Address:

Project #:

Project Owner: COPC

City:

Project Name: MCA 2C Header

State:

Project Location: Lea County, NM

Phone #:

Sampler Name: Justin Wright

Fax #:

FOR LAB USE ONLY

MATRIX

PRESERV.

SAMPLING

Lab I.D.

Sample I.D.

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	REMARKS
H9031689	SP#1 - Surface	G				*							10-23		✓ Chlorides
	SP#1 - 2'	G				*							10-23		✓
	SP#2 - Surface	G				*							10-23		✓
	SP#2 - 2'	G				*							10-23		✓
	SP#3 - Surface	G				*							10-23		✓
	SP#3 - 2'	G				*							10-23		✓
	SP#4 - Surface	G				*							10-23		✓
	SP#4 - 2'	G				*							10-23		✓
	SP#5 - Surface	G				*							10-23		✓
	SP#5 - 2'	G				*							10-23		✓

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Relinquished By:

Date: 10-25-19

Received By:

Sumera Chakraborty

Relinquished By:

Date: 11-15

Received By:

Delivered By: (Circle One)

Observed Temp. °C: -4.9

Sample Condition

CHECKED BY: (Initials)

Turnaround Time:

Standard

Bacteria (only)

Sample Condition

Sampler - UPS - Bus - Other:

Corrected Temp. °C: -4.4

Cool Intact

YES

Thermometer ID #97

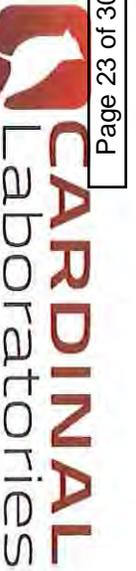
Rush

Cool Intact

Observed Temp. °C

FORM-006-R310

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

06 of 23 pages

BILL TO

ANALYSIS REQUEST

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

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME	REMARKS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
H903659													Chlorides	
11	SP#6 - Surface	G	*	*	*	*	*	*	*	10-23	✓			
12	SP#6 - 2'	G	*	*	*	*	*	*	*	10-23	✓			
13	SP#7 - Surface	G	*	*	*	*	*	*	*	10-23	✓			
14	SP#7 - 2'	G	*	*	*	*	*	*	*	10-23	✓			
15	SP#8 - Surface	G	*	*	*	*	*	*	*	10-23	✓			
16	SP#8 - 2'	G	*	*	*	*	*	*	*	10-23	✓			
17	SP#9 - Surface	G	*	*	*	*	*	*	*	10-23	✓			
18	SP#9 - 2'	G	*	*	*	*	*	*	*	10-23	✓			
19	SP#10 - Surface	G	*	*	*	*	*	*	*	10-23	✓			
20	SP#10 - 2'	G	*	*	*	*	*	*	*	10-23	✓			

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Relinquished By: *[Signature]* Date: 10-25-19
 Received By: *[Signature]* Date: 11-15-19
 Turnaround Time: Standard Rush
 Verbal Result: Yes No Add'l Phone #:
 All Results are emailed. Please provide Email address:
 REMARKS:

Delivered By: (Circle One) Observed Temp. °C: -4.9 Sample Condition: Intact Cool Intact Yes No
 Corrected Temp. °C: -4.4
 Checked By: (Initials) *[Signature]*
 Turnaround Time: Standard Rush
 Bacteria (only) Cool Intact Yes No
 Corrected Temp. °C



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: ConocoPhillips		Project Manager: Justin Wright		BILL TO		ANALYSIS REQUEST	
Address: Hobbs		St NM	Zip:	P.O. #:		Company: ConocoPhillips	
Phone #: 575-631-9092		Fax #:	Project Owner: COPC	Attn:		Address:	
Project #:		Project Name: MCA 3C Header		City:		State: Zip:	
Project Location: Lea County, NM		Sampler Name: Justin Wright		Phone #:		Fax #:	
FOR LAB USE ONLY				PRESERV.		SAMPLING	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX		ACID/BASE: ICE / COOL OTHER :	
				GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER :		DATE TIME	
H903659	SP #11 - Surface	G		* * * * *		10-23 ✓ Chlorides	
	SP #11 - 21	G		* * * * *		10-23 ✓	
	SP #12 - Surface	G		* * * * *		10-23 ✓	
	SP #12 - 21	G		* * * * *		10-23 ✓	
	SP #13 - Surface	G		* * * * *		10-23 ✓	
	SP #13 - 21	G		* * * * *		10-23 ✓	
	SP #14 - Surface	G		* * * * *		10-23 ✓	
	SP #14 - 21	G		* * * * *		10-23 ✓	
	SP #15 - Surface	G		* * * * *		10-23 ✓	
	SP #15 - 21	G		* * * * *		10-23 ✓	

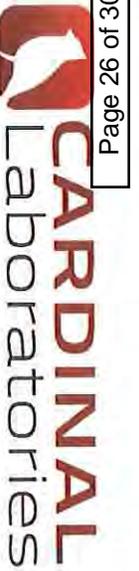
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Relinquished By: *[Signature]* Date: 10-25-23 Time: 11:15
 Received By: *[Signature]* Date: 10-25-23 Time: 11:15

Delivered By: (Circle One) Observed Temp. °C 4.9 Corrected Temp. °C 4.4
 Sampler - UPS - Bus - Other: Sample Condition Cool Intact Yes No No

Checked By: (Initials) Y.O.
 Turnaround Time: Standard Rush
 Thermometer ID #97 Correction Factor + 0.4 °C Bacteria (only) Sample Condition Cool Intact Yes No No No Corrected Temp. °C

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



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06:00:06 PM

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: ConocoPhillips

Project Manager: Justin Wright

Address:

City: Hobbs

Phone #: 575-631-9092

Project #:

Project Name: MCA 2C Header

Project Location: Lea County, NM

Sampler Name: Justin Wright

BILL TO

P.O. #:

Company: ConocoPhillips

Attn:

Address:

City:

State:

Phone #:

Fax #:

ANALYSIS REQUEST

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :						
H903659	41 SP#21-Surface	G				*						10-23		✓	Chlorides
	42 SP#21-21	G				*						10-23		✓	
	43 SP#22-Surface	G				*						10-23		✓	
	44 SP#22-21	G				*						10-23		✓	
	45 SP#23-Surface	G				*						10-23		✓	
	46 SP#23-21	G				*						10-23		✓	
	47 SP#24-Surface	G				*						10-23		✓	
	48 SP#24-21	G				*						10-23		✓	
	49 SP#25-Surface	G				*						10-23		✓	
	50 SP#25-21	G				*						10-23		✓	

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Relinquished By: [Signature]

Date: 10/23/19

Received By: [Signature]

Verbal Result: Yes No Add'l Phone #:

All Results are emailed. Please provide Email address:

Relinquished By: [Signature]

Date: 11/15

Received By: [Signature]

REMARKS:

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

Observed Temp. °C: 4.9
 Corrected Temp. °C: -4.4

Sample Condition
 Cool Intact
 Yes No

CHECKED BY: (Initials)
 [Signature]

Turnaround Time:
 Thermometer ID #97
 Correction Factor +0.4 °C

Standard
 Rush

Bacteria (only) Sample Condition
 Cool Intact
 Yes No

Observed Temp. °C
 Corrected Temp. °C

FORM 006-R-370

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

06 of 82 pages

Company Name: ConocoPhillips	P.O. #:	BILL TO		ANALYSIS REQUEST
Project Manager: Justin Wright	Company: ConocoPhillips			
Address:	Attn:			
City: Hobbs St NM Zip:	Address:			
Phone #: 575-631-9092 Fax #:	City:			
Project #: Project Owner: COPC	State:			
Project Name: MCA ac Heber	Zip:			
Project Location: Lea County, NM	Phone #:			
Sampler Name: Justin Wright	Fax #:			

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
H903659	SP# 31- Surface	G				*				10-23	✓	Chlorides
	SP# 31- 2'	G				*				10-23	✓	
	SP# 32- Surface	G				*				10-23	✓	
	SP# 32- 2'	G				*				10-23	✓	
	SP# 33- Surface	G				*				10-23	✓	
	SP# 33- 2'	G				*				10-23	✓	
	SP# 34- Surface	G				*				10-23	✓	
	SP# 34- 2'	G				*				10-23	✓	
	SP# 35- Surface	G				*				10-23	✓	
	SP# 35- 2'	G				*				10-23	✓	

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Reinquisitioned By:	Date: 10-25-19	Received By:
Time: 11:15		

Delivered By: (Circle One)	Observed Temp. °C	Sample Condition	CHECKED BY: (Initials)	Turnaround Time:	Standard	Bacteria (only)
Sampler - UPS - Bus - Other:	Corrected Temp. °C	Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	✓		Rush	Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No
FORM-006-R-30	-4.4					Observed Temp. °C
						Corrected Temp. °C

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: ConocoPhillips	P.O. #: _____
Project Manager: Justin Wright	Company: ConocoPhillips
Address: _____	Attn: _____
City: Hobbs St NM Zip: _____	Address: _____
Phone #: 575-631-9092 Fax #: _____	City: _____
Project #: _____ Project Owner: COPC	State: _____ Zip: _____
Project Name: MCA DC Header	Phone #: _____
Project Location: Lea County, NM	Fax #: _____
Sampler Name: Justin Wright	

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.		DATE	TIME	REMARKS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL			
H903659	SP # 36 - Surface	G		*							10-23		✓	Chlorides
	SP # 36 - 2'	G		*							10-23		✓	
	SP# 37 - Surface	G		*							10-23		✓	
	SP# 37 - 2'	G		*							10-23		✓	
	SP# 38 - Surface	G		*							10-23		✓	
	SP# 38 - 2'	G		*							10-23		✓	
	SP# 39 - 2'	G		*							10-23		✓	
	SP# 40 - Surface	G		*							10-23		✓	
	SP# 40 - 2'	G		*							10-23		✓	

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Relinquished By: _____	Date: 10-25-19	Received By: _____	Date: 11-15
Reinforced By: _____	Time: _____	Received By: _____	Time: _____

Delivered By: (Circle One)	Observed Temp. °C	Sample Condition	CHECKED BY: _____	Turnaround Time:	Standard	Bacteria (only)
Sampler - UPS - Bus - Other:	Corrected Temp. °C	Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>	(Initials)	_____	Rush <input type="checkbox"/>	Cool Intact <input type="checkbox"/>
		No <input type="checkbox"/> Yes <input type="checkbox"/>				Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: ConocoPhillips Project Manager: Justin Wright		P.O. #: Company: ConocoPhillips	
Address: City: Hobbs St NM Zip: #		Attn: Address: City: State: Zip:	
Phone #: 575-631-9092 Fax #: Project #: Project Owner: COPC		City: State: Zip:	
Project Name: <i>MCA de Header</i> Project Location: <i>Lea County, NM</i>		Phone #: Fax #:	
Sampler Name: Justin Wright		P.O. #: Company: ConocoPhillips	
BILL TO			
ANALYSIS REQUEST			
Lab I.D. <i>H903659</i>		Sample I.D.	
SP#41 - Surface		(G)RAB OR (C)OMP.	
SP#41-2i		# CONTAINERS	
SP#42 - Surface		GROUNDWATER	
SP#42-2i		WASTEWATER	
SP#43 - Surface		SOIL	
SP#43-2i		OIL	
SP#44 - Surface		SLUDGE	
SP#44-2i		OTHER:	
SP#45 - Surface		ACID/BASE:	
SP#45-2i		ICE / COOL	
SP#46 - Surface		OTHER:	
SP#46-2i		DATE	
SP#47 - Surface		TIME	
SP#47-2i		DATE	
SP#48 - Surface		TIME	
SP#48-2i		DATE	
SP#49 - Surface		TIME	
SP#49-2i		DATE	
SP#50 - Surface		TIME	
SP#50-2i		DATE	
SP#51 - Surface		TIME	
SP#51-2i		DATE	
SP#52 - Surface		TIME	
SP#52-2i		DATE	
SP#53 - Surface		TIME	
SP#53-2i		DATE	
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SP#54-2i		DATE	
SP#55 - Surface		TIME	
SP#55-2i		DATE	
SP#56 - Surface		TIME	
SP#56-2i		DATE	
SP#57 - Surface		TIME	
SP#57-2i		DATE	
SP#58 - Surface		TIME	
SP#58-2i		DATE	
SP#59 - Surface		TIME	
SP#59-2i		DATE	
SP#60 - Surface		TIME	
SP#60-2i		DATE	
SP#61 - Surface		TIME	
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SP#62 - Surface		TIME	
SP#62-2i		DATE	
SP#63 - Surface		TIME	
SP#63-2i		DATE	
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SP#66-2i		DATE	
SP#67 - Surface		TIME	
SP#67-2i		DATE	
SP#68 - Surface		TIME	
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SP#69 - Surface		TIME	
SP#69-2i		DATE	
SP#70 - Surface		TIME	
SP#70-2i		DATE	
SP#71 - Surface		TIME	
SP#71-2i		DATE	
SP#72 - Surface		TIME	
SP#72-2i		DATE	
SP#73 - Surface		TIME	
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SP#74 - Surface		TIME	
SP#74-2i		DATE	
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SP#81-2i		DATE	
SP#82 - Surface		TIME	
SP#82-2i		DATE	
SP#83 - Surface		TIME	
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SP#88-2i		DATE	
SP#89 - Surface		TIME	
SP#89-2i		DATE	
SP#90 - Surface		TIME	
SP#90-2i		DATE	
SP#91 - Surface		TIME	
SP#91-2i		DATE	
SP#92 - Surface		TIME	
SP#92-2i		DATE	
SP#93 - Surface		TIME	
SP#93-2i		DATE	
SP#94 - Surface		TIME	
SP#94-2i		DATE	
SP#95 - Surface		TIME	
SP#95-2i		DATE	
SP#96 - Surface		TIME	
SP#96-2i		DATE	
SP#97 - Surface		TIME	
SP#97-2i		DATE	
SP#98 - Surface		TIME	
SP#98-2i		DATE	
SP#99 - Surface		TIME	
SP#99-2i		DATE	
SP#100 - Surface		TIME	
SP#100-2i		DATE	



ANALYTICAL REPORT

March 24, 2020

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

ConocoPhillips - Tetra Tech

Sample Delivery Group: L1199114
 Samples Received: 03/13/2020
 Project Number: 212C-MD-02119
 Description: COP MCA 2-C Header Release
 Site: LEA COUNTY, NEW MEXICO
 Report To: Christian Lull
 901 West Wall
 Suite 100
 Midland, TX 79701

Entire Report Reviewed By:

Chris McCord
Project Manager

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



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AH-4E (0-1') L1199114-01 Solid

Collected by: Adrian
 Collected date/time: 03/03/20 11:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444779	1	03/18/20 02:57	03/18/20 20:10	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 00:27	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 00:32	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/18/20 21:53	FM	Mt. Juliet, TN

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

AH-4E (3-4') L1199114-02 Solid

Collected by: Adrian
 Collected date/time: 03/03/20 11:10
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444779	1	03/18/20 02:57	03/18/20 20:20	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445448	1	03/16/20 08:41	03/17/20 13:18	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 00:52	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/18/20 22:05	FM	Mt. Juliet, TN

AH-4W (0-1') L1199114-03 Solid

Collected by: Adrian
 Collected date/time: 03/03/20 11:20
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444779	1	03/18/20 02:57	03/18/20 20:29	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 01:09	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 01:12	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/18/20 21:40	FM	Mt. Juliet, TN

AH-4W (3-4') L1199114-04 Solid

Collected by: Adrian
 Collected date/time: 03/03/20 11:30
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444779	1	03/18/20 02:57	03/18/20 20:39	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445448	1	03/16/20 08:41	03/17/20 13:39	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 01:32	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 22:04	KME	Mt. Juliet, TN

T-5 (1-2') L1199114-05 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 11:50
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444779	1	03/18/20 02:57	03/18/20 20:48	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 01:50	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 01:52	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 21:00	KME	Mt. Juliet, TN

T-5 (3-4') L1199114-06 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 12:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 10:55	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 02:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1.04	03/16/20 08:41	03/17/20 02:13	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 21:13	KME	Mt. Juliet, TN

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

T-5 (5-6') L1199114-07 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 12:10
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	5	03/18/20 08:48	03/18/20 11:14	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445448	1	03/16/20 08:41	03/17/20 13:59	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 02:33	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 20:35	KME	Mt. Juliet, TN

T-5 (7-8') L1199114-08 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 12:20
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 11:23	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 02:52	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 02:53	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 20:48	KME	Mt. Juliet, TN

AH-5S (0-1') L1199114-09 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 13:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 11:33	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 03:12	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 03:13	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	20	03/17/20 16:06	03/17/20 23:32	KME	Mt. Juliet, TN

AH-5S (3-4') L1199114-10 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 13:10
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 11:42	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445448	1	03/16/20 08:41	03/17/20 14:20	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 03:34	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	20	03/17/20 16:06	03/17/20 23:57	KME	Mt. Juliet, TN

AH-5E (0-1') L1199114-11 Solid

Collected by: Adrian
Collected date/time: 03/05/20 11:00
Received date/time: 03/13/20 08:00

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

1 Cp

2 Tc

3 Ss

4 Cn

AH-5E (3-4') L1199114-12 Solid

Collected by: Adrian
Collected date/time: 03/05/20 11:10
Received date/time: 03/13/20 08:00

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

5 Sr

6 Qc

7 Gl

8 Al

AH-5W (0-1') L1199114-13 Solid

Collected by: Adrian
Collected date/time: 03/05/20 11:20
Received date/time: 03/13/20 08:00

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

9 Sc

AH-5W (3-4') L1199114-14 Solid

Collected by: Adrian
Collected date/time: 03/05/20 11:30
Received date/time: 03/13/20 08:00

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

T-6 (1-2') L1199114-15 Solid

Collected by: Adrian
Collected date/time: 03/05/20 11:50
Received date/time: 03/13/20 08:00

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

T-6 (9-10') L1199114-16 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 12:20
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 13:17	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445448	1	03/16/20 08:41	03/17/20 15:01	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 05:35	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 21:38	KME	Mt. Juliet, TN

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

AH-6E (0-1') L1199114-17 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 13:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 13:27	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 07:01	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 05:56	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 23:30	KME	Mt. Juliet, TN

AH-6E (3-4') L1199114-18 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 13:10
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 13:36	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 07:22	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 06:16	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 21:32	KME	Mt. Juliet, TN

AH-6W (0-1') L1199114-19 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 11:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 13:46	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 07:42	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 06:36	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 21:45	KME	Mt. Juliet, TN

AH-6W (3-4') L1199114-20 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 11:10
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 13:55	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 08:03	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 06:56	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 21:57	KME	Mt. Juliet, TN

AH-7W (0-1') L1199114-21 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 11:20
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 14:24	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 01:23	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 15:22	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/20/20 07:45	KME	Mt. Juliet, TN

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

AH-7W (3-4') L1199114-22 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 11:30
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	5	03/18/20 08:48	03/18/20 14:34	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 01:44	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 15:41	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 23:56	KME	Mt. Juliet, TN

T-7 (1-2') L1199114-23 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 11:50
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	5	03/18/20 08:48	03/18/20 14:43	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 02:04	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 16:00	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 22:40	KME	Mt. Juliet, TN

T-7 (17.5') L1199114-24 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 13:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 14:53	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 02:25	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 16:19	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/20/20 07:19	KME	Mt. Juliet, TN

AH-7E (0-1') L1199114-25 Solid

Collected by: Adrian
 Collected date/time: 03/05/20 13:10
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 15:02	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445660	1	03/16/20 08:59	03/17/20 18:13	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 16:38	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/20/20 00:59	KME	Mt. Juliet, TN

AH-7E (3-4') L1199114-26 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 11:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	10	03/17/20 22:10	03/18/20 00:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 06:54	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 16:57	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/20/20 00:08	KME	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

AH-8N (0-1') L1199114-27 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 11:20
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 00:15	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 07:14	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 17:16	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 23:05	KME	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

AH-8N (3-4') L1199114-28 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 11:30
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	5	03/17/20 22:10	03/18/20 00:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 07:35	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 17:35	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/20/20 07:32	KME	Mt. Juliet, TN

9 Sc

T-8 (1-2') L1199114-29 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 11:50
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	5	03/17/20 22:10	03/18/20 00:34	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445660	1	03/16/20 08:59	03/17/20 18:34	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 17:54	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	20	03/19/20 06:41	03/20/20 02:28	KME	Mt. Juliet, TN

T-8 (3-4') L1199114-30 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 12:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	5	03/17/20 22:10	03/18/20 00:53	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 08:16	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 18:13	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	20	03/20/20 15:35	03/21/20 04:09	JDG	Mt. Juliet, TN

T-8 (7-8') L1199114-31 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 12:10
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	5	03/17/20 22:10	03/18/20 01:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445660	1	03/16/20 08:59	03/17/20 18:54	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 18:32	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 13:28	JDG	Mt. Juliet, TN

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

T-8 (9-10') L1199114-32 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 12:20
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	5	03/17/20 22:10	03/18/20 01:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 08:57	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 18:51	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 02:54	JDG	Mt. Juliet, TN

AH-8E (0-1') L1199114-33 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 13:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 01:40	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 09:17	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 19:10	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 03:07	JDG	Mt. Juliet, TN

AH-8E (3-4') L1199114-34 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 13:10
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 02:09	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 09:38	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 08:16	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 02:41	JDG	Mt. Juliet, TN

AH-8W (0-1') L1199114-35 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 11:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 02:18	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 09:58	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 08:37	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	20	03/20/20 15:35	03/21/20 03:57	JDG	Mt. Juliet, TN

AH-8W (3-4') L1199114-36 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 11:10
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 02:28	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 10:18	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 08:58	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 13:02	JDG	Mt. Juliet, TN

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

AH-9E (0-1) L1199114-37 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 11:20
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 02:37	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 10:39	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 09:18	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 00:48	JDG	Mt. Juliet, TN

AH-9E (3-4') L1199114-38 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 11:30
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 02:47	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 10:59	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 09:39	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 13:15	JDG	Mt. Juliet, TN

T-9 (1-2') L1199114-39 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 11:50
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	20	03/17/20 22:10	03/18/20 02:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445660	1	03/16/20 08:59	03/17/20 19:15	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 10:00	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	20	03/20/20 15:35	03/21/20 03:32	JDG	Mt. Juliet, TN

T-9 (3-4') L1199114-40 Solid

Collected by: Adrian
 Collected date/time: 03/06/20 12:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	20	03/17/20 22:10	03/18/20 03:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445660	1	03/16/20 08:59	03/17/20 19:35	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 10:21	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	10	03/20/20 15:35	03/21/20 03:44	JDG	Mt. Juliet, TN

T-9 (7-8') L1199114-41 Solid

Collected by Adrian Collected date/time 03/06/20 12:10 Received date/time 03/13/20 08:00

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

Vertical sidebar with colored boxes containing chemical symbols: 1 Cp, 2 Tc, 3 Ss, 4 Cn.

T-9 (9-10') L1199114-42 Solid

Collected by Adrian Collected date/time 03/06/20 12:20 Received date/time 03/13/20 08:00

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

Vertical sidebar with colored boxes containing chemical symbols: 5 Sr, 6 Qc, 7 Gl, 8 Al.

AH-9W (0-1') L1199114-43 Solid

Collected by Adrian Collected date/time 03/06/20 13:00 Received date/time 03/13/20 08:00

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

Vertical sidebar with colored box containing chemical symbol: 9 Sc.

AH-9W (3-4') L1199114-44 Solid

Collected by Adrian Collected date/time 03/06/20 13:10 Received date/time 03/13/20 08:00

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

AH-10E (0-1') L1199114-45 Solid

Collected by Adrian Collected date/time 03/09/20 11:00 Received date/time 03/13/20 08:00

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

AH-10E (3-4') L1199114-46 Solid

Collected by: Adrian
 Collected date/time: 03/09/20 11:10
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 01:51	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 09:57	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 12:24	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 02:29	JDG	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

AH-10W (0-1') L1199114-47 Solid

Collected by: Adrian
 Collected date/time: 03/09/20 11:20
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 02:09	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 10:20	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 12:45	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 01:51	JDG	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

AH-10W (3-4') L1199114-48 Solid

Collected by: Adrian
 Collected date/time: 03/09/20 11:30
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 02:27	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 10:42	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 13:06	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 02:03	JDG	Mt. Juliet, TN

9 Sc

T-10 (1-2') L1199114-49 Solid

Collected by: Adrian
 Collected date/time: 03/09/20 11:50
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	5	03/17/20 20:08	03/18/20 02:45	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 11:03	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 13:26	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 02:16	JDG	Mt. Juliet, TN

T-10 (14-15') L1199114-50 Solid

Collected by: Adrian
 Collected date/time: 03/09/20 12:20
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 03:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445199	1	03/16/20 09:14	03/17/20 11:14	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 13:47	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 00:31	KME	Mt. Juliet, TN

T-9 (16'-17') L1199114-51 Solid

Collected by: Adrian
 Collected date/time: 03/09/20 13:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	10	03/17/20 20:08	03/18/20 03:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445199	1	03/16/20 09:14	03/17/20 11:38	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 14:07	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 00:45	KME	Mt. Juliet, TN

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

AH-11W (0-1') L1199114-52 Solid

Collected by: Adrian
 Collected date/time: 03/10/20 10:50
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	10	03/17/20 20:08	03/18/20 04:15	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445199	1	03/16/20 09:14	03/17/20 12:14	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 14:28	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 10:45	FM	Mt. Juliet, TN

AH-11W (3-4') L1199114-53 Solid

Collected by: Adrian
 Collected date/time: 03/10/20 11:00
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 04:32	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1446150	1	03/16/20 09:14	03/18/20 17:19	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 14:48	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 10:59	FM	Mt. Juliet, TN

AH-11E (0-1') L1199114-54 Solid

Collected by: Adrian
 Collected date/time: 03/10/20 11:10
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 05:26	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445199	1	03/16/20 09:14	03/17/20 13:02	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445419	1	03/16/20 09:14	03/17/20 17:30	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 10:32	FM	Mt. Juliet, TN

AH-11E (3-4') L1199114-55 Solid

Collected by: Adrian
 Collected date/time: 03/10/20 11:20
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 05:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445199	1	03/16/20 09:14	03/17/20 13:26	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445419	1	03/16/20 09:14	03/17/20 17:49	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 10:18	FM	Mt. Juliet, TN

SAMPLE SUMMARY

T-11 (1-2') L1199114-56 Solid

Collected by: Adrian
 Collected date/time: 03/10/20 11:30
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	5	03/17/20 20:08	03/18/20 06:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445199	1	03/16/20 09:14	03/17/20 13:50	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445419	1	03/16/20 09:14	03/17/20 18:08	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 00:58	KME	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

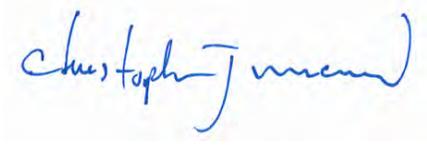
T-11 (14-15') L1199114-57 Solid

Collected by: Adrian
 Collected date/time: 03/10/20 12:10
 Received date/time: 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 06:20	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 09:35	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445419	1	03/16/20 09:14	03/17/20 18:27	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 09:52	FM	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc

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



Chris McCord
Project Manager

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

Collected date/time: 03/03/20 11:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.9		1	03/19/2020 01:48	WG1445642

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	2.79	<u>B J</u>	0.829	10.4	1	03/18/2020 20:10	WG1444779

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0568	<u>B J</u>	0.0226	0.104	1	03/17/2020 00:27	WG1445119
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	93.3			77.0-120		03/17/2020 00:27	WG1445119

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000417	0.00104	1	03/17/2020 00:32	WG1445122
Toluene	U		0.00130	0.00521	1	03/17/2020 00:32	WG1445122
Ethylbenzene	U		0.000553	0.00261	1	03/17/2020 00:32	WG1445122
Total Xylenes	U		0.00498	0.00678	1	03/17/2020 00:32	WG1445122
(S) <i>Toluene-d8</i>	98.4			75.0-131		03/17/2020 00:32	WG1445122
(S) <i>4-Bromofluorobenzene</i>	109			67.0-138		03/17/2020 00:32	WG1445122
(S) <i>1,2-Dichloroethane-d4</i>	132	<u>J1</u>		70.0-130		03/17/2020 00:32	WG1445122

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	7.86		1.68	4.17	1	03/18/2020 21:53	WG1445151
C28-C40 Oil Range	29.7		0.286	4.17	1	03/18/2020 21:53	WG1445151
(S) <i>o</i> -Terphenyl	66.7			18.0-148		03/18/2020 21:53	WG1445151

Collected date/time: 03/03/20 11:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.1		1	03/19/2020 01:48	WG1445642

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	106		0.836	10.5	1	03/18/2020 20:20	WG1444779

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0258	J	0.0228	0.105	1	03/17/2020 13:18	WG1445448
(S) a,a,a-Trifluorotoluene(FID)	94.6			77.0-120		03/17/2020 13:18	WG1445448

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000421	0.00105	1	03/17/2020 00:52	WG1445122
Toluene	U		0.00131	0.00526	1	03/17/2020 00:52	WG1445122
Ethylbenzene	U		0.000557	0.00263	1	03/17/2020 00:52	WG1445122
Total Xylenes	U		0.00503	0.00683	1	03/17/2020 00:52	WG1445122
(S) Toluene-d8	101			75.0-131		03/17/2020 00:52	WG1445122
(S) 4-Bromofluorobenzene	117			67.0-138		03/17/2020 00:52	WG1445122
(S) 1,2-Dichloroethane-d4	122			70.0-130		03/17/2020 00:52	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	8.59		1.69	4.21	1	03/18/2020 22:05	WG1445151
C28-C40 Oil Range	30.2		0.288	4.21	1	03/18/2020 22:05	WG1445151
(S) o-Terphenyl	75.5			18.0-148		03/18/2020 22:05	WG1445151

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

Collected date/time: 03/03/20 11:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	96.0		1	03/19/2020 01:48	WG1445642

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	2.64	B J	0.828	10.4	1	03/18/2020 20:29	WG1444779

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0422	B J	0.0226	0.104	1	03/17/2020 01:09	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	95.2			77.0-120		03/17/2020 01:09	WG1445119

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000417	0.00104	1	03/17/2020 01:12	WG1445122
Toluene	U		0.00130	0.00521	1	03/17/2020 01:12	WG1445122
Ethylbenzene	U		0.000552	0.00260	1	03/17/2020 01:12	WG1445122
Total Xylenes	U		0.00498	0.00677	1	03/17/2020 01:12	WG1445122
(S) Toluene-d8	99.6			75.0-131		03/17/2020 01:12	WG1445122
(S) 4-Bromofluorobenzene	115			67.0-138		03/17/2020 01:12	WG1445122
(S) 1,2-Dichloroethane-d4	119			70.0-130		03/17/2020 01:12	WG1445122

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	7.90		1.68	4.17	1	03/18/2020 21:40	WG1445151
C28-C40 Oil Range	28.0		0.285	4.17	1	03/18/2020 21:40	WG1445151
(S) o-Terphenyl	69.6			18.0-148		03/18/2020 21:40	WG1445151

Collected date/time: 03/03/20 11:30

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.3		1	03/19/2020 01:48	WG1445642

- 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	285		0.843	10.6	1	03/18/2020 20:39	WG1444779

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	03/17/2020 13:39	WG1445448
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120		03/17/2020 13:39	WG1445448

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		0.000424	0.00106	1	03/17/2020 01:32	WG1445122
Toluene	U		0.00133	0.00530	1	03/17/2020 01:32	WG1445122
Ethylbenzene	U		0.000562	0.00265	1	03/17/2020 01:32	WG1445122
Total Xylenes	U		0.00507	0.00689	1	03/17/2020 01:32	WG1445122
(S) Toluene-d8	101			75.0-131		03/17/2020 01:32	WG1445122
(S) 4-Bromofluorobenzene	112			67.0-138		03/17/2020 01:32	WG1445122
(S) 1,2-Dichloroethane-d4	117			70.0-130		03/17/2020 01:32	WG1445122

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.16	J	1.71	4.24	1	03/17/2020 22:04	WG1445151
C28-C40 Oil Range	7.64		0.291	4.24	1	03/17/2020 22:04	WG1445151
(S) o-Terphenyl	59.0			18.0-148		03/17/2020 22:04	WG1445151

Collected date/time: 03/05/20 11:50

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.1		1	03/19/2020 01:48	WG1445642

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	38.0		0.836	10.5	1	03/18/2020 20:48	WG1444779

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0350	B J	0.0228	0.105	1	03/17/2020 01:50	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	94.8			77.0-120		03/17/2020 01:50	WG1445119

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000421	0.00105	1	03/17/2020 01:52	WG1445122
Toluene	U		0.00131	0.00526	1	03/17/2020 01:52	WG1445122
Ethylbenzene	U		0.000557	0.00263	1	03/17/2020 01:52	WG1445122
Total Xylenes	U		0.00503	0.00684	1	03/17/2020 01:52	WG1445122
(S) Toluene-d8	102			75.0-131		03/17/2020 01:52	WG1445122
(S) 4-Bromofluorobenzene	109			67.0-138		03/17/2020 01:52	WG1445122
(S) 1,2-Dichloroethane-d4	115			70.0-130		03/17/2020 01:52	WG1445122

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.69	4.21	1	03/17/2020 21:00	WG1445151
C28-C40 Oil Range	4.04	J	0.288	4.21	1	03/17/2020 21:00	WG1445151
(S) o-Terphenyl	64.4			18.0-148		03/17/2020 21:00	WG1445151

Collected date/time: 03/05/20 12:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	91.1		1	03/19/2020 01:48	WG1445642

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	628		0.873	11.0	1	03/18/2020 10:55	WG1444780

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0649	B J	0.0238	0.110	1	03/17/2020 02:10	WG1445119
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	93.5			77.0-120		03/17/2020 02:10	WG1445119

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000457	0.00114	1.04	03/17/2020 02:13	WG1445122
Toluene	U		0.00143	0.00571	1.04	03/17/2020 02:13	WG1445122
Ethylbenzene	U		0.000605	0.00285	1.04	03/17/2020 02:13	WG1445122
Total Xylenes	U		0.00546	0.00742	1.04	03/17/2020 02:13	WG1445122
(S) <i>Toluene-d8</i>	99.4			75.0-131		03/17/2020 02:13	WG1445122
(S) <i>4-Bromofluorobenzene</i>	113			67.0-138		03/17/2020 02:13	WG1445122
(S) <i>1,2-Dichloroethane-d4</i>	115			70.0-130		03/17/2020 02:13	WG1445122

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.77	4.39	1	03/17/2020 21:13	WG1445151
C28-C40 Oil Range	3.13	J	0.301	4.39	1	03/17/2020 21:13	WG1445151
(S) <i>o</i> -Terphenyl	70.9			18.0-148		03/17/2020 21:13	WG1445151

Collected date/time: 03/05/20 12:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	90.7		1	03/19/2020 01:48	WG1445642

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	2630		4.39	55.1	5	03/18/2020 11:14	WG1444780

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0670	J	0.0239	0.110	1	03/17/2020 13:59	WG1445448
(S) a,a,a-Trifluorotoluene(FID)	92.1			77.0-120		03/17/2020 13:59	WG1445448

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000441	0.00110	1	03/17/2020 02:33	WG1445122
Toluene	U		0.00138	0.00551	1	03/17/2020 02:33	WG1445122
Ethylbenzene	U		0.000584	0.00276	1	03/17/2020 02:33	WG1445122
Total Xylenes	U		0.00527	0.00717	1	03/17/2020 02:33	WG1445122
(S) Toluene-d8	102			75.0-131		03/17/2020 02:33	WG1445122
(S) 4-Bromofluorobenzene	112			67.0-138		03/17/2020 02:33	WG1445122
(S) 1,2-Dichloroethane-d4	118			70.0-130		03/17/2020 02:33	WG1445122

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.78	4.41	1	03/17/2020 20:35	WG1445151
C28-C40 Oil Range	7.83		0.302	4.41	1	03/17/2020 20:35	WG1445151
(S) o-Terphenyl	68.8			18.0-148		03/17/2020 20:35	WG1445151

Collected date/time: 03/05/20 12:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.6		1	03/19/2020 01:48	WG1445642

- 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	233		0.877	11.0	1	03/18/2020 11:23	WG1444780

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0347	B J	0.0240	0.110	1	03/17/2020 02:52	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	93.8			77.0-120		03/17/2020 02:52	WG1445119

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		0.000442	0.00110	1	03/17/2020 02:53	WG1445122
Toluene	U		0.00138	0.00552	1	03/17/2020 02:53	WG1445122
Ethylbenzene	U		0.000585	0.00276	1	03/17/2020 02:53	WG1445122
Total Xylenes	U		0.00528	0.00717	1	03/17/2020 02:53	WG1445122
(S) Toluene-d8	102			75.0-131		03/17/2020 02:53	WG1445122
(S) 4-Bromofluorobenzene	113			67.0-138		03/17/2020 02:53	WG1445122
(S) 1,2-Dichloroethane-d4	114			70.0-130		03/17/2020 02:53	WG1445122

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.78	4.42	1	03/17/2020 20:48	WG1445151
C28-C40 Oil Range	1.56	J	0.302	4.42	1	03/17/2020 20:48	WG1445151
(S) o-Terphenyl	65.5			18.0-148		03/17/2020 20:48	WG1445151

Collected date/time: 03/05/20 13:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.0		1	03/19/2020 01:36	WG1445643

- 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	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	38.2		0.820	10.3	1	03/18/2020 11:33	WG1444780

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	0.0321	B J	0.0224	0.103	1	03/17/2020 03:12	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120		03/17/2020 03:12	WG1445119

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		0.000412	0.00103	1	03/17/2020 03:13	WG1445122
Toluene	U		0.00129	0.00515	1	03/17/2020 03:13	WG1445122
Ethylbenzene	U		0.000546	0.00258	1	03/17/2020 03:13	WG1445122
Total Xylenes	U		0.00493	0.00670	1	03/17/2020 03:13	WG1445122
(S) Toluene-d8	104			75.0-131		03/17/2020 03:13	WG1445122
(S) 4-Bromofluorobenzene	120			67.0-138		03/17/2020 03:13	WG1445122
(S) 1,2-Dichloroethane-d4	113			70.0-130		03/17/2020 03:13	WG1445122

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	133		33.2	82.5	20	03/17/2020 23:32	WG1445151
C28-C40 Oil Range	391		5.65	82.5	20	03/17/2020 23:32	WG1445151
(S) o-Terphenyl	0.000	J7		18.0-148		03/17/2020 23:32	WG1445151

Collected date/time: 03/05/20 13:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	90.6		1	03/19/2020 01:36	WG1445643

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	84.6		0.878	11.0	1	03/18/2020 11:42	WG1444780

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0240	0.110	1	03/17/2020 14:20	WG1445448
(S) a,a,a-Trifluorotoluene(FID)	94.0			77.0-120		03/17/2020 14:20	WG1445448

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000442	0.00110	1	03/17/2020 03:34	WG1445122
Toluene	U		0.00138	0.00552	1	03/17/2020 03:34	WG1445122
Ethylbenzene	U		0.000585	0.00276	1	03/17/2020 03:34	WG1445122
Total Xylenes	U		0.00528	0.00717	1	03/17/2020 03:34	WG1445122
(S) Toluene-d8	103			75.0-131		03/17/2020 03:34	WG1445122
(S) 4-Bromofluorobenzene	113			67.0-138		03/17/2020 03:34	WG1445122
(S) 1,2-Dichloroethane-d4	107			70.0-130		03/17/2020 03:34	WG1445122

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	309		35.5	88.3	20	03/17/2020 23:57	WG1445151
C28-C40 Oil Range	793		6.05	88.3	20	03/17/2020 23:57	WG1445151
(S) o-Terphenyl	0.000	J7		18.0-148		03/17/2020 23:57	WG1445151

Collected date/time: 03/05/20 11:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.9		1	03/19/2020 01:36	WG1445643

- 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	2.50	J	0.829	10.4	1	03/18/2020 11:52	WG1444780

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0312	B J	0.0226	0.104	1	03/17/2020 03:53	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	95.4			77.0-120		03/17/2020 03:53	WG1445119

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		0.000417	0.00104	1	03/17/2020 03:54	WG1445122
Toluene	U		0.00130	0.00521	1	03/17/2020 03:54	WG1445122
Ethylbenzene	U		0.000553	0.00261	1	03/17/2020 03:54	WG1445122
Total Xylenes	U		0.00498	0.00678	1	03/17/2020 03:54	WG1445122
(S) Toluene-d8	104			75.0-131		03/17/2020 03:54	WG1445122
(S) 4-Bromofluorobenzene	117			67.0-138		03/17/2020 03:54	WG1445122
(S) 1,2-Dichloroethane-d4	112			70.0-130		03/17/2020 03:54	WG1445122

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	9.00		1.68	4.17	1	03/18/2020 22:18	WG1445151
C28-C40 Oil Range	33.3		0.286	4.17	1	03/18/2020 22:18	WG1445151
(S) o-Terphenyl	73.7			18.0-148		03/18/2020 22:18	WG1445151

Collected date/time: 03/05/20 11:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.6		1	03/19/2020 01:36	WG1445643

- 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	209		0.841	10.6	1	03/18/2020 12:01	WG1444780

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	03/17/2020 14:41	WG1445448
(S) a,a,a-Trifluorotoluene(FID)	94.3			77.0-120		03/17/2020 14:41	WG1445448

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		0.000423	0.00106	1	03/17/2020 04:14	WG1445122
Toluene	U		0.00132	0.00529	1	03/17/2020 04:14	WG1445122
Ethylbenzene	U		0.000561	0.00264	1	03/17/2020 04:14	WG1445122
Total Xylenes	U		0.00506	0.00687	1	03/17/2020 04:14	WG1445122
(S) Toluene-d8	102			75.0-131		03/17/2020 04:14	WG1445122
(S) 4-Bromofluorobenzene	115			67.0-138		03/17/2020 04:14	WG1445122
(S) 1,2-Dichloroethane-d4	110			70.0-130		03/17/2020 04:14	WG1445122

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.18	J	1.70	4.23	1	03/18/2020 19:46	WG1445151
C28-C40 Oil Range	8.05		0.290	4.23	1	03/18/2020 19:46	WG1445151
(S) o-Terphenyl	69.3			18.0-148		03/18/2020 19:46	WG1445151

Collected date/time: 03/05/20 11:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	97.8		1	03/19/2020 01:36	WG1445643

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	19.2		0.813	10.2	1	03/18/2020 12:49	WG1444780

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0273	B J	0.0222	0.102	1	03/17/2020 04:34	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	95.4			77.0-120		03/17/2020 04:34	WG1445119

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000409	0.00102	1	03/17/2020 04:35	WG1445122
Toluene	U		0.00128	0.00511	1	03/17/2020 04:35	WG1445122
Ethylbenzene	U		0.000542	0.00256	1	03/17/2020 04:35	WG1445122
Total Xylenes	U		0.00489	0.00665	1	03/17/2020 04:35	WG1445122
(S) Toluene-d8	102			75.0-131		03/17/2020 04:35	WG1445122
(S) 4-Bromofluorobenzene	115			67.0-138		03/17/2020 04:35	WG1445122
(S) 1,2-Dichloroethane-d4	115			70.0-130		03/17/2020 04:35	WG1445122

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	23.8		1.65	4.09	1	03/18/2020 19:59	WG1445151
C28-C40 Oil Range	63.4		0.280	4.09	1	03/18/2020 19:59	WG1445151
(S) o-Terphenyl	61.3			18.0-148		03/18/2020 19:59	WG1445151

Collected date/time: 03/05/20 11:30

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	96.1		1	03/19/2020 01:36	WG1445643

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	33.7		0.827	10.4	1	03/18/2020 12:58	WG1444780

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0362	B J	0.0226	0.104	1	03/17/2020 04:55	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120		03/17/2020 04:55	WG1445119

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000416	0.00104	1	03/17/2020 04:55	WG1445122
Toluene	U		0.00130	0.00520	1	03/17/2020 04:55	WG1445122
Ethylbenzene	U		0.000551	0.00260	1	03/17/2020 04:55	WG1445122
Total Xylenes	U		0.00497	0.00676	1	03/17/2020 04:55	WG1445122
(S) Toluene-d8	103			75.0-131		03/17/2020 04:55	WG1445122
(S) 4-Bromofluorobenzene	119			67.0-138		03/17/2020 04:55	WG1445122
(S) 1,2-Dichloroethane-d4	113			70.0-130		03/17/2020 04:55	WG1445122

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	18.5		1.67	4.16	1	03/17/2020 21:26	WG1445151
C28-C40 Oil Range	6.18		0.285	4.16	1	03/17/2020 21:26	WG1445151
(S) o-Terphenyl	40.4			18.0-148		03/17/2020 21:26	WG1445151

Collected date/time: 03/05/20 11:50

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.4		1	03/19/2020 01:36	WG1445643

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	569		4.40	55.3	5	03/18/2020 13:08	WG1444780

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0265	B J	0.0240	0.111	1	03/17/2020 05:15	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	95.0			77.0-120		03/17/2020 05:15	WG1445119

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000442	0.00111	1	03/17/2020 05:15	WG1445122
Toluene	U		0.00138	0.00553	1	03/17/2020 05:15	WG1445122
Ethylbenzene	U		0.000586	0.00277	1	03/17/2020 05:15	WG1445122
Total Xylenes	U		0.00529	0.00719	1	03/17/2020 05:15	WG1445122
(S) Toluene-d8	103			75.0-131		03/17/2020 05:15	WG1445122
(S) 4-Bromofluorobenzene	115			67.0-138		03/17/2020 05:15	WG1445122
(S) 1,2-Dichloroethane-d4	116			70.0-130		03/17/2020 05:15	WG1445122

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1250		35.6	88.5	20	03/18/2020 00:15	WG1445151
C28-C40 Oil Range	969		6.06	88.5	20	03/18/2020 00:15	WG1445151
(S) o-Terphenyl	0.000	J7		18.0-148		03/18/2020 00:15	WG1445151

Collected date/time: 03/05/20 12:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	93.4		1	03/19/2020 01:36	WG1445643

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	722		0.851	10.7	1	03/18/2020 13:17	WG1444780

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0251	J	0.0232	0.107	1	03/17/2020 15:01	WG1445448
(S) a,a,a-Trifluorotoluene(FID)	95.1			77.0-120		03/17/2020 15:01	WG1445448

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000428	0.00107	1	03/17/2020 05:35	WG1445122
Toluene	U		0.00134	0.00535	1	03/17/2020 05:35	WG1445122
Ethylbenzene	U		0.000568	0.00268	1	03/17/2020 05:35	WG1445122
Total Xylenes	U		0.00512	0.00696	1	03/17/2020 05:35	WG1445122
(S) Toluene-d8	103			75.0-131		03/17/2020 05:35	WG1445122
(S) 4-Bromofluorobenzene	114			67.0-138		03/17/2020 05:35	WG1445122
(S) 1,2-Dichloroethane-d4	114			70.0-130		03/17/2020 05:35	WG1445122

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	215		1.72	4.28	1	03/17/2020 21:38	WG1445151
C28-C40 Oil Range	156		0.293	4.28	1	03/17/2020 21:38	WG1445151
(S) o-Terphenyl	71.0			18.0-148		03/17/2020 21:38	WG1445151

Collected date/time: 03/05/20 13:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.7		1	03/19/2020 01:36	WG1445643

- 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	1.38	J	0.830	10.4	1	03/18/2020 13:27	WG1444780

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0323	B J	0.0227	0.104	1	03/17/2020 07:01	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	96.4			77.0-120		03/17/2020 07:01	WG1445119

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		0.000418	0.00104	1	03/17/2020 05:56	WG1445122
Toluene	U		0.00131	0.00522	1	03/17/2020 05:56	WG1445122
Ethylbenzene	U		0.000554	0.00261	1	03/17/2020 05:56	WG1445122
Total Xylenes	U		0.00499	0.00679	1	03/17/2020 05:56	WG1445122
(S) Toluene-d8	102			75.0-131		03/17/2020 05:56	WG1445122
(S) 4-Bromofluorobenzene	115			67.0-138		03/17/2020 05:56	WG1445122
(S) 1,2-Dichloroethane-d4	107			70.0-130		03/17/2020 05:56	WG1445122

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.54	J	1.68	4.18	1	03/19/2020 23:30	WG1446556
C28-C40 Oil Range	9.51		0.286	4.18	1	03/19/2020 23:30	WG1446556
(S) o-Terphenyl	66.8			18.0-148		03/19/2020 23:30	WG1446556

Collected date/time: 03/05/20 13:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.6		1	03/19/2020 01:36	WG1445643

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	3.41	J	0.832	10.5	1	03/18/2020 13:36	WG1444780

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0247	B J	0.0227	0.105	1	03/17/2020 07:22	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	95.3			77.0-120		03/17/2020 07:22	WG1445119

- 8 Al
- 9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000419	0.00105	1	03/17/2020 06:16	WG1445122
Toluene	U		0.00131	0.00523	1	03/17/2020 06:16	WG1445122
Ethylbenzene	U		0.000555	0.00262	1	03/17/2020 06:16	WG1445122
Total Xylenes	U		0.00500	0.00680	1	03/17/2020 06:16	WG1445122
(S) Toluene-d8	103			75.0-131		03/17/2020 06:16	WG1445122
(S) 4-Bromofluorobenzene	119			67.0-138		03/17/2020 06:16	WG1445122
(S) 1,2-Dichloroethane-d4	110			70.0-130		03/17/2020 06:16	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.68	4.19	1	03/19/2020 21:32	WG1446556
C28-C40 Oil Range	3.52	J	0.287	4.19	1	03/19/2020 21:32	WG1446556
(S) o-Terphenyl	66.5			18.0-148		03/19/2020 21:32	WG1446556

Collected date/time: 03/05/20 11:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.4		1	03/19/2020 01:27	WG1445647

- 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	1.27	J	0.851	10.7	1	03/18/2020 13:46	WG1444780

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0324	B J	0.0232	0.107	1	03/17/2020 07:42	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120		03/17/2020 07:42	WG1445119

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		0.000428	0.00107	1	03/17/2020 06:36	WG1445122
Toluene	U		0.00134	0.00535	1	03/17/2020 06:36	WG1445122
Ethylbenzene	U		0.000567	0.00268	1	03/17/2020 06:36	WG1445122
Total Xylenes	U		0.00512	0.00696	1	03/17/2020 06:36	WG1445122
(S) Toluene-d8	101			75.0-131		03/17/2020 06:36	WG1445122
(S) 4-Bromofluorobenzene	115			67.0-138		03/17/2020 06:36	WG1445122
(S) 1,2-Dichloroethane-d4	111			70.0-130		03/17/2020 06:36	WG1445122

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.72	4.28	1	03/19/2020 21:45	WG1446556
C28-C40 Oil Range	3.00	J	0.293	4.28	1	03/19/2020 21:45	WG1446556
(S) o-Terphenyl	62.9			18.0-148		03/19/2020 21:45	WG1446556

Collected date/time: 03/05/20 11:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.2		1	03/19/2020 01:27	WG1445647

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	24.0		0.862	10.8	1	03/18/2020 13:55	WG1444780

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0788	B J	0.0235	0.108	1	03/17/2020 08:03	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	92.8			77.0-120		03/17/2020 08:03	WG1445119

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		0.000434	0.00108	1	03/17/2020 06:56	WG1445122
Toluene	U		0.00136	0.00542	1	03/17/2020 06:56	WG1445122
Ethylbenzene	U		0.000575	0.00271	1	03/17/2020 06:56	WG1445122
Total Xylenes	U		0.00518	0.00705	1	03/17/2020 06:56	WG1445122
(S) Toluene-d8	103			75.0-131		03/17/2020 06:56	WG1445122
(S) 4-Bromofluorobenzene	114			67.0-138		03/17/2020 06:56	WG1445122
(S) 1,2-Dichloroethane-d4	106			70.0-130		03/17/2020 06:56	WG1445122

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.75	4.34	1	03/19/2020 21:57	WG1446556
C28-C40 Oil Range	4.33	J	0.297	4.34	1	03/19/2020 21:57	WG1446556
(S) o-Terphenyl	63.0			18.0-148		03/19/2020 21:57	WG1446556

Collected date/time: 03/05/20 11:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.5		1	03/19/2020 01:27	WG1445647

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	3.62	J	0.841	10.6	1	03/18/2020 14:24	WG1444780

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0546	B J	0.0230	0.106	1	03/17/2020 01:23	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.0			77.0-120		03/17/2020 01:23	WG1445120

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000423	0.00106	1	03/17/2020 15:22	WG1445259
Toluene	U		0.00132	0.00529	1	03/17/2020 15:22	WG1445259
Ethylbenzene	U		0.000561	0.00264	1	03/17/2020 15:22	WG1445259
Total Xylenes	U		0.00506	0.00688	1	03/17/2020 15:22	WG1445259
(S) Toluene-d8	105			75.0-131		03/17/2020 15:22	WG1445259
(S) 4-Bromofluorobenzene	103			67.0-138		03/17/2020 15:22	WG1445259
(S) 1,2-Dichloroethane-d4	99.2			70.0-130		03/17/2020 15:22	WG1445259

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	16.4		1.70	4.23	1	03/20/2020 07:45	WG1446556
C28-C40 Oil Range	53.2		0.290	4.23	1	03/20/2020 07:45	WG1446556
(S) o-Terphenyl	47.2			18.0-148		03/20/2020 07:45	WG1446556

Collected date/time: 03/05/20 11:30

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.5		1	03/19/2020 01:27	WG1445647

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	1950		4.55	57.1	5	03/18/2020 14:34	WG1444780

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0493	BJ	0.0248	0.114	1	03/17/2020 01:44	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.7			77.0-120		03/17/2020 01:44	WG1445120

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000457	0.00114	1	03/17/2020 15:41	WG1445259
Toluene	U		0.00143	0.00571	1	03/17/2020 15:41	WG1445259
Ethylbenzene	U		0.000606	0.00286	1	03/17/2020 15:41	WG1445259
Total Xylenes	U		0.00546	0.00743	1	03/17/2020 15:41	WG1445259
(S) Toluene-d8	105			75.0-131		03/17/2020 15:41	WG1445259
(S) 4-Bromofluorobenzene	99.6			67.0-138		03/17/2020 15:41	WG1445259
(S) 1,2-Dichloroethane-d4	100			70.0-130		03/17/2020 15:41	WG1445259

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	8.71		1.84	4.57	1	03/19/2020 23:56	WG1446556
C28-C40 Oil Range	18.5		0.313	4.57	1	03/19/2020 23:56	WG1446556
(S) o-Terphenyl	67.5			18.0-148		03/19/2020 23:56	WG1446556

Collected date/time: 03/05/20 11:50

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	90.9		1	03/19/2020 01:27	WG1445647

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	1100		4.38	55.0	5	03/18/2020 14:43	WG1444780

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0522	B J	0.0239	0.110	1	03/17/2020 02:04	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.3			77.0-120		03/17/2020 02:04	WG1445120

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000440	0.00110	1	03/17/2020 16:00	WG1445259
Toluene	U		0.00138	0.00550	1	03/17/2020 16:00	WG1445259
Ethylbenzene	U		0.000583	0.00275	1	03/17/2020 16:00	WG1445259
Total Xylenes	U		0.00526	0.00715	1	03/17/2020 16:00	WG1445259
(S) Toluene-d8	105			75.0-131		03/17/2020 16:00	WG1445259
(S) 4-Bromofluorobenzene	98.8			67.0-138		03/17/2020 16:00	WG1445259
(S) 1,2-Dichloroethane-d4	101			70.0-130		03/17/2020 16:00	WG1445259

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	2.45	J	1.77	4.40	1	03/19/2020 22:40	WG1446556
C28-C40 Oil Range	8.45		0.302	4.40	1	03/19/2020 22:40	WG1446556
(S) o-Terphenyl	68.2			18.0-148		03/19/2020 22:40	WG1446556

Collected date/time: 03/05/20 13:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.6		1	03/19/2020 01:27	WG1445647

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	446		0.832	10.5	1	03/18/2020 14:53	WG1444780

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0392	<u>BJ</u>	0.0227	0.105	1	03/17/2020 02:25	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.6			77.0-120		03/17/2020 02:25	WG1445120

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000419	0.00105	1	03/17/2020 16:19	WG1445259
Toluene	U		0.00131	0.00523	1	03/17/2020 16:19	WG1445259
Ethylbenzene	U		0.000555	0.00262	1	03/17/2020 16:19	WG1445259
Total Xylenes	U		0.00500	0.00680	1	03/17/2020 16:19	WG1445259
(S) Toluene-d8	107			75.0-131		03/17/2020 16:19	WG1445259
(S) 4-Bromofluorobenzene	100			67.0-138		03/17/2020 16:19	WG1445259
(S) 1,2-Dichloroethane-d4	98.8			70.0-130		03/17/2020 16:19	WG1445259

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1.76	<u>J</u>	1.68	4.19	1	03/20/2020 07:19	WG1446556
C28-C40 Oil Range	1.61	<u>J</u>	0.287	4.19	1	03/20/2020 07:19	WG1446556
(S) o-Terphenyl	74.3			18.0-148		03/20/2020 07:19	WG1446556

Collected date/time: 03/05/20 13:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.7		1	03/19/2020 01:27	WG1445647

- 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	3.69	J	0.839	10.6	1	03/18/2020 15:02	WG1444780

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0548	B J	0.0229	0.106	1	03/17/2020 18:13	WG1445660
(S) a,a,a-Trifluorotoluene(FID)	96.5			77.0-120		03/17/2020 18:13	WG1445660

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		0.000422	0.00106	1	03/17/2020 16:38	WG1445259
Toluene	U		0.00132	0.00528	1	03/17/2020 16:38	WG1445259
Ethylbenzene	U		0.000560	0.00264	1	03/17/2020 16:38	WG1445259
Total Xylenes	U		0.00505	0.00686	1	03/17/2020 16:38	WG1445259
(S) Toluene-d8	105			75.0-131		03/17/2020 16:38	WG1445259
(S) 4-Bromofluorobenzene	98.1			67.0-138		03/17/2020 16:38	WG1445259
(S) 1,2-Dichloroethane-d4	101			70.0-130		03/17/2020 16:38	WG1445259

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	9.98		1.70	4.22	1	03/20/2020 00:59	WG1446556
C28-C40 Oil Range	28.0		0.289	4.22	1	03/20/2020 00:59	WG1446556
(S) o-Terphenyl	62.5			18.0-148		03/20/2020 00:59	WG1446556

Collected date/time: 03/06/20 11:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.1		1	03/19/2020 01:27	WG1445647

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	1780		9.13	115	10	03/18/2020 00:06	WG1445291

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0422	B J	0.0249	0.115	1	03/17/2020 06:54	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/17/2020 06:54	WG1445120

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		0.000459	0.00115	1	03/17/2020 16:57	WG1445259
Toluene	U		0.00144	0.00574	1	03/17/2020 16:57	WG1445259
Ethylbenzene	U		0.000608	0.00287	1	03/17/2020 16:57	WG1445259
Total Xylenes	U		0.00549	0.00746	1	03/17/2020 16:57	WG1445259
(S) Toluene-d8	106			75.0-131		03/17/2020 16:57	WG1445259
(S) 4-Bromofluorobenzene	100			67.0-138		03/17/2020 16:57	WG1445259
(S) 1,2-Dichloroethane-d4	100			70.0-130		03/17/2020 16:57	WG1445259

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	7.51		1.85	4.59	1	03/20/2020 00:08	WG1446556
C28-C40 Oil Range	16.9		0.315	4.59	1	03/20/2020 00:08	WG1446556
(S) o-Terphenyl	66.7			18.0-148		03/20/2020 00:08	WG1446556

Collected date/time: 03/06/20 11:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.4		1	03/19/2020 01:27	WG1445647

- 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	40.3		0.816	10.3	1	03/18/2020 00:15	WG1445291

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0408	B J	0.0223	0.103	1	03/17/2020 07:14	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/17/2020 07:14	WG1445120

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		0.000411	0.00103	1	03/17/2020 17:16	WG1445259
Toluene	U		0.00128	0.00514	1	03/17/2020 17:16	WG1445259
Ethylbenzene	U		0.000544	0.00257	1	03/17/2020 17:16	WG1445259
Total Xylenes	U		0.00491	0.00668	1	03/17/2020 17:16	WG1445259
(S) Toluene-d8	106			75.0-131		03/17/2020 17:16	WG1445259
(S) 4-Bromofluorobenzene	96.7			67.0-138		03/17/2020 17:16	WG1445259
(S) 1,2-Dichloroethane-d4	102			70.0-130		03/17/2020 17:16	WG1445259

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.19	J	1.65	4.11	1	03/19/2020 23:05	WG1446556
C28-C40 Oil Range	7.68		0.281	4.11	1	03/19/2020 23:05	WG1446556
(S) o-Terphenyl	66.0			18.0-148		03/19/2020 23:05	WG1446556

Collected date/time: 03/06/20 11:30

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	95.2		1	03/19/2020 01:04	WG1445648

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	174		4.18	52.5	5	03/18/2020 00:24	WG1445291

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0377	B J	0.0228	0.105	1	03/17/2020 07:35	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/17/2020 07:35	WG1445120

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000420	0.00105	1	03/17/2020 17:35	WG1445259
Toluene	U		0.00131	0.00525	1	03/17/2020 17:35	WG1445259
Ethylbenzene	U		0.000556	0.00262	1	03/17/2020 17:35	WG1445259
Total Xylenes	U		0.00502	0.00682	1	03/17/2020 17:35	WG1445259
(S) Toluene-d8	104			75.0-131		03/17/2020 17:35	WG1445259
(S) 4-Bromofluorobenzene	100			67.0-138		03/17/2020 17:35	WG1445259
(S) 1,2-Dichloroethane-d4	99.3			70.0-130		03/17/2020 17:35	WG1445259

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.69	4.20	1	03/20/2020 07:32	WG1446556
C28-C40 Oil Range	3.30	J	0.288	4.20	1	03/20/2020 07:32	WG1446556
(S) o-Terphenyl	60.6			18.0-148		03/20/2020 07:32	WG1446556

Collected date/time: 03/06/20 11:50

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.1		1	03/19/2020 01:04	WG1445648

- 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	1080		4.57	57.4	5	03/18/2020 00:34	WG1445291

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0556	B J	0.0249	0.115	1	03/17/2020 18:34	WG1445660
(S) a,a,a-Trifluorotoluene(FID)	95.1			77.0-120		03/17/2020 18:34	WG1445660

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		0.000459	0.00115	1	03/17/2020 17:54	WG1445259
Toluene	U		0.00144	0.00574	1	03/17/2020 17:54	WG1445259
Ethylbenzene	U		0.000609	0.00287	1	03/17/2020 17:54	WG1445259
Total Xylenes	U		0.00549	0.00746	1	03/17/2020 17:54	WG1445259
(S) Toluene-d8	104			75.0-131		03/17/2020 17:54	WG1445259
(S) 4-Bromofluorobenzene	96.8			67.0-138		03/17/2020 17:54	WG1445259
(S) 1,2-Dichloroethane-d4	98.9			70.0-130		03/17/2020 17:54	WG1445259

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	324		37.0	91.9	20	03/20/2020 02:28	WG1446556
C28-C40 Oil Range	633		6.29	91.9	20	03/20/2020 02:28	WG1446556
(S) o-Terphenyl	67.4	J7		18.0-148		03/20/2020 02:28	WG1446556

Collected date/time: 03/06/20 12:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.8		1	03/19/2020 01:04	WG1445648

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	1580		4.43	55.7	5	03/18/2020 00:53	WG1445291

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0442	B J	0.0242	0.111	1	03/17/2020 08:16	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	93.0			77.0-120		03/17/2020 08:16	WG1445120

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000445	0.00111	1	03/17/2020 18:13	WG1445259
Toluene	U		0.00139	0.00557	1	03/17/2020 18:13	WG1445259
Ethylbenzene	U		0.000590	0.00278	1	03/17/2020 18:13	WG1445259
Total Xylenes	U		0.00532	0.00724	1	03/17/2020 18:13	WG1445259
(S) Toluene-d8	104			75.0-131		03/17/2020 18:13	WG1445259
(S) 4-Bromofluorobenzene	99.3			67.0-138		03/17/2020 18:13	WG1445259
(S) 1,2-Dichloroethane-d4	99.1			70.0-130		03/17/2020 18:13	WG1445259

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	416		35.9	89.1	20	03/21/2020 04:09	WG1447675
C28-C40 Oil Range	725		6.10	89.1	20	03/21/2020 04:09	WG1447675
(S) o-Terphenyl	60.3	J7		18.0-148		03/21/2020 04:09	WG1447675

Collected date/time: 03/06/20 12:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	93.0		1	03/19/2020 01:04	WG1445648

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	1360		4.28	53.8	5	03/18/2020 01:02	WG1445291

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0372	B J	0.0233	0.108	1	03/17/2020 18:54	WG1445660
(S) a,a,a-Trifluorotoluene(FID)	97.3			77.0-120		03/17/2020 18:54	WG1445660

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000430	0.00108	1	03/17/2020 18:32	WG1445259
Toluene	U		0.00134	0.00538	1	03/17/2020 18:32	WG1445259
Ethylbenzene	U		0.000570	0.00269	1	03/17/2020 18:32	WG1445259
Total Xylenes	U		0.00514	0.00699	1	03/17/2020 18:32	WG1445259
(S) Toluene-d8	107			75.0-131		03/17/2020 18:32	WG1445259
(S) 4-Bromofluorobenzene	102			67.0-138		03/17/2020 18:32	WG1445259
(S) 1,2-Dichloroethane-d4	99.3			70.0-130		03/17/2020 18:32	WG1445259

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	6.49		1.73	4.30	1	03/21/2020 13:28	WG1447675
C28-C40 Oil Range	7.75		0.295	4.30	1	03/21/2020 13:28	WG1447675
(S) o-Terphenyl	55.6			18.0-148		03/21/2020 13:28	WG1447675

Collected date/time: 03/06/20 12:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.7		1	03/19/2020 01:04	WG1445648

- 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	1320		4.34	54.5	5	03/18/2020 01:12	WG1445291

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	0.0379	B J	0.0237	0.109	1	03/17/2020 08:57	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.8			77.0-120		03/17/2020 08:57	WG1445120

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		0.000436	0.00109	1	03/17/2020 18:51	WG1445259
Toluene	U		0.00136	0.00545	1	03/17/2020 18:51	WG1445259
Ethylbenzene	U		0.000578	0.00273	1	03/17/2020 18:51	WG1445259
Total Xylenes	U		0.00521	0.00709	1	03/17/2020 18:51	WG1445259
(S) Toluene-d8	105			75.0-131		03/17/2020 18:51	WG1445259
(S) 4-Bromofluorobenzene	98.1			67.0-138		03/17/2020 18:51	WG1445259
(S) 1,2-Dichloroethane-d4	98.2			70.0-130		03/17/2020 18:51	WG1445259

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	24.2		1.76	4.36	1	03/21/2020 02:54	WG1447675
C28-C40 Oil Range	44.4		0.299	4.36	1	03/21/2020 02:54	WG1447675
(S) o-Terphenyl	55.3			18.0-148		03/21/2020 02:54	WG1447675

Collected date/time: 03/06/20 13:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.7		1	03/19/2020 01:04	WG1445648

- 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	381		0.840	10.6	1	03/18/2020 01:40	WG1445291

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0440	BJ	0.0229	0.106	1	03/17/2020 09:17	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.6			77.0-120		03/17/2020 09:17	WG1445120

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		0.000423	0.00106	1	03/17/2020 19:10	WG1445259
Toluene	U		0.00132	0.00528	1	03/17/2020 19:10	WG1445259
Ethylbenzene	U		0.000560	0.00264	1	03/17/2020 19:10	WG1445259
Total Xylenes	U		0.00505	0.00687	1	03/17/2020 19:10	WG1445259
(S) Toluene-d8	105			75.0-131		03/17/2020 19:10	WG1445259
(S) 4-Bromofluorobenzene	101			67.0-138		03/17/2020 19:10	WG1445259
(S) 1,2-Dichloroethane-d4	98.6			70.0-130		03/17/2020 19:10	WG1445259

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	10.3		1.70	4.23	1	03/21/2020 03:07	WG1447675
C28-C40 Oil Range	30.8		0.289	4.23	1	03/21/2020 03:07	WG1447675
(S) o-Terphenyl	71.3			18.0-148		03/21/2020 03:07	WG1447675

Collected date/time: 03/06/20 13:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	89.4		1	03/19/2020 01:04	WG1445648

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	71.0		0.889	11.2	1	03/18/2020 02:09	WG1445291

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0439	B J	0.0243	0.112	1	03/17/2020 09:38	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.0			77.0-120		03/17/2020 09:38	WG1445120

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000447	0.00112	1	03/18/2020 08:16	WG1445267
Toluene	U		0.00140	0.00559	1	03/18/2020 08:16	WG1445267
Ethylbenzene	U		0.000593	0.00280	1	03/18/2020 08:16	WG1445267
Total Xylenes	U		0.00534	0.00727	1	03/18/2020 08:16	WG1445267
(S) Toluene-d8	106			75.0-131		03/18/2020 08:16	WG1445267
(S) 4-Bromofluorobenzene	106			67.0-138		03/18/2020 08:16	WG1445267
(S) 1,2-Dichloroethane-d4	103			70.0-130		03/18/2020 08:16	WG1445267

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	10.6		1.80	4.47	1	03/21/2020 02:41	WG1447675
C28-C40 Oil Range	31.3		0.306	4.47	1	03/21/2020 02:41	WG1447675
(S) o-Terphenyl	58.7			18.0-148		03/21/2020 02:41	WG1447675

Collected date/time: 03/06/20 11:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	89.2		1	03/19/2020 01:04	WG1445648

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	158		0.891	11.2	1	03/18/2020 02:18	WG1445291

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0381	<u>B J</u>	0.0243	0.112	1	03/17/2020 09:58	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	92.0			77.0-120		03/17/2020 09:58	WG1445120

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000448	0.00112	1	03/18/2020 08:37	WG1445267
Toluene	U		0.00140	0.00561	1	03/18/2020 08:37	WG1445267
Ethylbenzene	U		0.000594	0.00280	1	03/18/2020 08:37	WG1445267
Total Xylenes	U		0.00536	0.00729	1	03/18/2020 08:37	WG1445267
(S) Toluene-d8	105			75.0-131		03/18/2020 08:37	WG1445267
(S) 4-Bromofluorobenzene	93.1			67.0-138		03/18/2020 08:37	WG1445267
(S) 1,2-Dichloroethane-d4	114			70.0-130		03/18/2020 08:37	WG1445267

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	726		36.1	89.7	20	03/21/2020 03:57	WG1447675
C28-C40 Oil Range	1260		6.14	89.7	20	03/21/2020 03:57	WG1447675
(S) o-Terphenyl	82.1	<u>J7</u>		18.0-148		03/21/2020 03:57	WG1447675

Collected date/time: 03/06/20 11:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	89.4		1	03/19/2020 01:04	WG1445648

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	40.3		0.889	11.2	1	03/18/2020 02:28	WG1445291

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0422	<u>BJ</u>	0.0243	0.112	1	03/17/2020 10:18	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/17/2020 10:18	WG1445120

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000447	0.00112	1	03/18/2020 08:58	WG1445267
Toluene	U		0.00140	0.00559	1	03/18/2020 08:58	WG1445267
Ethylbenzene	U		0.000593	0.00280	1	03/18/2020 08:58	WG1445267
Total Xylenes	U		0.00535	0.00727	1	03/18/2020 08:58	WG1445267
(S) Toluene-d8	105			75.0-131		03/18/2020 08:58	WG1445267
(S) 4-Bromofluorobenzene	92.9			67.0-138		03/18/2020 08:58	WG1445267
(S) 1,2-Dichloroethane-d4	113			70.0-130		03/18/2020 08:58	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	2.08	<u>J</u>	1.80	4.47	1	03/21/2020 13:02	WG1447675
C28-C40 Oil Range	2.72	<u>J</u>	0.306	4.47	1	03/21/2020 13:02	WG1447675
(S) o-Terphenyl	48.9			18.0-148		03/21/2020 13:02	WG1447675

Collected date/time: 03/06/20 11:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	98.0		1	03/19/2020 01:04	WG1445648

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	69.4		0.811	10.2	1	03/18/2020 02:37	WG1445291

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.189	B	0.0221	0.102	1	03/17/2020 10:39	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.3			77.0-120		03/17/2020 10:39	WG1445120

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000408	0.00102	1	03/18/2020 09:18	WG1445267
Toluene	U		0.00128	0.00510	1	03/18/2020 09:18	WG1445267
Ethylbenzene	U		0.000541	0.00255	1	03/18/2020 09:18	WG1445267
Total Xylenes	U		0.00488	0.00663	1	03/18/2020 09:18	WG1445267
(S) Toluene-d8	108			75.0-131		03/18/2020 09:18	WG1445267
(S) 4-Bromofluorobenzene	94.4			67.0-138		03/18/2020 09:18	WG1445267
(S) 1,2-Dichloroethane-d4	97.8			70.0-130		03/18/2020 09:18	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.64	4.08	1	03/21/2020 00:48	WG1447675
C28-C40 Oil Range	5.53		0.280	4.08	1	03/21/2020 00:48	WG1447675
(S) o-Terphenyl	61.1			18.0-148		03/21/2020 00:48	WG1447675

Collected date/time: 03/06/20 11:30

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.7		1	03/19/2020 00:54	WG1445649

- 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	248		0.822	10.3	1	03/18/2020 02:47	WG1445291

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0414	B J	0.0224	0.103	1	03/17/2020 10:59	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/17/2020 10:59	WG1445120

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		0.000414	0.00103	1	03/18/2020 09:39	WG1445267
Toluene	U		0.00129	0.00517	1	03/18/2020 09:39	WG1445267
Ethylbenzene	U		0.000548	0.00259	1	03/18/2020 09:39	WG1445267
Total Xylenes	U		0.00494	0.00672	1	03/18/2020 09:39	WG1445267
(S) Toluene-d8	107			75.0-131		03/18/2020 09:39	WG1445267
(S) 4-Bromofluorobenzene	94.9			67.0-138		03/18/2020 09:39	WG1445267
(S) 1,2-Dichloroethane-d4	103			70.0-130		03/18/2020 09:39	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.66	4.14	1	03/21/2020 13:15	WG1447675
C28-C40 Oil Range	2.71	J	0.283	4.14	1	03/21/2020 13:15	WG1447675
(S) o-Terphenyl	63.0			18.0-148		03/21/2020 13:15	WG1447675

Collected date/time: 03/06/20 11:50

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.1		1	03/19/2020 00:54	WG1445649

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	4360		17.1	215	20	03/18/2020 02:57	WG1445291

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0496	B J	0.0233	0.107	1	03/17/2020 19:15	WG1445660
(S) a,a,a-Trifluorotoluene(FID)	94.7			77.0-120		03/17/2020 19:15	WG1445660

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000429	0.00107	1	03/18/2020 10:00	WG1445267
Toluene	U		0.00134	0.00537	1	03/18/2020 10:00	WG1445267
Ethylbenzene	U		0.000569	0.00268	1	03/18/2020 10:00	WG1445267
Total Xylenes	U		0.00513	0.00698	1	03/18/2020 10:00	WG1445267
(S) Toluene-d8	107			75.0-131		03/18/2020 10:00	WG1445267
(S) 4-Bromofluorobenzene	92.8			67.0-138		03/18/2020 10:00	WG1445267
(S) 1,2-Dichloroethane-d4	101			70.0-130		03/18/2020 10:00	WG1445267

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	176		34.6	85.9	20	03/21/2020 03:32	WG1447675
C28-C40 Oil Range	390		5.88	85.9	20	03/21/2020 03:32	WG1447675
(S) o-Terphenyl	77.6	J7		18.0-148		03/21/2020 03:32	WG1447675

Collected date/time: 03/06/20 12:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.4		1	03/19/2020 00:54	WG1445649

- 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	3800		17.0	214	20	03/18/2020 03:06	WG1445291

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0451	B J	0.0232	0.107	1	03/17/2020 19:35	WG1445660
(S) a,a,a-Trifluorotoluene(FID)	93.4			77.0-120		03/17/2020 19:35	WG1445660

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		0.000428	0.00107	1	03/18/2020 10:21	WG1445267
Toluene	U		0.00134	0.00535	1	03/18/2020 10:21	WG1445267
Ethylbenzene	U		0.000567	0.00268	1	03/18/2020 10:21	WG1445267
Total Xylenes	U		0.00512	0.00696	1	03/18/2020 10:21	WG1445267
(S) Toluene-d8	107			75.0-131		03/18/2020 10:21	WG1445267
(S) 4-Bromofluorobenzene	95.2			67.0-138		03/18/2020 10:21	WG1445267
(S) 1,2-Dichloroethane-d4	100			70.0-130		03/18/2020 10:21	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	80.3		17.2	42.8	10	03/21/2020 03:44	WG1447675
C28-C40 Oil Range	172		2.93	42.8	10	03/21/2020 03:44	WG1447675
(S) o-Terphenyl	35.5			18.0-148		03/21/2020 03:44	WG1447675

Collected date/time: 03/06/20 12:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.3		1	03/19/2020 00:54	WG1445649

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	6720		17.0	214	20	03/18/2020 03:35	WG1445291

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0327	B J	0.0233	0.107	1	03/20/2020 16:07	WG1447538
(S) a,a,a-Trifluorotoluene(FID)	98.6			77.0-120		03/20/2020 16:07	WG1447538

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		0.000429	0.00107	1	03/18/2020 10:41	WG1445267
Toluene	U		0.00134	0.00536	1	03/18/2020 10:41	WG1445267
Ethylbenzene	U		0.000568	0.00268	1	03/18/2020 10:41	WG1445267
Total Xylenes	U		0.00512	0.00697	1	03/18/2020 10:41	WG1445267
(S) Toluene-d8	107			75.0-131		03/18/2020 10:41	WG1445267
(S) 4-Bromofluorobenzene	93.4			67.0-138		03/18/2020 10:41	WG1445267
(S) 1,2-Dichloroethane-d4	101			70.0-130		03/18/2020 10:41	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	7.34		1.73	4.29	1	03/21/2020 01:00	WG1447675
C28-C40 Oil Range	13.7		0.294	4.29	1	03/21/2020 01:00	WG1447675
(S) o-Terphenyl	53.5			18.0-148		03/21/2020 01:00	WG1447675

Collected date/time: 03/06/20 12:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.2		1	03/19/2020 00:54	WG1445649

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	4830		16.9	212	20	03/18/2020 03:44	WG1445291

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0665	BJ	0.0230	0.106	1	03/17/2020 07:31	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		03/17/2020 07:31	WG1445128

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000424	0.00106	1	03/18/2020 11:02	WG1445267
Toluene	U		0.00133	0.00531	1	03/18/2020 11:02	WG1445267
Ethylbenzene	U		0.000562	0.00265	1	03/18/2020 11:02	WG1445267
Total Xylenes	U		0.00507	0.00690	1	03/18/2020 11:02	WG1445267
(S) Toluene-d8	105			75.0-131		03/18/2020 11:02	WG1445267
(S) 4-Bromofluorobenzene	91.9			67.0-138		03/18/2020 11:02	WG1445267
(S) 1,2-Dichloroethane-d4	103			70.0-130		03/18/2020 11:02	WG1445267

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	6.42		1.71	4.24	1	03/21/2020 01:13	WG1447675
C28-C40 Oil Range	12.8		0.291	4.24	1	03/21/2020 01:13	WG1447675
(S) o-Terphenyl	61.2			18.0-148		03/21/2020 01:13	WG1447675

Collected date/time: 03/06/20 13:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.4		1	03/19/2020 00:54	WG1445649

- 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	295		0.842	10.6	1	03/18/2020 03:54	WG1445291

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0606	B J	0.0230	0.106	1	03/17/2020 07:53	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	95.0			77.0-120		03/17/2020 07:53	WG1445128

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		0.000424	0.00106	1	03/18/2020 11:23	WG1445267
Toluene	U		0.00132	0.00530	1	03/18/2020 11:23	WG1445267
Ethylbenzene	U		0.000561	0.00265	1	03/18/2020 11:23	WG1445267
Total Xylenes	U		0.00506	0.00689	1	03/18/2020 11:23	WG1445267
(S) Toluene-d8	91.5			75.0-131		03/18/2020 11:23	WG1445267
(S) 4-Bromofluorobenzene	95.3			67.0-138		03/18/2020 11:23	WG1445267
(S) 1,2-Dichloroethane-d4	116			70.0-130		03/18/2020 11:23	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	949		85.3	212	50	03/21/2020 03:19	WG1447675
C28-C40 Oil Range	1920		14.5	212	50	03/21/2020 03:19	WG1447675
(S) o-Terphenyl	77.8	J7		18.0-148		03/21/2020 03:19	WG1447675

Collected date/time: 03/06/20 13:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.4		1	03/19/2020 00:54	WG1445649

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	302		0.825	10.4	1	03/18/2020 04:03	WG1445291

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0505	B J	0.0225	0.104	1	03/17/2020 08:25	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		03/17/2020 08:25	WG1445128

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		0.000415	0.00104	1	03/18/2020 11:43	WG1445267
Toluene	U		0.00130	0.00519	1	03/18/2020 11:43	WG1445267
Ethylbenzene	U		0.000550	0.00259	1	03/18/2020 11:43	WG1445267
Total Xylenes	U		0.00496	0.00675	1	03/18/2020 11:43	WG1445267
(S) Toluene-d8	89.9			75.0-131		03/18/2020 11:43	WG1445267
(S) 4-Bromofluorobenzene	89.3			67.0-138		03/18/2020 11:43	WG1445267
(S) 1,2-Dichloroethane-d4	110			70.0-130		03/18/2020 11:43	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1.94	J	1.67	4.15	1	03/21/2020 01:26	WG1447675
C28-C40 Oil Range	7.12		0.284	4.15	1	03/21/2020 01:26	WG1447675
(S) o-Terphenyl	69.6			18.0-148		03/21/2020 01:26	WG1447675

Collected date/time: 03/09/20 11:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	98.9		1	03/19/2020 00:54	WG1445649

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	2.92	<u>B J</u>	0.804	10.1	1	03/18/2020 00:58	WG1445292

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0670	<u>B J</u>	0.0219	0.101	1	03/17/2020 09:13	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	102			77.0-120		03/17/2020 09:13	WG1445128

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000405	0.00101	1	03/18/2020 12:04	WG1445267
Toluene	U		0.00126	0.00506	1	03/18/2020 12:04	WG1445267
Ethylbenzene	U		0.000536	0.00253	1	03/18/2020 12:04	WG1445267
Total Xylenes	U		0.00483	0.00657	1	03/18/2020 12:04	WG1445267
(S) Toluene-d8	101			75.0-131		03/18/2020 12:04	WG1445267
(S) 4-Bromofluorobenzene	92.1			67.0-138		03/18/2020 12:04	WG1445267
(S) 1,2-Dichloroethane-d4	98.6			70.0-130		03/18/2020 12:04	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.63	4.05	1	03/21/2020 01:38	WG1447675
C28-C40 Oil Range	7.73		0.277	4.05	1	03/21/2020 01:38	WG1447675
(S) o-Terphenyl	60.1			18.0-148		03/21/2020 01:38	WG1447675

Collected date/time: 03/09/20 11:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.6		1	03/19/2020 00:54	WG1445649

- 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	3.32	<u>B</u> <u>J</u>	0.823	10.3	1	03/18/2020 01:51	WG1445292

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0556	<u>B</u> <u>J</u>	0.0225	0.103	1	03/17/2020 09:57	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		03/17/2020 09:57	WG1445128

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		0.000414	0.00103	1	03/18/2020 12:24	WG1445267
Toluene	U		0.00129	0.00517	1	03/18/2020 12:24	WG1445267
Ethylbenzene	U		0.000549	0.00259	1	03/18/2020 12:24	WG1445267
Total Xylenes	U		0.00495	0.00673	1	03/18/2020 12:24	WG1445267
(S) Toluene-d8	124			75.0-131		03/18/2020 12:24	WG1445267
(S) 4-Bromofluorobenzene	94.6			67.0-138		03/18/2020 12:24	WG1445267
(S) 1,2-Dichloroethane-d4	115			70.0-130		03/18/2020 12:24	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.79	<u>J</u>	1.67	4.14	1	03/21/2020 02:29	WG1447675
C28-C40 Oil Range	18.2		0.284	4.14	1	03/21/2020 02:29	WG1447675
(S) o-Terphenyl	72.1			18.0-148		03/21/2020 02:29	WG1447675

Collected date/time: 03/09/20 11:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.6		1	03/19/2020 00:54	WG1445649

- 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	2.67	<u>B</u> <u>J</u>	0.806	10.1	1	03/18/2020 02:09	WG1445292

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0675	<u>B</u> <u>J</u>	0.0220	0.101	1	03/17/2020 10:20	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		03/17/2020 10:20	WG1445128

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		0.000406	0.00101	1	03/18/2020 12:45	WG1445267
Toluene	U		0.00127	0.00507	1	03/18/2020 12:45	WG1445267
Ethylbenzene	U		0.000537	0.00253	1	03/18/2020 12:45	WG1445267
Total Xylenes	U		0.00485	0.00659	1	03/18/2020 12:45	WG1445267
(S) Toluene-d8	105			75.0-131		03/18/2020 12:45	WG1445267
(S) 4-Bromofluorobenzene	91.0			67.0-138		03/18/2020 12:45	WG1445267
(S) 1,2-Dichloroethane-d4	104			70.0-130		03/18/2020 12:45	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1.91	<u>J</u>	1.63	4.06	1	03/21/2020 01:51	WG1447675
C28-C40 Oil Range	8.03		0.278	4.06	1	03/21/2020 01:51	WG1447675
(S) o-Terphenyl	67.3			18.0-148		03/21/2020 01:51	WG1447675

Collected date/time: 03/09/20 11:30

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.0		1	03/19/2020 00:43	WG1445651

- 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	3.96	<u>B</u> <u>J</u>	0.828	10.4	1	03/18/2020 02:27	WG1445292

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0729	<u>B</u> <u>J</u>	0.0226	0.104	1	03/17/2020 10:42	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		03/17/2020 10:42	WG1445128

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		0.000417	0.00104	1	03/18/2020 13:06	WG1445267
Toluene	U		0.00130	0.00521	1	03/18/2020 13:06	WG1445267
Ethylbenzene	U		0.000552	0.00261	1	03/18/2020 13:06	WG1445267
Total Xylenes	U		0.00498	0.00677	1	03/18/2020 13:06	WG1445267
(S) Toluene-d8	105			75.0-131		03/18/2020 13:06	WG1445267
(S) 4-Bromofluorobenzene	89.9			67.0-138		03/18/2020 13:06	WG1445267
(S) 1,2-Dichloroethane-d4	115			70.0-130		03/18/2020 13:06	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.15	<u>J</u>	1.68	4.17	1	03/21/2020 02:03	WG1447675
C28-C40 Oil Range	8.49		0.286	4.17	1	03/21/2020 02:03	WG1447675
(S) o-Terphenyl	71.7			18.0-148		03/21/2020 02:03	WG1447675

Collected date/time: 03/09/20 11:50

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	91.9		1	03/19/2020 00:43	WG1445651

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	838		4.33	54.4	5	03/18/2020 02:45	WG1445292

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0648	B J	0.0236	0.109	1	03/17/2020 11:03	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	102			77.0-120		03/17/2020 11:03	WG1445128

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000435	0.00109	1	03/18/2020 13:26	WG1445267
Toluene	U		0.00136	0.00544	1	03/18/2020 13:26	WG1445267
Ethylbenzene	U		0.000577	0.00272	1	03/18/2020 13:26	WG1445267
Total Xylenes	U		0.00520	0.00707	1	03/18/2020 13:26	WG1445267
(S) Toluene-d8	103			75.0-131		03/18/2020 13:26	WG1445267
(S) 4-Bromofluorobenzene	91.1			67.0-138		03/18/2020 13:26	WG1445267
(S) 1,2-Dichloroethane-d4	114			70.0-130		03/18/2020 13:26	WG1445267

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	20.4		1.75	4.35	1	03/21/2020 02:16	WG1447675
C28-C40 Oil Range	36.3		0.298	4.35	1	03/21/2020 02:16	WG1447675
(S) o-Terphenyl	50.5			18.0-148		03/21/2020 02:16	WG1447675

Collected date/time: 03/09/20 12:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.6		1	03/19/2020 00:43	WG1445651

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	432		0.832	10.5	1	03/18/2020 03:03	WG1445292

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	03/17/2020 11:14	WG1445199
(S) a,a,a-Trifluorotoluene(FID)	98.9			77.0-120		03/17/2020 11:14	WG1445199

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		0.000419	0.00105	1	03/18/2020 13:47	WG1445267
Toluene	U		0.00131	0.00523	1	03/18/2020 13:47	WG1445267
Ethylbenzene	U		0.000555	0.00262	1	03/18/2020 13:47	WG1445267
Total Xylenes	U		0.00500	0.00680	1	03/18/2020 13:47	WG1445267
(S) Toluene-d8	103			75.0-131		03/18/2020 13:47	WG1445267
(S) 4-Bromofluorobenzene	90.9			67.0-138		03/18/2020 13:47	WG1445267
(S) 1,2-Dichloroethane-d4	111			70.0-130		03/18/2020 13:47	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.68	4.19	1	03/20/2020 00:31	WG1447038
C28-C40 Oil Range	1.57	J	0.287	4.19	1	03/20/2020 00:31	WG1447038
(S) o-Terphenyl	72.0			18.0-148		03/20/2020 00:31	WG1447038

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 03/09/20 13:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.5		1	03/19/2020 00:43	WG1445651

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	2690		8.78	110	10	03/18/2020 03:57	WG1445292

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0240	0.110	1	03/17/2020 11:38	WG1445199
(S) a,a,a-Trifluorotoluene(FID)	99.9			77.0-120		03/17/2020 11:38	WG1445199

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000442	0.00110	1	03/18/2020 14:07	WG1445267
Toluene	U		0.00138	0.00552	1	03/18/2020 14:07	WG1445267
Ethylbenzene	U		0.000585	0.00276	1	03/18/2020 14:07	WG1445267
Total Xylenes	U		0.00528	0.00718	1	03/18/2020 14:07	WG1445267
(S) Toluene-d8	105			75.0-131		03/18/2020 14:07	WG1445267
(S) 4-Bromofluorobenzene	91.4			67.0-138		03/18/2020 14:07	WG1445267
(S) 1,2-Dichloroethane-d4	113			70.0-130		03/18/2020 14:07	WG1445267

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.78	4.42	1	03/20/2020 00:45	WG1447038
C28-C40 Oil Range	1.60	J	0.303	4.42	1	03/20/2020 00:45	WG1447038
(S) o-Terphenyl	72.6			18.0-148		03/20/2020 00:45	WG1447038

Collected date/time: 03/10/20 10:50

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.6		1	03/19/2020 00:43	WG1445651

- 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	3030		8.50	107	10	03/18/2020 04:15	WG1445292

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	03/17/2020 12:14	WG1445199
(S) a,a,a-Trifluorotoluene(FID)	99.2			77.0-120		03/17/2020 12:14	WG1445199

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		0.000428	0.00107	1	03/18/2020 14:28	WG1445267
Toluene	U		0.00134	0.00534	1	03/18/2020 14:28	WG1445267
Ethylbenzene	U		0.000567	0.00267	1	03/18/2020 14:28	WG1445267
Total Xylenes	U		0.00511	0.00695	1	03/18/2020 14:28	WG1445267
(S) Toluene-d8	107			75.0-131		03/18/2020 14:28	WG1445267
(S) 4-Bromofluorobenzene	93.2			67.0-138		03/18/2020 14:28	WG1445267
(S) 1,2-Dichloroethane-d4	99.1			70.0-130		03/18/2020 14:28	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.46	J	1.72	4.28	1	03/20/2020 10:45	WG1447038
C28-C40 Oil Range	10.8		0.293	4.28	1	03/20/2020 10:45	WG1447038
(S) o-Terphenyl	77.0			18.0-148		03/20/2020 10:45	WG1447038

Collected date/time: 03/10/20 11:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.2		1	03/19/2020 00:43	WG1445651

- 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	42.6		0.853	10.7	1	03/18/2020 04:32	WG1445292

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0233	0.107	1	03/18/2020 17:19	WG1446150
(S) a,a,a-Trifluorotoluene(FID)	97.0			77.0-120		03/18/2020 17:19	WG1446150

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	0.000429	0.00107	1	03/18/2020 14:48	WG1445267
Toluene	U	J3	0.00134	0.00537	1	03/18/2020 14:48	WG1445267
Ethylbenzene	U	J3	0.000569	0.00268	1	03/18/2020 14:48	WG1445267
Total Xylenes	U	J3	0.00513	0.00697	1	03/18/2020 14:48	WG1445267
(S) Toluene-d8	107			75.0-131		03/18/2020 14:48	WG1445267
(S) 4-Bromofluorobenzene	93.1			67.0-138		03/18/2020 14:48	WG1445267
(S) 1,2-Dichloroethane-d4	107			70.0-130		03/18/2020 14:48	WG1445267

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.73	4.29	1	03/20/2020 10:59	WG1447038
C28-C40 Oil Range	5.92		0.294	4.29	1	03/20/2020 10:59	WG1447038
(S) o-Terphenyl	68.7			18.0-148		03/20/2020 10:59	WG1447038

Collected date/time: 03/10/20 11:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.5		1	03/19/2020 00:43	WG1445651

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	3.39	<u>BJ</u>	0.833	10.5	1	03/18/2020 05:26	WG1445292

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	03/17/2020 13:02	WG1445199
(S) a,a,a-Trifluorotoluene(FID)	99.1			77.0-120		03/17/2020 13:02	WG1445199

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		0.000419	0.00105	1	03/17/2020 17:30	WG1445419
Toluene	U		0.00131	0.00524	1	03/17/2020 17:30	WG1445419
Ethylbenzene	U		0.000555	0.00262	1	03/17/2020 17:30	WG1445419
Total Xylenes	U		0.00501	0.00681	1	03/17/2020 17:30	WG1445419
(S) Toluene-d8	102			75.0-131		03/17/2020 17:30	WG1445419
(S) 4-Bromofluorobenzene	100			67.0-138		03/17/2020 17:30	WG1445419
(S) 1,2-Dichloroethane-d4	99.1			70.0-130		03/17/2020 17:30	WG1445419

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	8.83		1.69	4.19	1	03/20/2020 10:32	WG1447038
C28-C40 Oil Range	28.8		0.287	4.19	1	03/20/2020 10:32	WG1447038
(S) o-Terphenyl	73.9			18.0-148		03/20/2020 10:32	WG1447038

Collected date/time: 03/10/20 11:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	93.5		1	03/19/2020 00:43	WG1445651

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	45.7		0.850	10.7	1	03/18/2020 05:44	WG1445292

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	03/17/2020 13:26	WG1445199
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		03/17/2020 13:26	WG1445199

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000428	0.00107	1	03/17/2020 17:49	WG1445419
Toluene	U		0.00134	0.00535	1	03/17/2020 17:49	WG1445419
Ethylbenzene	U		0.000567	0.00267	1	03/17/2020 17:49	WG1445419
Total Xylenes	U		0.00511	0.00695	1	03/17/2020 17:49	WG1445419
(S) Toluene-d8	101			75.0-131		03/17/2020 17:49	WG1445419
(S) 4-Bromofluorobenzene	101			67.0-138		03/17/2020 17:49	WG1445419
(S) 1,2-Dichloroethane-d4	97.3			70.0-130		03/17/2020 17:49	WG1445419

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	2.82	J	1.72	4.28	1	03/20/2020 10:18	WG1447038
C28-C40 Oil Range	16.5		0.293	4.28	1	03/20/2020 10:18	WG1447038
(S) o-Terphenyl	76.7			18.0-148		03/20/2020 10:18	WG1447038

Collected date/time: 03/10/20 11:30

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.9		1	03/19/2020 00:43	WG1445651

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	225		4.80	60.3	5	03/18/2020 06:02	WG1445292

3 Ss

4 Cn

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.177		0.0262	0.121	1	03/17/2020 13:50	WG1445199
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		03/17/2020 13:50	WG1445199

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000483	0.00121	1	03/17/2020 18:08	WG1445419
Toluene	U		0.00151	0.00603	1	03/17/2020 18:08	WG1445419
Ethylbenzene	U		0.000640	0.00302	1	03/17/2020 18:08	WG1445419
Total Xylenes	U		0.00577	0.00784	1	03/17/2020 18:08	WG1445419
(S) Toluene-d8	103			75.0-131		03/17/2020 18:08	WG1445419
(S) 4-Bromofluorobenzene	99.5			67.0-138		03/17/2020 18:08	WG1445419
(S) 1,2-Dichloroethane-d4	98.2			70.0-130		03/17/2020 18:08	WG1445419

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	11.8		1.94	4.83	1	03/20/2020 00:58	WG1447038
C28-C40 Oil Range	14.2		0.331	4.83	1	03/20/2020 00:58	WG1447038
(S) o-Terphenyl	45.0			18.0-148		03/20/2020 00:58	WG1447038

Collected date/time: 03/10/20 12:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.1		1	03/19/2020 00:43	WG1445651

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	545		0.836	10.5	1	03/18/2020 06:20	WG1445292

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	0.0631	<u>B J</u>	0.0228	0.105	1	03/17/2020 09:35	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	103			77.0-120		03/17/2020 09:35	WG1445128

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		0.000420	0.00105	1	03/17/2020 18:27	WG1445419
Toluene	U		0.00131	0.00526	1	03/17/2020 18:27	WG1445419
Ethylbenzene	U		0.000557	0.00263	1	03/17/2020 18:27	WG1445419
Total Xylenes	U		0.00502	0.00683	1	03/17/2020 18:27	WG1445419
(S) Toluene-d8	102			75.0-131		03/17/2020 18:27	WG1445419
(S) 4-Bromofluorobenzene	101			67.0-138		03/17/2020 18:27	WG1445419
(S) 1,2-Dichloroethane-d4	97.9			70.0-130		03/17/2020 18:27	WG1445419

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.69	4.20	1	03/20/2020 09:52	WG1447038
C28-C40 Oil Range	0.557	<u>J</u>	0.288	4.20	1	03/20/2020 09:52	WG1447038
(S) o-Terphenyl	79.6			18.0-148		03/20/2020 09:52	WG1447038

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

W01445642
Total Solids by Method 2540 G-2011

[L1199114-01,02,03,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3510267-1 03/19/20 01:48

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1199114-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-01 03/19/20 01:48 • (DUP) R3510267-3 03/19/20 01:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	95.9	96.0	1	0.114		10

Laboratory Control Sample (LCS)

(LCS) R3510267-2 03/19/20 01:48

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

[L1199114-09,10,11,12,13,14,15,16,17,18](#)

Method Blank (MB)

(MB) R3510263-1 03/19/20 01:36

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1199114-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-12 03/19/20 01:36 • (DUP) R3510263-3 03/19/20 01:36

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	94.6	94.5	1	0.0688		10

Laboratory Control Sample (LCS)

(LCS) R3510263-2 03/19/20 01:36

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

Total Solids by Method 2540 G-2011

[L1199114-19,20,21,22,23,24,25,26,27](#)

Method Blank (MB)

(MB) R3510262-1 03/19/20 01:27

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1199114-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-20 03/19/20 01:27 • (DUP) R3510262-3 03/19/20 01:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	92.2	92.5	1	0.225		10

Laboratory Control Sample (LCS)

(LCS) R3510262-2 03/19/20 01:27

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

W01445648
Total Solids by Method 2540 G-2011

[L1199114-28,29,30,31,32,33,34,35,36,37](#)

Method Blank (MB)

(MB) R3510259-1 03/19/20 01:04

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

L1199114-30 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-30 03/19/20 01:04 • (DUP) R3510259-3 03/19/20 01:04

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	89.8	89.7	1	0.144		10

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3510259-2 03/19/20 01:04

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

[L1199114-38,39,40,41,42,43,44,45,46,47](#)

Method Blank (MB)

(MB) R3510249-1 03/19/20 00:54

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1199114-47 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-47 03/19/20 00:54 • (DUP) R3510249-3 03/19/20 00:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	98.6	98.6	1	0.00943		10

Laboratory Control Sample (LCS)

(LCS) R3510249-2 03/19/20 00:54

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

[L1199114-48,49,50,51,52,53,54,55,56,57](#)

Method Blank (MB)

(MB) R3510245-1 03/19/20 00:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.0160			

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

L1199114-49 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-49 03/19/20 00:43 • (DUP) R3510245-3 03/19/20 00:43

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	91.9	92.0	1	0.0850		10

7 Gl

8 Al

Laboratory Control Sample (LCS)

(LCS) R3510245-2 03/19/20 00:43

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	49.8	99.7	85.0-115	

9 Sc

Wet Chemistry by Method 300.0

[L1199114-01,02,03,04,05](#)

Method Blank (MB)

(MB) R3510072-1 03/18/20 16:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	1.57	<u>J</u>	0.795	10.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1199114-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-05 03/18/20 20:48 • (DUP) R3510072-6 03/18/20 20:58

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	38.0	39.9	1	4.81		20

L1199095-34 Original Sample (OS) • Duplicate (DUP)

(OS) L1199095-34 03/18/20 21:08 • (DUP) R3510072-7 03/18/20 21:17

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	12800	13000	20	1.24		20

Laboratory Control Sample (LCS)

(LCS) R3510072-2 03/18/20 16:12

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	188	94.0	90.0-110	

L1199095-46 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199095-46 03/18/20 18:54 • (MS) R3510072-4 03/18/20 19:04 • (MSD) R3510072-5 03/18/20 19:13

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	500	11200	12900	12900	328	335	1	80.0-120	<u>E V</u>	<u>E V</u>	0.270	20

Wet Chemistry by Method 300.0

L1199114-06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25

Method Blank (MB)

(MB) R3509981-1 03/18/20 10:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		0.795	10.0

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1199114-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-06 03/18/20 10:55 • (DUP) R3509981-3 03/18/20 11:04

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	628	672	1	6.75		20

L1199114-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-25 03/18/20 15:02 • (DUP) R3509981-6 03/18/20 15:12

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	3.69	3.75	1	1.62	↓	20

Laboratory Control Sample (LCS)

(LCS) R3509981-2 03/18/20 10:24

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	185	92.7	90.0-110	

L1199114-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-12 03/18/20 12:01 • (MS) R3509981-4 03/18/20 12:30 • (MSD) R3509981-5 03/18/20 12:39

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	529	209	797	737	111	99.8	1	80.0-120			7.77	20

Wet Chemistry by Method 300.0

[L1199114-26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44](#)

Method Blank (MB)

(MB) R3509647-1 03/17/20 23:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	2.44	↓	0.795	10.0

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

L1199114-29 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-29 03/18/20 00:34 • (DUP) R3509647-3 03/18/20 00:43

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	1080	1080	5	0.547		20

L1199596-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1199596-01 03/18/20 04:13 • (DUP) R3509647-6 03/18/20 04:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	12.9	12.0	1	7.33		20

Laboratory Control Sample (LCS)

(LCS) R3509647-2 03/17/20 23:44

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	192	96.2	90.0-110	

L1199114-33 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-33 03/18/20 01:40 • (MS) R3509647-4 03/18/20 01:50 • (MSD) R3509647-5 03/18/20 01:59

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	528	381	901	886	98.5	95.6	1	80.0-120			1.68	20

Wet Chemistry by Method 300.0

[L1199114-45,46,47,48,49,50,51,52,53,54,55,56,57](#)

Method Blank (MB)

(MB) R3509727-1 03/17/20 21:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	2.37	↓	0.795	10.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1198966-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1198966-01 03/17/20 23:46 • (DUP) R3509727-3 03/18/20 00:04

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	1.66	0.000	1	200	P1	20

L1199114-57 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-57 03/18/20 06:20 • (DUP) R3509727-6 03/18/20 06:38

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	545	548	1	0.624		20

Laboratory Control Sample (LCS)

(LCS) R3509727-2 03/17/20 22:14

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	200	205	103	90.0-110	

L1199114-50 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-50 03/18/20 03:03 • (MS) R3509727-4 03/18/20 03:21 • (MSD) R3509727-5 03/18/20 03:39

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	523	432	975	978	104	104	1	80.0-120			0.271	20

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

[L1199114-01,03,05,06,08,09,11,13,14,15,17,18,19,20](#)

Method Blank (MB)

(MB) R3509356-2 03/16/20 23:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0529	↓	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	97.8			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3509356-1 03/16/20 23:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.60	102	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			112	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

[L1199114-21,22,23,24,26,27,28,30,32,33,34,35,36,37,38](#)

Method Blank (MB)

(MB) R3509468-3 03/17/20 00:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0315	↓	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	97.8			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3509468-2 03/16/20 23:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.76	105	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			107	77.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1199114-42,43,44,45,46,47,48,49,57](#)

Method Blank (MB)

(MB) R3510670-2 03/17/20 00:47

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0503	↓	0.0217	0.100
(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

Laboratory Control Sample (LCS)

(LCS) R3510670-1 03/17/20 00:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.51	100	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			101	77.0-120	

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

[L1199114-50,51,52,54,55,56](#)

Method Blank (MB)

(MB) R3509759-3 03/17/20 10:26

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

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

(LCS) R3509759-1 03/17/20 08:20 • (LCSD) R3509759-2 03/17/20 09:39

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	4.80	4.22	87.3	76.7	72.0-127			12.9	20
^(S) a,a,a-Trifluorotoluene(FID)				105	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

[L1199114-02,04,07,10,12,16](#)

Method Blank (MB)

(MB) R3509541-2 03/17/20 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)	98.6			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3509541-1 03/17/20 10:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.10	92.7	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			108	77.0-120	

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

[L1199114-25,29,31,39,40](#)

Method Blank (MB)

(MB) R3510206-3 03/17/20 16:17

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0249	↓	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	102			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3510206-1 03/17/20 15:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.30	96.4	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			110	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

[L1199114-53](#)

Method Blank (MB)

(MB) R3511077-2 03/18/20 00:09

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)	98.9			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3511077-1 03/17/20 22:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.15	75.5	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			106	77.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1199114-41](#)

Method Blank (MB)

(MB) R3510978-3 03/20/20 14:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0254	↓	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	99.4			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3510978-2 03/20/20 13:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.15	93.6	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			111	77.0-120	

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

[L1199114-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20](#)

Method Blank (MB)

(MB) R3509307-3 03/16/20 23:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	100			75.0-131
(S) 4-Bromofluorobenzene	112			67.0-138
(S) 1,2-Dichloroethane-d4	127			70.0-130

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

(LCS) R3509307-1 03/16/20 21:16 • (LCSD) R3509307-2 03/16/20 22:30

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.112	0.113	89.6	90.4	70.0-123			0.889	20
Ethylbenzene	0.125	0.108	0.102	86.4	81.6	74.0-126			5.71	20
Toluene	0.125	0.100	0.0953	80.0	76.2	75.0-121			4.81	20
Xylenes, Total	0.375	0.289	0.278	77.1	74.1	72.0-127			3.88	20
(S) Toluene-d8				99.3	94.1	75.0-131				
(S) 4-Bromofluorobenzene				114	104	67.0-138				
(S) 1,2-Dichloroethane-d4				126	129	70.0-130				

L1199114-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-20 03/17/20 06:56 • (MS) R3509307-4 03/17/20 07:16 • (MSD) R3509307-5 03/17/20 07:37

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.136	U	0.113	0.113	83.2	83.2	1	10.0-149			0.000	37
Ethylbenzene	0.136	U	0.127	0.138	93.6	102	1	10.0-160			8.20	38
Toluene	0.136	U	0.108	0.116	80.0	85.6	1	10.0-156			6.76	38
Xylenes, Total	0.407	U	0.337	0.357	82.9	87.7	1	10.0-160			5.63	38
(S) Toluene-d8					102	101		75.0-131				
(S) 4-Bromofluorobenzene					119	120		67.0-138				
(S) 1,2-Dichloroethane-d4					117	116		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

[L1199114-21,22,23,24,25,26,27,28,29,30,31,32,33](#)

Method Blank (MB)

(MB) R3509519-2 03/17/20 11:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	107			75.0-131
(S) 4-Bromofluorobenzene	101			67.0-138
(S) 1,2-Dichloroethane-d4	101			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3509519-1 03/17/20 08:50

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.110	88.0	70.0-123	
Ethylbenzene	0.125	0.139	111	74.0-126	
Toluene	0.125	0.115	92.0	75.0-121	
Xylenes, Total	0.375	0.423	113	72.0-127	
(S) Toluene-d8			104	75.0-131	
(S) 4-Bromofluorobenzene			103	67.0-138	
(S) 1,2-Dichloroethane-d4			104	70.0-130	

L1199073-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199073-16 03/17/20 13:47 • (MS) R3509519-3 03/17/20 19:29 • (MSD) R3509519-4 03/17/20 19:47

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.125	ND	0.0649	0.0396	51.9	31.7	1	10.0-149		J3	48.4	37
Ethylbenzene	0.125	ND	0.0789	0.0451	63.1	36.1	1	10.0-160		J3	54.5	38
Toluene	0.125	ND	0.0678	0.0410	54.2	32.8	1	10.0-156		J3	49.3	38
Xylenes, Total	0.375	ND	0.243	0.151	64.8	40.3	1	10.0-160		J3	46.7	38
(S) Toluene-d8					105	101		75.0-131				
(S) 4-Bromofluorobenzene					97.9	106		67.0-138				
(S) 1,2-Dichloroethane-d4					103	108		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

[L1199114-34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53](#)

Method Blank (MB)

(MB) R3510640-3 03/18/20 07:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	104			75.0-131
(S) 4-Bromofluorobenzene	91.8			67.0-138
(S) 1,2-Dichloroethane-d4	98.6			70.0-130

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

(LCS) R3510640-1 03/18/20 06:33 • (LCSD) R3510640-2 03/18/20 06:54

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.122	0.119	97.6	95.2	70.0-123			2.49	20
Ethylbenzene	0.125	0.111	0.116	88.8	92.8	74.0-126			4.41	20
Toluene	0.125	0.122	0.143	97.6	114	75.0-121			15.8	20
Xylenes, Total	0.375	0.323	0.338	86.1	90.1	72.0-127			4.54	20
(S) Toluene-d8				101	124	75.0-131				
(S) 4-Bromofluorobenzene				76.1	92.4	67.0-138				
(S) 1,2-Dichloroethane-d4				120	122	70.0-130				

L1199114-53 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-53 03/18/20 14:48 • (MS) R3510640-4 03/18/20 15:08 • (MSD) R3510640-5 03/18/20 15:29

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.134	U	0.0913	0.0378	68.1	28.2	1	10.0-149		J3	83.0	37
Ethylbenzene	0.134	U	0.0880	0.0349	65.6	26.0	1	10.0-160		J3	86.5	38
Toluene	0.134	U	0.0954	0.0388	71.1	29.0	1	10.0-156		J3	84.3	38
Xylenes, Total	0.402	U	0.269	0.113	66.9	28.0	1	10.0-160		J3	82.0	38
(S) Toluene-d8					106	103		75.0-131				
(S) 4-Bromofluorobenzene					92.9	94.9		67.0-138				
(S) 1,2-Dichloroethane-d4					107	104		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

[L1199114-54,55,56,57](#)

Method Blank (MB)

(MB) R3511093-2 03/17/20 17:11

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	103			75.0-131
(S) 4-Bromofluorobenzene	102			67.0-138
(S) 1,2-Dichloroethane-d4	97.4			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Laboratory Control Sample (LCS)

(LCS) R3511093-1 03/17/20 16:14

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.109	87.2	70.0-123	
Ethylbenzene	0.125	0.114	91.2	74.0-126	
Toluene	0.125	0.107	85.6	75.0-121	
Xylenes, Total	0.375	0.366	97.6	72.0-127	
(S) Toluene-d8			102	75.0-131	
(S) 4-Bromofluorobenzene			101	67.0-138	
(S) 1,2-Dichloroethane-d4			102	70.0-130	

6 Qc

7 Gl

8 Al

9 Sc

L1199114-57 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-57 03/17/20 18:27 • (MS) R3511093-3 03/17/20 23:48 • (MSD) R3511093-4 03/18/20 00:07

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.131	U	0.127	0.121	96.8	92.0	1	10.0-149			5.08	37
Ethylbenzene	0.131	U	0.125	0.119	95.2	90.4	1	10.0-160			5.17	38
Toluene	0.131	U	0.125	0.121	95.2	92.0	1	10.0-156			3.42	38
Xylenes, Total	0.394	U	0.402	0.383	102	97.1	1	10.0-160			4.83	38
(S) Toluene-d8					100	101		75.0-131				
(S) 4-Bromofluorobenzene					97.2	98.6		67.0-138				
(S) 1,2-Dichloroethane-d4					97.0	97.1		70.0-130				

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1199114-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16](#)

Method Blank (MB)

(MB) R3509778-1 03/17/20 20:10

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	70.1			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3509778-2 03/17/20 20:23

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	37.5	75.0	50.0-150	
(S) o-Terphenyl			77.2	18.0-148	

L1199114-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-04 03/17/20 22:04 • (MS) R3509778-3 03/17/20 22:16 • (MSD) R3509778-4 03/17/20 22:29

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	50.7	2.16	35.2	38.0	65.2	70.0	1	50.0-150			7.54	20
(S) o-Terphenyl					65.5	60.0		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1199114-17,18,19,20,21,22,23,24,25,26,27,28,29](#)

Method Blank (MB)

(MB) R3510563-1 03/19/20 21:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	64.3			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3510563-2 03/19/20 21:19

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	36.5	73.0	50.0-150	
(S) o-Terphenyl			83.2	18.0-148	

L1199114-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-20 03/19/20 21:57 • (MS) R3510563-3 03/19/20 22:14 • (MSD) R3510563-4 03/19/20 22:27

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	53.3	U	36.4	36.8	68.3	69.5	1	50.0-150			0.889	20
(S) o-Terphenyl					65.7	65.8		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

[L1199114-50,51,52,53,54,55,56,57](#)

Method Blank (MB)

(MB) R3510569-1 03/19/20 22:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	75.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3510569-2 03/19/20 22:44

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	43.2	86.4	50.0-150	
(S) o-Terphenyl			95.9	18.0-148	

L1198863-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1198863-14 03/20/20 03:10 • (MS) R3510569-3 03/20/20 03:23 • (MSD) R3510569-4 03/20/20 03:36

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	50.0	ND	53.2	48.5	76.4	67.0	5	50.0-150			9.24	20
(S) o-Terphenyl					103	95.8		18.0-148				

Sample Narrative:

OS: Cannot run at lower dilution due to viscosity of extract

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

[L1199114-30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49](#)

Method Blank (MB)

(MB) R3510943-3 03/21/20 12:37

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	58.7			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3510943-4 03/21/20 12:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	36.1	72.2	50.0-150	
(S) o-Terphenyl			81.2	18.0-148	

L1199114-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-30 03/21/20 04:09 • (MS) R3510943-1 03/21/20 04:22 • (MSD) R3510943-2 03/21/20 04:35

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	55.3	416	452	488	64.4	129	20	50.0-150			7.58	20
(S) o-Terphenyl					63.9	57.6		18.0-148	J7	J7		

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
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.
J1	Surrogate recovery limits have been exceeded; values are outside upper 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.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

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

State Accreditations

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

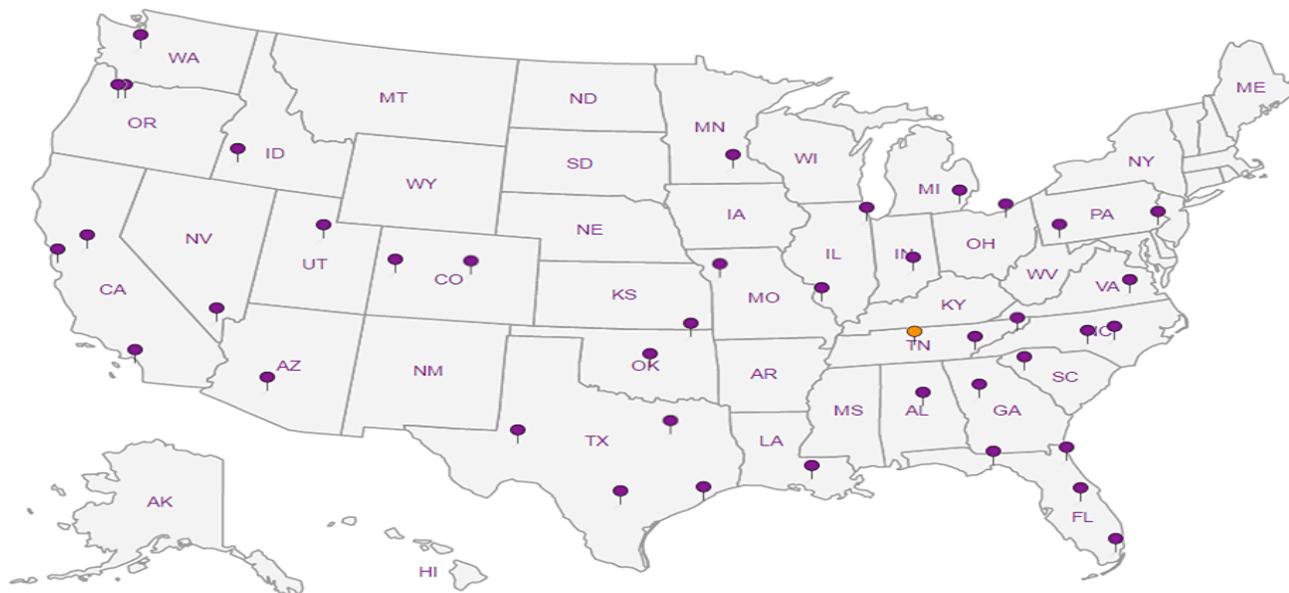
Third Party Federal Accreditations

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

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

Our Locations

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



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Pace Analytical National Center for Testing & Innovation Cooler Receipt Form			
Client:	COPTETRA	1199114	
Cooler Received/Opened On:	3/13/20	Temperature:	.7
Received By:	Willie Taylor	8:00	
Signature:	<i>Willie Taylor</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?			



ANALYTICAL REPORT

July 28, 2020

Revised Report



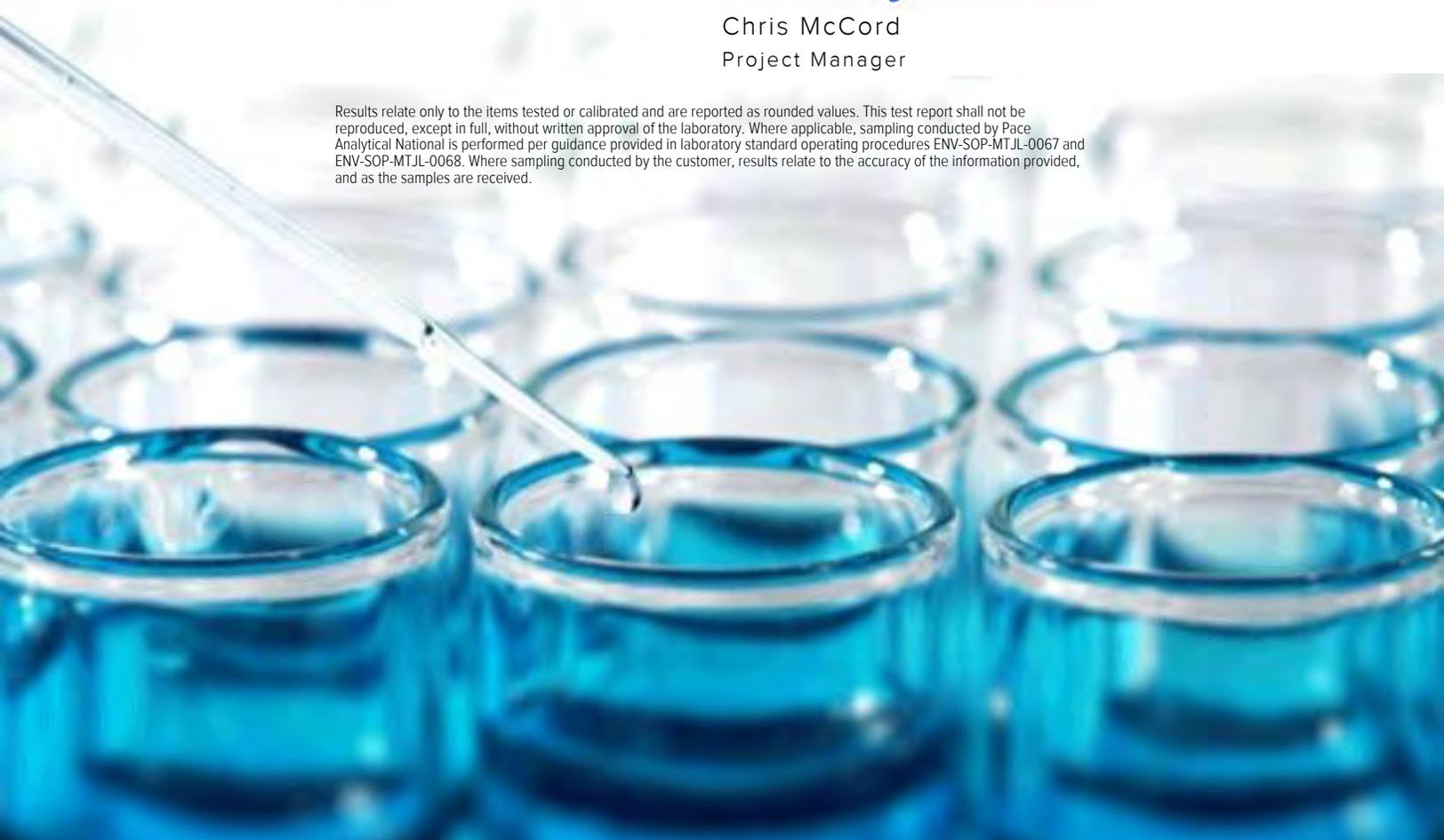
ConocoPhillips - Tetra Tech

Sample Delivery Group: L1238345
 Samples Received: 07/10/2020
 Project Number: 212C-MD-02119
 Description: COP MCA 2-C Header Release
 Site: LEA COUNTY, NEW MEXICO
 Report To: Christian Lull
 901 West Wall
 Suite 100
 Midland, TX 79701

Entire Report Reviewed By:

Chris McCord
Project Manager

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



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AH-1S-2 0-1FT L1238345-01 Solid

Collected by John Myler Collected date/time 07/08/20 12:00 Received date/time 07/10/20 08:30

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

Vertical sidebar with colored boxes containing chemical symbols: 1 Cp, 2 Tc, 3 Ss, 4 Cn, 5 Sr, 6 Qc, 7 Gl, 8 Al, 9 Sc.

AH-1S-2 2-3FT L1238345-02 Solid

Collected by John Myler Collected date/time 07/08/20 12:30 Received date/time 07/10/20 08:30

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

AH-5S-2 0-1FT L1238345-03 Solid

Collected by John Myler Collected date/time 07/08/20 13:30 Received date/time 07/10/20 08:30

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

AH-5S-2 2-3FT L1238345-04 Solid

Collected by John Myler Collected date/time 07/08/20 14:00 Received date/time 07/10/20 08:30

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

AH-7W-2 0-1FT L1238345-05 Solid

Collected by John Myler Collected date/time 07/08/20 14:30 Received date/time 07/10/20 08:30

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

AH-7W-2 2-3FT L1238345-06 Solid

Collected by John Myler Collected date/time 07/08/20 15:00 Received date/time 07/10/20 08:30

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

Vertical sidebar with colored boxes containing chemical symbols: 1 Cp, 2 Tc, 3 Ss, 4 Cn, 5 Sr, 6 Qc, 7 Gl, 8 Al, 9 Sc.

AH-7E-2 0-1FT L1238345-07 Solid

Collected by John Myler Collected date/time 07/08/20 15:30 Received date/time 07/10/20 08:30

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

AH-7E-2 2-3FT L1238345-08 Solid

Collected by John Myler Collected date/time 07/08/20 16:00 Received date/time 07/10/20 08:30

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

AH-11W-2 0-1FT L1238345-09 Solid

Collected by John Myler Collected date/time 07/08/20 16:30 Received date/time 07/10/20 08:30

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

AH-11W-2 2-3FT L1238345-10 Solid

Collected by John Myler Collected date/time 07/08/20 17:00 Received date/time 07/10/20 08:30

Table with 7 columns: Method, Batch, Dilution, Preparation date/time, Analysis date/time, Analyst, Location. Rows include Total Solids by Method 2540 G-2011, Wet Chemistry by Method 300.0, Volatile Organic Compounds (GC) by Method 8015D/GRO, Volatile Organic Compounds (GC/MS) by Method 8260B, and Semi-Volatile Organic Compounds (GC) by Method 8015.

AH-9W-2 0-1FT L1238345-11 Solid

Collected by John Myler
 Collected date/time 07/08/20 17:30
 Received date/time 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 04:08	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 05:14	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 17:18	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/17/20 00:06	KLM	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn

AH-9N 0-1FT L1238345-13 Solid

Collected by John Myler
 Collected date/time 07/08/20 18:30
 Received date/time 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 04:27	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 05:36	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 17:38	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 22:31	KLM	Mt. Juliet, TN

5 Sr
 6 Qc
 7 Gl
 8 Al

AH-9N 2-3FT L1238345-14 Solid

Collected by John Myler
 Collected date/time 07/08/20 19:00
 Received date/time 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 04:45	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 05:58	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 17:58	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 14:14	KLM	Mt. Juliet, TN

9 Sc

AH-8W-2 0-1FT L1238345-15 Solid

Collected by John Myler
 Collected date/time 07/08/20 19:30
 Received date/time 07/10/20 08:30

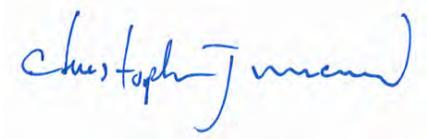
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 05:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 06:21	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 18:18	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 22:45	KLM	Mt. Juliet, TN

AH-8W-2 2-3FT L1238345-16 Solid

Collected by John Myler
 Collected date/time 07/08/20 20:00
 Received date/time 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 05:22	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 06:43	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507972	1	07/10/20 21:04	07/14/20 13:17	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 22:58	KLM	Mt. Juliet, TN

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



Chris McCord
Project Manager

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

Report Revision History

Level II Report - Version 1: 07/20/20 17:24

Collected date/time: 07/08/20 12:00

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	93.4		1	07/14/2020 23:35	WG1508708

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		9.85	21.4	1	07/13/2020 23:32	WG1507969

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	07/12/2020 00:21	WG1507601
(S) a,a,a-Trifluorotoluene(FID)	89.2			77.0-120		07/12/2020 00:21	WG1507601

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000500	0.00107	1	07/12/2020 13:59	WG1507711
Toluene	U		0.00139	0.00535	1	07/12/2020 13:59	WG1507711
Ethylbenzene	U		0.000789	0.00268	1	07/12/2020 13:59	WG1507711
Total Xylenes	U		0.000942	0.00696	1	07/12/2020 13:59	WG1507711
(S) Toluene-d8	104			75.0-131		07/12/2020 13:59	WG1507711
(S) 4-Bromofluorobenzene	101			67.0-138		07/12/2020 13:59	WG1507711
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/12/2020 13:59	WG1507711

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	3.23	J	1.72	4.28	1	07/16/2020 13:15	WG1507584
C28-C40 Oil Range	14.3		0.293	4.28	1	07/16/2020 13:15	WG1507584
(S) o-Terphenyl	52.4			18.0-148		07/16/2020 13:15	WG1507584

Collected date/time: 07/08/20 12:30

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.4		1	07/14/2020 23:35	WG1508708

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	U		9.54	20.7	1	07/13/2020 23:50	WG1507969

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0225	0.104	1	07/12/2020 00:41	WG1507601
(S) a,a,a-Trifluorotoluene(FID)	88.7			77.0-120		07/12/2020 00:41	WG1507601

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000484	0.00104	1	07/12/2020 14:19	WG1507711
Toluene	U		0.00135	0.00519	1	07/12/2020 14:19	WG1507711
Ethylbenzene	U		0.000764	0.00259	1	07/12/2020 14:19	WG1507711
Total Xylenes	U		0.000913	0.00674	1	07/12/2020 14:19	WG1507711
(S) Toluene-d8	104			75.0-131		07/12/2020 14:19	WG1507711
(S) 4-Bromofluorobenzene	103			67.0-138		07/12/2020 14:19	WG1507711
(S) 1,2-Dichloroethane-d4	111			70.0-130		07/12/2020 14:19	WG1507711

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.53	J	1.67	4.15	1	07/16/2020 12:33	WG1507584
C28-C40 Oil Range	11.7		0.284	4.15	1	07/16/2020 12:33	WG1507584
(S) o-Terphenyl	52.0			18.0-148		07/16/2020 12:33	WG1507584

Collected date/time: 07/08/20 13:30

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	82.9		1	07/14/2020 23:35	WG1508708

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	11.8	J	11.1	24.1	1	07/14/2020 00:09	WG1507969

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0282	J	0.0262	0.121	1	07/12/2020 01:02	WG1507601
(S) a,a,a-Trifluorotoluene(FID)	87.5			77.0-120		07/12/2020 01:02	WG1507601

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000661	0.00141	1	07/12/2020 14:39	WG1507711
Toluene	U		0.00184	0.00707	1	07/12/2020 14:39	WG1507711
Ethylbenzene	U		0.00104	0.00354	1	07/12/2020 14:39	WG1507711
Total Xylenes	U		0.00125	0.00920	1	07/12/2020 14:39	WG1507711
(S) Toluene-d8	104			75.0-131		07/12/2020 14:39	WG1507711
(S) 4-Bromofluorobenzene	100			67.0-138		07/12/2020 14:39	WG1507711
(S) 1,2-Dichloroethane-d4	110			70.0-130		07/12/2020 14:39	WG1507711

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	U		1.94	4.83	1	07/16/2020 11:19	WG1507584
C28-C40 Oil Range	4.44	B J	0.331	4.83	1	07/16/2020 11:19	WG1507584
(S) o-Terphenyl	46.9			18.0-148		07/16/2020 11:19	WG1507584

Collected date/time: 07/08/20 14:00

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	93.6		1	07/14/2020 23:35	WG1508708

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		9.83	21.4	1	07/14/2020 00:27	WG1507969

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	07/12/2020 01:22	WG1507601
(S) a,a,a-Trifluorotoluene(FID)	89.1			77.0-120		07/12/2020 01:22	WG1507601

- 8 Al
- 9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000499	0.00107	1	07/12/2020 14:59	WG1507711
Toluene	U		0.00139	0.00534	1	07/12/2020 14:59	WG1507711
Ethylbenzene	U		0.000788	0.00267	1	07/12/2020 14:59	WG1507711
Total Xylenes	U		0.000940	0.00695	1	07/12/2020 14:59	WG1507711
(S) Toluene-d8	107			75.0-131		07/12/2020 14:59	WG1507711
(S) 4-Bromofluorobenzene	103			67.0-138		07/12/2020 14:59	WG1507711
(S) 1,2-Dichloroethane-d4	98.8			70.0-130		07/12/2020 14:59	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	4.78		1.72	4.27	1	07/17/2020 16:09	WG1507584
C28-C40 Oil Range	13.8		0.293	4.27	1	07/17/2020 16:09	WG1507584
(S) o-Terphenyl	48.5			18.0-148		07/17/2020 16:09	WG1507584

Collected date/time: 07/08/20 14:30

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	99.6		1	07/14/2020 23:35	WG1508708

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		9.23	20.1	1	07/14/2020 01:04	WG1507969

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0251	J	0.0218	0.100	1	07/12/2020 01:43	WG1507601
(S) a,a,a-Trifluorotoluene(FID)	89.2			77.0-120		07/12/2020 01:43	WG1507601

- 8 Al
- 9 Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000469	0.00100	1	07/12/2020 15:19	WG1507711
Toluene	U		0.00130	0.00502	1	07/12/2020 15:19	WG1507711
Ethylbenzene	U		0.000740	0.00251	1	07/12/2020 15:19	WG1507711
Total Xylenes	U		0.000883	0.00652	1	07/12/2020 15:19	WG1507711
(S) Toluene-d8	105			75.0-131		07/12/2020 15:19	WG1507711
(S) 4-Bromofluorobenzene	98.1			67.0-138		07/12/2020 15:19	WG1507711
(S) 1,2-Dichloroethane-d4	97.3			70.0-130		07/12/2020 15:19	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	3.57	J	1.62	4.01	1	07/16/2020 13:28	WG1507584
C28-C40 Oil Range	23.9		0.275	4.01	1	07/16/2020 13:28	WG1507584
(S) o-Terphenyl	61.0			18.0-148		07/16/2020 13:28	WG1507584

Collected date/time: 07/08/20 15:00

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	85.8		1	07/14/2020 23:35	WG1508708

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		10.7	23.3	1	07/14/2020 01:22	WG1507969

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	0.0304	J	0.0253	0.117	1	07/12/2020 02:03	WG1507601
(S) a,a,a-Trifluorotoluene(FID)	86.2			77.0-120		07/12/2020 02:03	WG1507601

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000623	0.00133	1	07/12/2020 15:39	WG1507711
Toluene	U		0.00173	0.00667	1	07/12/2020 15:39	WG1507711
Ethylbenzene	U		0.000982	0.00333	1	07/12/2020 15:39	WG1507711
Total Xylenes	U		0.00117	0.00866	1	07/12/2020 15:39	WG1507711
(S) Toluene-d8	105			75.0-131		07/12/2020 15:39	WG1507711
(S) 4-Bromofluorobenzene	100			67.0-138		07/12/2020 15:39	WG1507711
(S) 1,2-Dichloroethane-d4	110			70.0-130		07/12/2020 15:39	WG1507711

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	2.80	J	1.88	4.66	1	07/16/2020 14:01	WG1507584
C28-C40 Oil Range	14.7		0.320	4.66	1	07/16/2020 14:01	WG1507584
(S) o-Terphenyl	54.5			18.0-148		07/16/2020 14:01	WG1507584

Collected date/time: 07/08/20 15:30

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	81.3		1	07/14/2020 23:35	WG1508708

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		11.3	24.6	1	07/14/2020 02:54	WG1507969

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0267	0.123	1	07/12/2020 03:45	WG1507614
(S) a,a,a-Trifluorotoluene(FID)	97.9			77.0-120		07/12/2020 03:45	WG1507614

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000682	0.00146	1	07/12/2020 15:59	WG1507711
Toluene	U		0.00190	0.00730	1	07/12/2020 15:59	WG1507711
Ethylbenzene	U		0.00108	0.00365	1	07/12/2020 15:59	WG1507711
Total Xylenes	U		0.00129	0.00949	1	07/12/2020 15:59	WG1507711
(S) Toluene-d8	103			75.0-131		07/12/2020 15:59	WG1507711
(S) 4-Bromofluorobenzene	102			67.0-138		07/12/2020 15:59	WG1507711
(S) 1,2-Dichloroethane-d4	110			70.0-130		07/12/2020 15:59	WG1507711

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	9.48		1.98	4.92	1	07/17/2020 00:20	WG1507584
C28-C40 Oil Range	49.5		0.337	4.92	1	07/17/2020 00:20	WG1507584
(S) o-Terphenyl	55.2			18.0-148		07/17/2020 00:20	WG1507584

Collected date/time: 07/08/20 16:00

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	99.2		1	07/14/2020 23:35	WG1508708

1 Cp

2 Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		9.27	20.2	1	07/14/2020 03:13	WG1507969

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0219	0.101	1	07/12/2020 04:07	WG1507614
(S) a,a,a-Trifluorotoluene(FID)	97.8			77.0-120		07/12/2020 04:07	WG1507614

5 Sr

6 Qc

7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000471	0.00101	1	07/12/2020 16:18	WG1507711
Toluene	U		0.00131	0.00504	1	07/12/2020 16:18	WG1507711
Ethylbenzene	U		0.000743	0.00252	1	07/12/2020 16:18	WG1507711
Total Xylenes	U		0.000887	0.00655	1	07/12/2020 16:18	WG1507711
(S) Toluene-d8	105			75.0-131		07/12/2020 16:18	WG1507711
(S) 4-Bromofluorobenzene	98.6			67.0-138		07/12/2020 16:18	WG1507711
(S) 1,2-Dichloroethane-d4	103			70.0-130		07/12/2020 16:18	WG1507711

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	1.86	J	1.62	4.03	1	07/16/2020 12:19	WG1507584
C28-C40 Oil Range	9.44		0.276	4.03	1	07/16/2020 12:19	WG1507584
(S) o-Terphenyl	46.7			18.0-148		07/16/2020 12:19	WG1507584

Collected date/time: 07/08/20 16:30

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	99.7		1	07/14/2020 23:22	WG1508709

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		9.23	20.1	1	07/14/2020 03:31	WG1507969

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0218	0.100	1	07/12/2020 04:29	WG1507614
(S) a,a,a-Trifluorotoluene(FID)	99.0			77.0-120		07/12/2020 04:29	WG1507614

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000468	0.00100	1	07/12/2020 16:38	WG1507711
Toluene	U		0.00130	0.00501	1	07/12/2020 16:38	WG1507711
Ethylbenzene	U		0.000739	0.00251	1	07/12/2020 16:38	WG1507711
Total Xylenes	U		0.000883	0.00652	1	07/12/2020 16:38	WG1507711
(S) Toluene-d8	105			75.0-131		07/12/2020 16:38	WG1507711
(S) 4-Bromofluorobenzene	101			67.0-138		07/12/2020 16:38	WG1507711
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/12/2020 16:38	WG1507711

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	6.11		1.61	4.01	1	07/16/2020 23:39	WG1507584
C28-C40 Oil Range	33.6		0.275	4.01	1	07/16/2020 23:39	WG1507584
(S) o-Terphenyl	66.8			18.0-148		07/16/2020 23:39	WG1507584

Collected date/time: 07/08/20 17:00

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	87.5		1	07/14/2020 23:22	WG1508709

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		10.5	22.8	1	07/14/2020 03:50	WG1507969

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0248	0.114	1	07/12/2020 04:52	WG1507614
(S) a,a,a-Trifluorotoluene(FID)	98.4			77.0-120		07/12/2020 04:52	WG1507614

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000601	0.00129	1	07/12/2020 16:58	WG1507711
Toluene	U		0.00167	0.00643	1	07/12/2020 16:58	WG1507711
Ethylbenzene	U		0.000948	0.00322	1	07/12/2020 16:58	WG1507711
Total Xylenes	U		0.00113	0.00836	1	07/12/2020 16:58	WG1507711
(S) Toluene-d8	106			75.0-131		07/12/2020 16:58	WG1507711
(S) 4-Bromofluorobenzene	101			67.0-138		07/12/2020 16:58	WG1507711
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/12/2020 16:58	WG1507711

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	5.65		1.84	4.57	1	07/16/2020 23:53	WG1507584
C28-C40 Oil Range	23.5		0.313	4.57	1	07/16/2020 23:53	WG1507584
(S) o-Terphenyl	47.7			18.0-148		07/16/2020 23:53	WG1507584

Collected date/time: 07/08/20 17:30

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	99.6		1	07/14/2020 23:22	WG1508709

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	49.4		9.23	20.1	1	07/14/2020 04:08	WG1507969

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0218	0.100	1	07/12/2020 05:14	WG1507614
(S) a,a,a-Trifluorotoluene(FID)	99.0			77.0-120		07/12/2020 05:14	WG1507614

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000469	0.00100	1	07/12/2020 17:18	WG1507711
Toluene	U		0.00130	0.00502	1	07/12/2020 17:18	WG1507711
Ethylbenzene	U		0.000740	0.00251	1	07/12/2020 17:18	WG1507711
Total Xylenes	U		0.000883	0.00652	1	07/12/2020 17:18	WG1507711
(S) Toluene-d8	106			75.0-131		07/12/2020 17:18	WG1507711
(S) 4-Bromofluorobenzene	101			67.0-138		07/12/2020 17:18	WG1507711
(S) 1,2-Dichloroethane-d4	97.7			70.0-130		07/12/2020 17:18	WG1507711

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	21.6		1.62	4.01	1	07/17/2020 00:06	WG1507584
C28-C40 Oil Range	97.3		0.275	4.01	1	07/17/2020 00:06	WG1507584
(S) o-Terphenyl	59.0			18.0-148		07/17/2020 00:06	WG1507584

Collected date/time: 07/08/20 18:30

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	92.9		1	07/14/2020 23:22	WG1508709

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	U		9.90	21.5	1	07/14/2020 04:27	WG1507969

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0234	0.108	1	07/12/2020 05:36	WG1507614
(S) a,a,a-Trifluorotoluene(FID)	98.6			77.0-120		07/12/2020 05:36	WG1507614

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	U		0.000503	0.00108	1	07/12/2020 17:38	WG1507711
Toluene	U		0.00140	0.00538	1	07/12/2020 17:38	WG1507711
Ethylbenzene	U		0.000793	0.00269	1	07/12/2020 17:38	WG1507711
Total Xylenes	U		0.000947	0.00700	1	07/12/2020 17:38	WG1507711
(S) Toluene-d8	106			75.0-131		07/12/2020 17:38	WG1507711
(S) 4-Bromofluorobenzene	99.1			67.0-138		07/12/2020 17:38	WG1507711
(S) 1,2-Dichloroethane-d4	103			70.0-130		07/12/2020 17:38	WG1507711

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	10.1		1.73	4.31	1	07/16/2020 22:31	WG1507584
C28-C40 Oil Range	36.3		0.295	4.31	1	07/16/2020 22:31	WG1507584
(S) o-Terphenyl	61.7			18.0-148		07/16/2020 22:31	WG1507584

Collected date/time: 07/08/20 19:00

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.1		1	07/14/2020 23:22	WG1508709

- 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	13.1	J	9.29	20.2	1	07/14/2020 04:45	WG1507969

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0219	0.101	1	07/12/2020 05:58	WG1507614
(S) a,a,a-Trifluorotoluene(FID)	98.5			77.0-120		07/12/2020 05:58	WG1507614

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		0.000471	0.00101	1	07/12/2020 17:58	WG1507711
Toluene	U		0.00131	0.00505	1	07/12/2020 17:58	WG1507711
Ethylbenzene	U		0.000744	0.00252	1	07/12/2020 17:58	WG1507711
Total Xylenes	U		0.000888	0.00656	1	07/12/2020 17:58	WG1507711
(S) Toluene-d8	107			75.0-131		07/12/2020 17:58	WG1507711
(S) 4-Bromofluorobenzene	98.9			67.0-138		07/12/2020 17:58	WG1507711
(S) 1,2-Dichloroethane-d4	97.5			70.0-130		07/12/2020 17:58	WG1507711

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.35		1.63	4.04	1	07/16/2020 14:14	WG1507584
C28-C40 Oil Range	28.2		0.277	4.04	1	07/16/2020 14:14	WG1507584
(S) o-Terphenyl	51.8			18.0-148		07/16/2020 14:14	WG1507584

Collected date/time: 07/08/20 19:30

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.3		1	07/14/2020 23:22	WG1508709

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

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	16.6	J	9.27	20.1	1	07/14/2020 05:03	WG1507969

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0219	0.101	1	07/12/2020 06:21	WG1507614
(S) a,a,a-Trifluorotoluene(FID)	98.2			77.0-120		07/12/2020 06:21	WG1507614

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		0.000470	0.00101	1	07/12/2020 18:18	WG1507711
Toluene	U		0.00131	0.00504	1	07/12/2020 18:18	WG1507711
Ethylbenzene	U		0.000742	0.00252	1	07/12/2020 18:18	WG1507711
Total Xylenes	U		0.000886	0.00655	1	07/12/2020 18:18	WG1507711
(S) Toluene-d8	104			75.0-131		07/12/2020 18:18	WG1507711
(S) 4-Bromofluorobenzene	101			67.0-138		07/12/2020 18:18	WG1507711
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/12/2020 18:18	WG1507711

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	7.36		1.62	4.03	1	07/16/2020 22:45	WG1507584
C28-C40 Oil Range	40.1		0.276	4.03	1	07/16/2020 22:45	WG1507584
(S) o-Terphenyl	48.2			18.0-148		07/16/2020 22:45	WG1507584

Collected date/time: 07/08/20 20:00

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	97.7		1	07/14/2020 23:22	WG1508709

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Chloride	53.9		9.42	20.5	1	07/14/2020 05:22	WG1507969

- 5 Sr
- 6 Qc
- 7 Gl

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	07/12/2020 06:43	WG1507614
(S) a,a,a-Trifluorotoluene(FID)	99.2			77.0-120		07/12/2020 06:43	WG1507614

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Benzene	0.000717	J	0.000478	0.00102	1	07/14/2020 13:17	WG1507972
Toluene	0.00141	J	0.00133	0.00512	1	07/14/2020 13:17	WG1507972
Ethylbenzene	U		0.000755	0.00256	1	07/14/2020 13:17	WG1507972
Total Xylenes	0.00102	J	0.000901	0.00665	1	07/14/2020 13:17	WG1507972
(S) Toluene-d8	103			75.0-131		07/14/2020 13:17	WG1507972
(S) 4-Bromofluorobenzene	94.9			67.0-138		07/14/2020 13:17	WG1507972
(S) 1,2-Dichloroethane-d4	94.2			70.0-130		07/14/2020 13:17	WG1507972

- 8 Al
- 9 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	7.58		1.65	4.10	1	07/16/2020 22:58	WG1507584
C28-C40 Oil Range	37.6		0.281	4.10	1	07/16/2020 22:58	WG1507584
(S) o-Terphenyl	60.3			18.0-148		07/16/2020 22:58	WG1507584

Total Solids by Method 2540 G-2011

[L1238345-01,02,03,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3549748-1 07/14/20 23:35

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1238345-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1238345-01 07/14/20 23:35 • (DUP) R3549748-3 07/14/20 23:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	93.4	93.4	1	0.00139		10

Laboratory Control Sample (LCS)

(LCS) R3549748-2 07/14/20 23:35

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

[L1238345-09,10,11,13,14,15,16](#)

Method Blank (MB)

(MB) R3549745-1 07/14/20 23:22

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1238345-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1238345-13 07/14/20 23:22 • (DUP) R3549745-3 07/14/20 23:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	92.9	93.2	1	0.341		10

Laboratory Control Sample (LCS)

(LCS) R3549745-2 07/14/20 23:22

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

Wet Chemistry by Method 300.0

[L1238345-01,02,03,04,05,06,07,08,09,10,11,13,14,15,16](#)

Method Blank (MB)

(MB) R3549168-1 07/13/20 22:36

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1238345-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1238345-04 07/14/20 00:27 • (DUP) R3549168-3 07/14/20 00:45

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

L1238345-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1238345-16 07/14/20 05:22 • (DUP) R3549168-6 07/14/20 06:17

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	53.9	54.0	1	0.178		20

Laboratory Control Sample (LCS)

(LCS) R3549168-2 07/13/20 22:55

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

L1238345-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238345-06 07/14/20 01:22 • (MS) R3549168-4 07/14/20 01:41 • (MSD) R3549168-5 07/14/20 02:36

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	583	U	591	596	101	102	1	80.0-120			0.871	20

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

[L1238345-01,02,03,04,05,06](#)

Method Blank (MB)

(MB) R3550217-2 07/11/20 23:40

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)	92.6			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3550217-1 07/11/20 22:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.48	99.6	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			108	77.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1238345-07,08,09,10,11,13,14,15,16](#)

Method Blank (MB)

(MB) R3550799-3 07/12/20 03:23

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)	99.8			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3550799-2 07/12/20 02:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.71	85.6	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			101	77.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

[L1238345-01,02,03,04,05,06,07,08,09,10,11,13,14,15](#)

Method Blank (MB)

(MB) R3549987-2 07/12/20 12:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	103			75.0-131
(S) 4-Bromofluorobenzene	101			67.0-138
(S) 1,2-Dichloroethane-d4	105			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3549987-1 07/12/20 11:46

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.113	90.4	70.0-123	
Ethylbenzene	0.125	0.134	107	74.0-126	
Toluene	0.125	0.106	84.8	75.0-121	
Xylenes, Total	0.375	0.347	92.5	72.0-127	
(S) Toluene-d8			103	75.0-131	
(S) 4-Bromofluorobenzene			102	67.0-138	
(S) 1,2-Dichloroethane-d4			105	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

[L1238345-16](#)

Method Blank (MB)

(MB) R3550795-2 07/14/20 10:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	102			75.0-131
(S) 4-Bromofluorobenzene	97.2			67.0-138
(S) 1,2-Dichloroethane-d4	91.0			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)

(LCS) R3550795-1 07/14/20 09:18

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Benzene	0.125	0.122	97.6	70.0-123	
Ethylbenzene	0.125	0.118	94.4	74.0-126	
Toluene	0.125	0.116	92.8	75.0-121	
Xylenes, Total	0.375	0.382	102	72.0-127	
(S) Toluene-d8			94.7	75.0-131	
(S) 4-Bromofluorobenzene			103	67.0-138	
(S) 1,2-Dichloroethane-d4			101	70.0-130	

L1238436-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238436-03 07/14/20 16:46 • (MS) R3550795-3 07/14/20 19:36 • (MSD) R3550795-4 07/14/20 19:55

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg				%	%		%			%	%
Benzene	0.125	0.00130	0.187	0.183	96.9	94.5	1	10.0-149			2.49	37
Ethylbenzene	0.125	U	0.181	0.175	94.4	91.2	1	10.0-160			3.45	38
Toluene	0.125	U	0.193	0.189	101	98.4	1	10.0-156			2.41	38
Xylenes, Total	0.375	U	0.560	0.430	97.3	74.7	1	10.0-160			26.4	38
(S) Toluene-d8					99.2	99.3		75.0-131				
(S) 4-Bromofluorobenzene					93.9	93.4		67.0-138				
(S) 1,2-Dichloroethane-d4					101	102		70.0-130				

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1238345-01,02,03,04,05,06,07,08,09,10,11,13,14,15,16](#)

Method Blank (MB)

(MB) R3550539-1 07/16/20 10:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	0.442	J	0.274	4.00
(S) o-Terphenyl	49.4			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3550539-2 07/16/20 11:06

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	33.0	66.0	50.0-150	
(S) o-Terphenyl			82.3	18.0-148	

L1238345-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238345-03 07/16/20 11:19 • (MS) R3550539-3 07/16/20 11:34 • (MSD) R3550539-4 07/16/20 11:52

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	59.0	U	32.9	39.2	55.8	66.3	1	50.0-150			17.4	20
(S) o-Terphenyl					59.2	116		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

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

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

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

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

State Accreditations

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

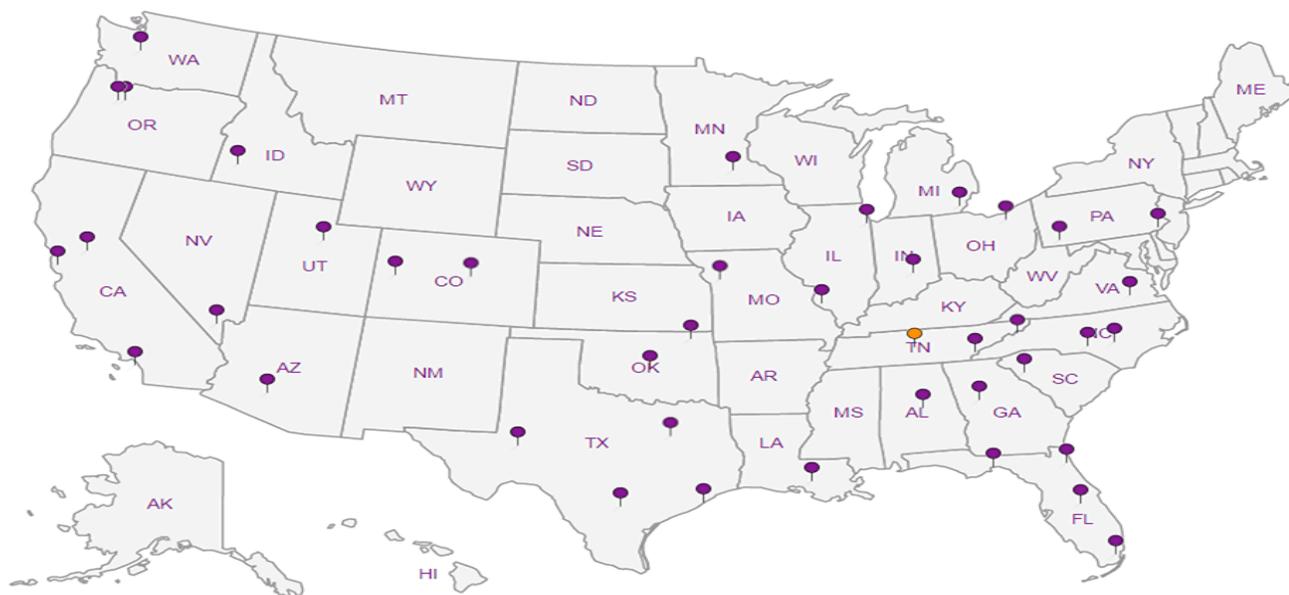
Third Party Federal Accreditations

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

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

Our Locations

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



1 Cp

2 Tc

3 Ss

4 Cn

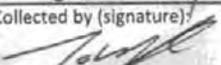
5 Sr

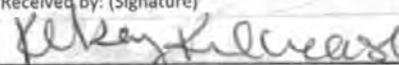
6 Qc

7 Gl

8 Al

9 Sc

ConocoPhillips - Tetra Tech 901 West Wall Suite 100 Midland TX 79701 Report to: Christian Llull		Billing Information: Accounts Payable 901 West Wall Suite 100 Midland, TX 79701 Email To: christian.llull@tetrattech.com		Pres Chk		Analysis / Container / Preservative										Chain of Custody Page 2 of 2  12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 	
Project Description: COP MCA 2-C Header Release		City/State Collected: Hobbs, NM		Please Circle: PT MT (C) ET		Phone: 512-338-1667		Client Project # 212C-MD-02119		Lab Project # COPTETRA-212CMD02119		CHLORIDE-300 4ozClr-NoPres GRO_V8260BTEX 4ozClr-NoPres TPH-DRO/ORO 4ozClr-NoPres		SDG # U238345			
Collected by (print): JOHN MYLER		Site/Facility ID # LEA COUNTY, NEW MEXICO		P.O. #		Collected by (signature): 		Rush? (Lab MUST Be Notified) ___ Same Day ___ Five Day ___ Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day		Quote #				Table #			
Immediately Packed on Ice N Y X		Date Results Needed Standard, No Rush		No. of Cntrs		Acctnum: COPTETRA Template: T170394 Prelogin: P784175 PM: 526 - Chris McCord PB: 7/1/20 nm		Shipped Via: FedEX Ground		Remarks				Sample # (lab only)			
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs											
AH-9W	Grab	SS	0'-1'	7/18/20	17:30	1	X	X	X						-11		
AH-9W	↓	SS	2'-3'	↓	18:00	↓	↓	↓	↓						-12		
AH-9N	↓	SS	0'-1'	↓	18:30	↓	↓	↓	↓						-13		
AH-9N	↓	SS	2'-3'	↓	19:00	↓	↓	↓	↓						-14		
AH-8W	↓	SS	0'-1'	↓	19:30	↓	↓	↓	↓						-15		
AH-8W	↓	SS	2'-3'	↓	20:00	↓	↓	↓	↓						-16		
Trip-Blank-1	-	SS	-	-	-	↓	↓	↓	↓						-17		
		SS															
		SS															
		SS															

* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other		Remarks: RED-COOLER		pH _____ Temp _____ Flow _____ Other _____		Sample Receipt Checklist COC Seal Present/Intact: <input type="checkbox"/> NP <input checked="" type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N IF Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N									
Samples returned via: ___ UPS ___ FedEx ___ Courier		Tracking #		Relinquished by: (Signature) 		Date: 7/19/20 Time: 10:30		Received by: (Signature) 		Trip Blank Received: Yes No HCL/MeOH TBR		Temp: 10.0°C Bottles Received: 16			
Relinquished by: (Signature) 		Date: _____ Time: _____		Received by: (Signature)		Date: _____ Time: _____		Received for lab by: (Signature)		Date: 7-18-20 Time: 0800		Hold:		Condition: NCF 100	

Troy Dunlap



Login #: L1238345	Client: COPTETRA	Date: 7/10/20	Evaluated by: Troy Dunlap
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Non-Conformance (check applicable items)

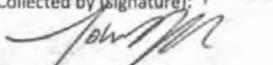
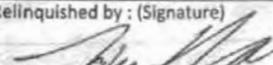
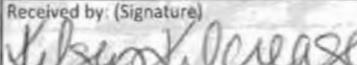
Sample Integrity	Chain of Custody Clarification	If Broken Container:
Parameter(s) past holding time	X Login Clarification Needed	Insufficient packing material around container
Temperature not in range	Chain of custody is incomplete	Insufficient packing material inside cooler
Improper container type	Please specify Metals requested.	Improper handling by carrier (FedEx / UPS / Courier)
pH not in range.	Please specify TCLP requested.	Sample was frozen
Insufficient sample volume.	Received additional samples not listed on coc.	Container lid not intact
Sample is biphasic.	Sample ids on containers do not match ids on coc	If no Chain of Custody:
Vials received with headspace.	Trip Blank not received.	Received by:
Broken container	Client did not "X" analysis.	Date/Time:
Broken container:	Chain of Custody is missing	Temp./Cont Rec./pH:
Sufficient sample remains		Carrier:
		Tracking#

Login Comments: Sample AH-9W 2-3FT received empty.

Client informed by:	Call	Email	Voice Mail	Date: 7/13/20	14:01
TSR Initials: CM	Client Contact:				

Logout

Client notified.

ConocoPhillips - Tetra Tech		Billing Information:		Analysis / Container / Preservative										Chain of Custody Page 1 of 2				
901 West Wall Suite 100 Midland TX 79701		Accounts Payable 901 West Wall Suite 100 Midland, TX 79701		Pres Chk										 Pace Analytical National Center for Testing & Innovation 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 				
Report to: Christian Llull		Email To: christian.llull@tetrattech.com																
Project Description: COP MCA 2-C Header Release		City/State Collected: Hobbs, NM		Please Circle: PT MT <input checked="" type="radio"/> ET														
Phone: 512-338-1667		Client Project # 212C-MD-02119		Lab Project # COPTETRA-212CMD02119														
Collected by (print): JOHN MYLER		Site/Facility ID # LEA COUNTY, NEW MEXICO		P.O. #														
Collected by (signature): 		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #														
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		Date Results Needed Standard, No Rush		No. of Cntrs														
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	CHLORIDE-300 4ozClr-NoPres			GRO,V8260BTEX 4ozClr-NoPres			TPH-DRO/ORO 4ozClr-NoPres					
AH-1S-2		Grab	SS	0'-1'	7/18/20	12:00	1	X	X	X								-01
AH-1S-2			SS	2'-3'		12:30												-02
AH-5S-2			SS	0'-1'		13:30												-03
AH-5S-2			SS	2'-3'		14:00												-04
AH-7W-2			SS	0'-1'		14:30												-05
AH-7W-2			SS	2'-3'		15:00												-06
AH-7E-2			SS	0'-1'		15:30												-07
AH-7E-2			SS	2'-3'		16:00												-08
AH-11W-2			SS	0'-1'		16:30												-09
AH-11W-2			SS	2'-3'		17:00												-10
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other		Remarks: RED COOLER		pH _____ Temp _____ Flow _____ Other _____		Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N												
Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking # 4510 1659 5120																
Relinquished by: (Signature) 		Date: 7/19/20	Time: 10:30	Received by: (Signature) 		Trip Blank Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		HCL / MeOH TBR		Bottles Received: 16		If preservation required by Login: Date/Time						
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)		Temp: 44.1°C		Date: 7/10/20		Time: 0830		Hold:		Condition: NCF OK				
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature)		Date:		Time:		Hold:		Condition:						

ConocoPhillips - Tetra Tech 901 West Wall Suite 100 Midland TX 79701		Billing Information: Accounts Payable 901 West Wall Suite 100 Midland, TX 79701		Email To: christian.llull@tetrattech.com		Report to: Christian Llull		Project Description: COP MCA 2-C Header Release		City/State Collected: Hobbs, NM		Please Circle: PT MT <input checked="" type="radio"/> ET		Phone: 512-338-1667		Client Project # 212C-MD-02119		Lab Project # COPTETRA-212CMD02119		Collected by (print): JOHN MYLER		Site/Facility ID # LEA COUNTY, NEW MEXICO		P.O. #		Collected by (signature): 		Rush? (Lab MUST Be Notified) ___ Same Day ___ Five Day ___ Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day		Quote #		Date Results Needed Standard, No Rush		No. of Cntrs		Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		Shipped Via: FedEX Ground	
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	CHLORIDE-300 4ozClr-NoPres	GRO,V8260BTEX 4ozClr-NoPres	TPH-DRO/ORO 4ozClr-NoPres	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
AH-9W-2		Grab	SS	0'-1'	7/18/20	17:30	1	X	X	X	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
AH-9W-2		↓	SS	2'-3'	↓	18:00	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
AH-9N		↓	SS	0'-1'	↓	18:30	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
AH-9N		↓	SS	2'-3'	↓	19:00	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
AH-8W-2		↓	SS	0'-1'	↓	19:30	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
AH-8W-2		↓	SS	2'-3'	↓	20:00	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1		-	SS	-	-	-	↓	↓	↓	↓	Analysis / Container / Preservative	Chain of Custody Page 2 of 2	Pace Analytical National Center for Testing & Innovation		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		SDG # U238345		Table #		Acctnum: COPTETRA		Template: T170394		Prelogin: P784175		PM: 526 - Chris McCord		PB: 7/1/20 mm		Remarks		Sample # (lab only)						
Trip-Blank-1																																							

Chris McCord

From: Dickerson, Ryan <Ryan.Dickerson@tetratech.com>
Sent: Tuesday, July 21, 2020 1:37 PM
To: Chris McCord
Cc: Lull, Christian
Subject: L1238345 COC Revision
Attachments: COC edits_L1238345.pdf

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

Chris,
Can you revise the L1238345 Report to match the attached revised COC? Add "-2" to all samples except AH-9N. We have samples from the site with those sample IDs and need to distinguish the latest samples.

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

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TETRA TECH

APPENDIX D

Laboratory Analytical Data

Part 2

Shallow and Deep Soil Assessments

nAPP2117456525



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

February 18, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCA 2C HEADER EAST 2 RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 02/15/22 13:05.

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, prominent "C" at the beginning.

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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 1 (0-1') (H220575-01)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	80.0	16.0	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	207	104	200	3.95	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	210	105	200	2.20	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 73.8 % 66.9-136

Surrogate: 1-Chlorooctadecane 77.4 % 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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 1 (2'-3') (H220575-02)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	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	112	16.0	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	207	104	200	3.95	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	210	105	200	2.20	
EXT DRO >C28-C36	14.3	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 90.3 % 66.9-136

Surrogate: 1-Chlorooctadecane 95.5 % 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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 2 (0-1') (H220575-03)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	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	80.0	16.0	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 86.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 90.1 % 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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 2 (2'-3') (H220575-04)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	256	16.0	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 95.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 102 % 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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 3 (0-1') (H220575-05)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	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	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	14.6	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 93.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 98.9 % 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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 3 (2'-3') (H220575-06)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	224	16.0	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 92.7 % 66.9-136

Surrogate: 1-Chlorooctadecane 97.7 % 59.5-142

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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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 4 (0-1') (H220575-07)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	48.0	16.0	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 89.9 % 66.9-136

Surrogate: 1-Chlorooctadecane 93.3 % 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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 4 (2'-3') (H220575-08)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	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	272	16.0	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 80.5 % 66.9-136

Surrogate: 1-Chlorooctadecane 83.4 % 59.5-142

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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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 5 (0-1') (H220575-09)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 93.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 97.4 % 59.5-142

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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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 5 (2'-3') (H220575-10)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	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	16.0	16.0	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 97.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 104 % 59.5-142

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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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 6 (0-1') (H220575-11)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 98.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 104 % 59.5-142

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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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 6 (2'-3') (H220575-12)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	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	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 95.3 % 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
 CHRISTIAN LLULL
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 7 (0-1') (H220575-13)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	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	<16.0	16.0	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 92.8 % 66.9-136

Surrogate: 1-Chlorooctadecane 96.7 % 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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 7 (2'-3') (H220575-14)

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	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	128	16.0	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 92.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 97.0 % 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:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 8 (0-1') (H220575-15)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	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	80.0	16.0	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	188	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	101	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 86.8 % 66.9-136

Surrogate: 1-Chlorooctadecane 103 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHRISTIAN LLULL
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	02/15/2022	Sampling Date:	02/15/2022
Reported:	02/18/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH -8 (2'-3') (H220575-16)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2022	ND	1.98	98.8	2.00	9.13	
Toluene*	<0.050	0.050	02/16/2022	ND	1.92	96.2	2.00	9.06	
Ethylbenzene*	<0.050	0.050	02/16/2022	ND	1.88	93.8	2.00	9.38	
Total Xylenes*	<0.150	0.150	02/16/2022	ND	5.76	96.1	6.00	9.07	
Total BTEX	<0.300	0.300	02/16/2022	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	304	16.0	02/16/2022	ND	416	104	400	7.41	

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	02/16/2022	ND	237	119	200	0.984	
DRO >C10-C28*	<10.0	10.0	02/16/2022	ND	232	116	200	0.891	
EXT DRO >C28-C36	<10.0	10.0	02/16/2022	ND					

Surrogate: 1-Chlorooctane 92.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 98.6 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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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

BILL TO

ANALYSIS REQUEST

Company Name: ~~John Phillips~~ **John Phillips**
 Project Manager: **Christen Lynn @stratco.com**
 Address: **Christen Lynn @stratco.com**
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____
 Project #: **212L-MD-02119** Project Owner: _____
 Project Name: **MVA 2L Header East 2" Release**
 Project Location: **Lea County, NM**
 Sampler Name: **Celina Bikerstaff**
 FOR LAB USE ONLY

P.O. #: _____
 Company: **Tetra Tech**
 Attn: **Christen Lynn**
 Address: **by email**
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	TPH	BTEX	Chlorides
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
H220575	1 AH-1 (0-1')		1			X				2/6/22		X	X	X
	2 AH-1 (2-3')		1											
	3 AH-2 (0-1')		1											
	4 AH-2 (2-3')		1											
	5 AH-3 (0-1')		1											
	6 AH-3 (2-3')		1											
	7 AH-4 (0-1')		1											
	8 AH-4 (2-3')		1											
	9 AH-5 (0-1')		1											
	10 AH-5 (2-3')		1											

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Relinquished By: **Celina Bikerstaff**
 Date: **2/6/22**
 Time: **1305**
 Received By: **Christen Lynn**
 Date: _____
 Time: _____

Turnaround Time: _____
 Standard Rush
 Bacteria (only) Sample Condition: Cool Intact Yes No Yes No No
 Corrected Temp. °C: _____
 Verbal Result: Yes No Add'l Phone #: _____
 All Results are emailed. Please provide Email address: _____
 REMARKS: **Christen Lynn @stratco.com**

Delivered By: (Circle One) _____
 Sampler - UPS - Bus - Other: _____
 Observed Temp. °C: **22.8**
 Corrected Temp. °C: **22.3**
 Sample Condition: Cool Intact Yes No Yes No
 CHECKED BY: (Initials) **YO**
 Cardinal cannot accept verbal changes. Please email changes to celina.keene@cardinallabsnm.com

1072



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: ~~Patricia Keene~~ **Patricia Keene PLLC**
 Project Manager: **Christina Linn**
 Address: **Christina Linn @statatech.com**
 City: State: Zip:
 Phone #: Fax #:
 Project #: **2126-MO-02119** Project Owner:
 Project Name: **WA 2L Heater East "2" Release**
 Project Location: **Lee County, NM**
 Sampler Name: **Christina Keene**

P.O. #: **Company: Patricia Tech**
 Attn: **Christina Linn**
 Address: **by email**
 City: State: Zip:
 Phone #: Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	TPH	BTEX	Chlorides
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:					
H220575	11 AH-6 (0-1')	G	1			X					2/10/22		X	X	X
	12 AH-6 (2-3')												X	X	X
	13 AH-7 (0-1')												X	X	X
	14 AH-7 (2-3')												X	X	X
	15 AH-8 (0-1')												X	X	X
	16 AH-8 (2-3')												X	X	X

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Relinquished By: **Christina Keene** Date: **2/15/22** Received By: **Jessica Black**
 Relinquished By: **Christina Keene** Date: **1/30/23** Received By: **Christina Linn @statatech.com**

Delivered By: (Circle One) Observed Temp. °C: **22.8** Sample Condition: Intact Cool Intact Yes No
 Corrected Temp. °C: **22.3** CHECKED BY: (Initials) **JK**
 Turnaround Time: Standard Rush Bacteria (only) Sample Condition: Cool Intact Yes No Observed Temp. °C: Corrected Temp. °C:



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February 21, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCA 2C HEADER EAST 2 RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 02/16/22 15:08.

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.

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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 1 (0-1') (H220609-01)

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	02/19/2022	ND	2.06	103	2.00	1.57	
Toluene*	<0.050	0.050	02/19/2022	ND	2.05	103	2.00	2.09	
Ethylbenzene*	<0.050	0.050	02/19/2022	ND	1.97	98.6	2.00	1.20	
Total Xylenes*	<0.150	0.150	02/19/2022	ND	6.12	102	6.00	0.966	
Total BTEX	<0.300	0.300	02/19/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 91.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 97.1 % 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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 1 (2'-3') (H220609-02)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/19/2022	ND	2.06	103	2.00	1.57	
Toluene*	<0.050	0.050	02/19/2022	ND	2.05	103	2.00	2.09	
Ethylbenzene*	<0.050	0.050	02/19/2022	ND	1.97	98.6	2.00	1.20	
Total Xylenes*	<0.150	0.150	02/19/2022	ND	6.12	102	6.00	0.966	
Total BTEX	<0.300	0.300	02/19/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 85.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 90.8 % 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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 1 (4'-5') (H220609-03)

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	02/19/2022	ND	2.06	103	2.00	1.57	
Toluene*	<0.050	0.050	02/19/2022	ND	2.05	103	2.00	2.09	
Ethylbenzene*	<0.050	0.050	02/19/2022	ND	1.97	98.6	2.00	1.20	
Total Xylenes*	<0.150	0.150	02/19/2022	ND	6.12	102	6.00	0.966	
Total BTEX	<0.300	0.300	02/19/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7280	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 89.9 % 66.9-136

Surrogate: 1-Chlorooctadecane 95.3 % 59.5-142

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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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 1 (6'-7') (H220609-04)

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	02/19/2022	ND	2.06	103	2.00	1.57	
Toluene*	<0.050	0.050	02/19/2022	ND	2.05	103	2.00	2.09	
Ethylbenzene*	<0.050	0.050	02/19/2022	ND	1.97	98.6	2.00	1.20	
Total Xylenes*	<0.150	0.150	02/19/2022	ND	6.12	102	6.00	0.966	
Total BTEX	<0.300	0.300	02/19/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2080	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 80.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 85.7 % 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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 1 (9'-10') (H220609-05)

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	02/18/2022	ND	2.23	112	2.00	4.26	
Toluene*	<0.050	0.050	02/18/2022	ND	2.22	111	2.00	4.68	
Ethylbenzene*	<0.050	0.050	02/18/2022	ND	2.14	107	2.00	4.06	
Total Xylenes*	<0.150	0.150	02/18/2022	ND	6.62	110	6.00	3.65	
Total BTEX	<0.300	0.300	02/18/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1120	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 94.3 % 66.9-136

Surrogate: 1-Chlorooctadecane 102 % 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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 1 (11'-12') (H220609-06)

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	02/18/2022	ND	2.23	112	2.00	4.26	
Toluene*	<0.050	0.050	02/18/2022	ND	2.22	111	2.00	4.68	
Ethylbenzene*	<0.050	0.050	02/18/2022	ND	2.14	107	2.00	4.06	
Total Xylenes*	<0.150	0.150	02/18/2022	ND	6.62	110	6.00	3.65	
Total BTEX	<0.300	0.300	02/18/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 92.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 100 % 59.5-142

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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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 2 (0-1') (H220609-07)

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	02/18/2022	ND	2.23	112	2.00	4.26	
Toluene*	<0.050	0.050	02/18/2022	ND	2.22	111	2.00	4.68	
Ethylbenzene*	<0.050	0.050	02/18/2022	ND	2.14	107	2.00	4.06	
Total Xylenes*	<0.150	0.150	02/18/2022	ND	6.62	110	6.00	3.65	
Total BTEX	<0.300	0.300	02/18/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 88.7 % 66.9-136

Surrogate: 1-Chlorooctadecane 93.1 % 59.5-142

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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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 2 (2'-3') (H220609-08)

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	02/18/2022	ND	2.23	112	2.00	4.26	
Toluene*	<0.050	0.050	02/18/2022	ND	2.22	111	2.00	4.68	
Ethylbenzene*	<0.050	0.050	02/18/2022	ND	2.14	107	2.00	4.06	
Total Xylenes*	<0.150	0.150	02/18/2022	ND	6.62	110	6.00	3.65	
Total BTEX	<0.300	0.300	02/18/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2440	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 89.5 % 66.9-136

Surrogate: 1-Chlorooctadecane 94.5 % 59.5-142

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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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 2 (4'-5') (H220609-09)

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	02/18/2022	ND	2.23	112	2.00	4.26	
Toluene*	<0.050	0.050	02/18/2022	ND	2.22	111	2.00	4.68	
Ethylbenzene*	<0.050	0.050	02/18/2022	ND	2.14	107	2.00	4.06	
Total Xylenes*	<0.150	0.150	02/18/2022	ND	6.62	110	6.00	3.65	
Total BTEX	<0.300	0.300	02/18/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3840	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 89.3 % 66.9-136

Surrogate: 1-Chlorooctadecane 93.5 % 59.5-142

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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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 2 (6'-7') (H220609-10)

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	02/18/2022	ND	2.23	112	2.00	4.26	
Toluene*	<0.050	0.050	02/18/2022	ND	2.22	111	2.00	4.68	
Ethylbenzene*	<0.050	0.050	02/18/2022	ND	2.14	107	2.00	4.06	
Total Xylenes*	<0.150	0.150	02/18/2022	ND	6.62	110	6.00	3.65	
Total BTEX	<0.300	0.300	02/18/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2640	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 85.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 88.6 % 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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 2 (9'-10') (H220609-11)

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	02/18/2022	ND	2.23	112	2.00	4.26	
Toluene*	<0.050	0.050	02/18/2022	ND	2.22	111	2.00	4.68	
Ethylbenzene*	<0.050	0.050	02/18/2022	ND	2.14	107	2.00	4.06	
Total Xylenes*	<0.150	0.150	02/18/2022	ND	6.62	110	6.00	3.65	
Total BTEX	<0.300	0.300	02/18/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1010	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 86.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 91.0 % 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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 2 (11'-12') (H220609-12)

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	02/18/2022	ND	2.23	112	2.00	4.26	
Toluene*	<0.050	0.050	02/18/2022	ND	2.22	111	2.00	4.68	
Ethylbenzene*	<0.050	0.050	02/18/2022	ND	2.14	107	2.00	4.06	
Total Xylenes*	<0.150	0.150	02/18/2022	ND	6.62	110	6.00	3.65	
Total BTEX	<0.300	0.300	02/18/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 89.7 % 66.9-136

Surrogate: 1-Chlorooctadecane 96.6 % 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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 3 (0-1') (H220609-13)

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	02/18/2022	ND	2.23	112	2.00	4.26	
Toluene*	<0.050	0.050	02/18/2022	ND	2.22	111	2.00	4.68	
Ethylbenzene*	<0.050	0.050	02/18/2022	ND	2.14	107	2.00	4.06	
Total Xylenes*	<0.150	0.150	02/18/2022	ND	6.62	110	6.00	3.65	
Total BTEX	<0.300	0.300	02/18/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	37.9	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 98.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 104 % 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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 3 (2'-3') (H220609-14)

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	02/18/2022	ND	2.23	112	2.00	4.26	
Toluene*	<0.050	0.050	02/18/2022	ND	2.22	111	2.00	4.68	
Ethylbenzene*	<0.050	0.050	02/18/2022	ND	2.14	107	2.00	4.06	
Total Xylenes*	<0.150	0.150	02/18/2022	ND	6.62	110	6.00	3.65	
Total BTEX	<0.300	0.300	02/18/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1090	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 85.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 89.0 % 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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 3 (4'-5') (H220609-15)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/20/2022	ND	2.14	107	2.00	1.56	
Toluene*	<0.050	0.050	02/20/2022	ND	2.12	106	2.00	2.72	
Ethylbenzene*	<0.050	0.050	02/20/2022	ND	2.04	102	2.00	2.16	
Total Xylenes*	<0.150	0.150	02/20/2022	ND	6.33	106	6.00	2.59	
Total BTEX	<0.300	0.300	02/20/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1300	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	96.9	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	47.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 88.5 % 66.9-136

Surrogate: 1-Chlorooctadecane 97.8 % 59.5-142

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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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 3 (6'-7') (H220609-16)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/20/2022	ND	2.14	107	2.00	1.56	
Toluene*	<0.050	0.050	02/20/2022	ND	2.12	106	2.00	2.72	
Ethylbenzene*	<0.050	0.050	02/20/2022	ND	2.04	102	2.00	2.16	
Total Xylenes*	<0.150	0.150	02/20/2022	ND	6.33	106	6.00	2.59	
Total BTEX	<0.300	0.300	02/20/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1470	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	114	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	11.1	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 86.9 % 66.9-136

Surrogate: 1-Chlorooctadecane 95.1 % 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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 3 (9'-10') (H220609-17)

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	02/20/2022	ND	2.14	107	2.00	1.56	
Toluene*	<0.050	0.050	02/20/2022	ND	2.12	106	2.00	2.72	
Ethylbenzene*	<0.050	0.050	02/20/2022	ND	2.04	102	2.00	2.16	
Total Xylenes*	<0.150	0.150	02/20/2022	ND	6.33	106	6.00	2.59	
Total BTEX	<0.300	0.300	02/20/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	117	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	23.8	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 90.8 % 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
 CHRISTIAN LLULL
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 3 (11'-12') (H220609-18)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/20/2022	ND	2.14	107	2.00	1.56	
Toluene*	<0.050	0.050	02/20/2022	ND	2.12	106	2.00	2.72	
Ethylbenzene*	<0.050	0.050	02/20/2022	ND	2.04	102	2.00	2.16	
Total Xylenes*	<0.150	0.150	02/20/2022	ND	6.33	106	6.00	2.59	
Total BTEX	<0.300	0.300	02/20/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1200	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	27.8	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 85.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 93.6 % 59.5-142

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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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 4 (0-1') (H220609-19)

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	02/20/2022	ND	2.14	107	2.00	1.56	
Toluene*	<0.050	0.050	02/20/2022	ND	2.12	106	2.00	2.72	
Ethylbenzene*	<0.050	0.050	02/20/2022	ND	2.04	102	2.00	2.16	
Total Xylenes*	<0.150	0.150	02/20/2022	ND	6.33	106	6.00	2.59	
Total BTEX	<0.300	0.300	02/20/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1840	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 92.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 97.4 % 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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 4 (2'-3') (H220609-20)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/20/2022	ND	2.14	107	2.00	1.56	
Toluene*	<0.050	0.050	02/20/2022	ND	2.12	106	2.00	2.72	
Ethylbenzene*	<0.050	0.050	02/20/2022	ND	2.04	102	2.00	2.16	
Total Xylenes*	<0.150	0.150	02/20/2022	ND	6.33	106	6.00	2.59	
Total BTEX	<0.300	0.300	02/20/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1580	16.0	02/18/2022	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	02/18/2022	ND	237	118	200	0.462	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	226	113	200	0.933	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 87.7 % 66.9-136

Surrogate: 1-Chlorooctadecane 91.1 % 59.5-142

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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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 4 (4'-5') (H220609-21)

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	02/20/2022	ND	2.14	107	2.00	1.56	
Toluene*	<0.050	0.050	02/20/2022	ND	2.12	106	2.00	2.72	
Ethylbenzene*	<0.050	0.050	02/20/2022	ND	2.04	102	2.00	2.16	
Total Xylenes*	<0.150	0.150	02/20/2022	ND	6.33	106	6.00	2.59	
Total BTEX	<0.300	0.300	02/20/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3520	16.0	02/18/2022	ND	400	100	400	3.92	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	02/18/2022	ND	219	110	200	0.691	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	215	107	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 94.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 94.6 % 59.5-142

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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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 4 (6'-7') (H220609-22)

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	02/20/2022	ND	2.14	107	2.00	1.56	
Toluene*	<0.050	0.050	02/20/2022	ND	2.12	106	2.00	2.72	
Ethylbenzene*	<0.050	0.050	02/20/2022	ND	2.04	102	2.00	2.16	
Total Xylenes*	<0.150	0.150	02/20/2022	ND	6.33	106	6.00	2.59	
Total BTEX	<0.300	0.300	02/20/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1200	16.0	02/18/2022	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	02/18/2022	ND	219	110	200	0.691	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	215	107	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 96.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 96.6 % 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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 4 (9'-10') (H220609-23)

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	02/20/2022	ND	2.14	107	2.00	1.56	
Toluene*	<0.050	0.050	02/20/2022	ND	2.12	106	2.00	2.72	
Ethylbenzene*	<0.050	0.050	02/20/2022	ND	2.04	102	2.00	2.16	
Total Xylenes*	<0.150	0.150	02/20/2022	ND	6.33	106	6.00	2.59	
Total BTEX	<0.300	0.300	02/20/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1220	16.0	02/18/2022	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	02/18/2022	ND	219	110	200	0.691	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	215	107	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 98.9 % 66.9-136

Surrogate: 1-Chlorooctadecane 99.5 % 59.5-142

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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:	02/16/2022	Sampling Date:	02/16/2022
Reported:	02/21/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: T - 4 (11'-12') (H220609-24)

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	02/20/2022	ND	2.14	107	2.00	1.56	
Toluene*	<0.050	0.050	02/20/2022	ND	2.12	106	2.00	2.72	
Ethylbenzene*	<0.050	0.050	02/20/2022	ND	2.04	102	2.00	2.16	
Total Xylenes*	<0.150	0.150	02/20/2022	ND	6.33	106	6.00	2.59	
Total BTEX	<0.300	0.300	02/20/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1460	16.0	02/18/2022	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	02/18/2022	ND	219	110	200	0.691	
DRO >C10-C28*	<10.0	10.0	02/18/2022	ND	215	107	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	02/18/2022	ND					

Surrogate: 1-Chlorooctane 99.8 % 66.9-136

Surrogate: 1-Chlorooctadecane 100 % 59.5-142

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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
** Samples not received at proper temperature of 6°C or below.
*** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: ConocoPhillips		BILL TO		ANALYSIS REQUEST															
Project Manager: Christyann Luth		P.O. #:																	
Address: Christyann.Luth@statedel.com		Company: Tekoa Tech																	
City: _____ State: _____ Zip: _____		Attn: Christyann Luth																	
Phone #: _____ Fax #: _____		Address: by email																	
Project #: 212C-MD-02119 Project Owner: _____		City: _____																	
Project Name: M/S 2L Header East 32" Release		State: _____ Zip: _____																	
Project Location: Lea County, NM		Phone #: _____																	
Sampler Name: Colton Brakefield		Fax #: _____																	
FOR LAB USE ONLY																			
Lab I.D. H220609	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX	PRESERV	SAMPLING	DATE	TIME	TPH	ISTEX	Chlorides								
1 T-1 (0-1')		G	1	X			2/6/22		X	X	X								
2 T-1 (2-3')																			
3 T-1 (4-5')																			
4 T-1 (6-7')																			
5 T-1 (9-10')																			
6 T-1 (11-12')																			
7 T-2 (0-1')																			
8 T-2 (2-3')																			
9 T-2 (4-5')																			
10 T-2 (6-7')																			

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Relinquished By: **Colton Brakefield** Date: **2/6/22** Received By: **Christyann Luth** Date: **2/6/22**

Time: _____ Time: _____

Turnaround Time: _____ Verbal Result: Yes No Add'l Phone #: _____

Thermometer ID #113 Correction Factor -0.5°C All Results are emailed. Please provide Email address: _____

REMARKS: **Christyann.Luth@statedel.com**

Delivered By: (Circle One) Observed Temp. °C **22.8** Sample Condition Intact Cool Yes No

Sampler - UPS - Bus - Other: Corrected Temp. °C **22.3** CHECKED BY: **AD** (Initials)

Standard Rush Bacteria (only) Sample Condition Observed Temp. °C Corrected Temp. °C Cool Intact Yes No Corrected Temp. °C Yes No

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

215

Company Name: <u>Carroll Pharms</u> Project Manager: <u>Christina Linn</u> Address: <u>Christina Linn @stetarch.com</u> City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____ Project #: <u>212C-MD-02119</u> Project Owner: _____ Project Name: <u>MA 2L Header - Bldg 221 Release</u> Project Location: <u>Lee County, NM</u> Sampler Name: <u>Colton Birkert</u>		BILL TO P.O. #: _____ Company: <u>Yates Tech</u> Attn: <u>Christina Linn</u> Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____	
FOR LAB USE ONLY Lab I.D.: _____ Sample I.D.: _____ <u>H220609</u>		MATRIX GROUNDWATER _____ WASTEWATER _____ SOIL _____ OIL _____ SLUDGE _____ OTHER: _____	
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Relinquished By: <u>Colton Birkert</u> Date: <u>2/16/22</u> Time: <u>15:08</u>		Received By: <u>Jamara Williams</u> Date: _____ Time: _____	
Delivered By: (Circle One) UPS - Bus - Other: _____ Observed Temp. °C: <u>22.8</u> Corrected Temp. °C: <u>22.3</u>		Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #: _____ All Results are emailed. Please provide Email address: _____ REMARKS: <u>Christina Linn @stetarch.com</u>	
Sample Condition Cool Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Sample Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No CHECKED BY: (Initials) _____ Turnaround Time: _____ Thermometer ID #113 Correction Factor -0.5°C Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Bacteria (only) Sample Condition Cool Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Observed Temp. °C: _____ Corrected Temp. °C: _____		ANALYSIS REQUEST DATE: <u>2/16/22</u> TIME: _____ TPH <input checked="" type="checkbox"/> BTEX <input checked="" type="checkbox"/> Chlorides <input checked="" type="checkbox"/>	

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

313

Company Name: <u>ConocoPhillips</u> Project Manager: <u>Christina Linn</u>		P.O. #: _____ Company: <u>TARA TECH</u> Attn: <u>CHRISTINA LINN</u> Address: <u>by email</u> City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____	
Address: <u>Christina.Linn@tara-tech.com</u> City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____		Project #: <u>212C-MD-02119</u> Project Owner: _____ Project Name: <u>WCA 2L Header Base m² Release</u> Project Location: <u>Lea County, NM</u> Sampler Name: <u>Colton Bizerke</u> FOR LAB USE ONLY	
Lab I.D. <u>H220609</u> Sample I.D.	Date: <u>2/16/22</u> Time: <u>1508</u>	Date: _____ Time: _____	Received By: <u>Yunara Vialby</u>
	Relinquished By: <u>Colton Bizerke</u>	Date: _____ Time: _____	Received By: _____
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 the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.			
(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER:		MATRIX PRESERV. SAMPLING	
T-4 (4'-5') T-4 (6'-7') T-4 (9'-10') T-4 (11'-12')	6 1 1 1	2/16/22 _____ _____	X TPH X BTEX X Chlorides
Delivered By: (Circle One) <input checked="" type="checkbox"/> UPS <input type="checkbox"/> Bus <input type="checkbox"/> Other Corrected Temp. °C <u>22.3</u>		Observed Temp. °C <u>22.8</u> Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Checked By: (Initials) <u>CB</u>	
Turnaround Time: _____ Thermometer ID #113 Correction Factor -0.5°C		Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Bacteria (only) Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No Sample Condition Observed Temp. °C Corrected Temp. °C	
Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #: _____ All Results are emailed. Please provide Email address: _____ REMARKS: <u>CHRISTINA.LINN@TARA-TECH.COM</u>		Turnaround Time: _____ Thermometer ID #113 Correction Factor -0.5°C	

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



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

February 25, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCA 2C HEADER EAST 2 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 "Mike Snyder". The signature is written in a cursive style with a large, sweeping "M" and "S".

Mike Snyder For 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:	02/21/2022
Reported:	02/25/2022	Sampling Type:	Soil
Project Name:	MCA 2C HEADER EAST 2 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02119	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: AH - 9 (0-1') (H220655-01)

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) 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	02/22/2022	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	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 104 % 66.9-136

Surrogate: 1-Chlorooctadecane 106 % 59.5-142

Cardinal Laboratories

* = Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Mike Snyder For 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: <u>Celestia Phillips</u> Project Manager: <u>Christina Linn</u>		P.O. #: _____ Company: <u>Tetra Tech</u> Attn: <u>Christina Linn</u> Address: <u>by email</u> City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____ Project #: <u>212-140-02119</u> Project Owner: _____ Project Name: <u>WA 2L Header East 2nd Release</u> Project Location: <u>Lea County, NM</u> Sampler Name: <u>Coleen Birkbeck</u>	
Address: <u>Christina Linn @tetratech.com</u> City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____		BILL TO ANALYSIS REQUEST	
Lab I.D. <u>A220655</u> Sample I.D. <u>1 AH-9 (0-1)</u>		MATRIX (G)RAB OR (C)OMP. <input type="checkbox"/> # CONTAINERS <u>1</u> GROUNDWATER <input type="checkbox"/> WASTEWATER <input type="checkbox"/> SOIL <input checked="" type="checkbox"/> OIL <input type="checkbox"/> SLUDGE <input type="checkbox"/> OTHER: _____ ACID/BASE: _____ ICE / COOL <input checked="" type="checkbox"/> OTHER: _____	
Date: <u>2/21/22</u> Time: <u>13:35</u> Date: _____ Time: _____ Relinquished By: <u>Coleen Birkbeck</u> Received By: <u>Christina Linn</u>		DATE TIME <u>2/21/22</u> ANALYSIS REQUEST <input checked="" type="checkbox"/> TPH <input checked="" type="checkbox"/> BTEX <input checked="" type="checkbox"/> Chlorides	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____ Observed Temp. °C <u>1.6</u> Corrected Temp. °C <u>1.1</u>		Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Checked By: (Initials) <u>[Signature]</u> Turnaround Time: _____ Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No Observed Temp. °C _____ Corrected Temp. °C _____	
PLEASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remedy for any claim arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.		Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #: _____ All Results are emailed. Please provide Email address: _____ REMARKS: <u>Christina Linn @tetratech.com</u>	

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

APPENDIX D

Laboratory Analytical Data

Part 3
Confirmation Soil Samples
nRM1930950727 and nAPP2117456525



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

March 17, 2023

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCA 2C REMEDIATION

Enclosed are the results of analyses for samples received by the laboratory on 03/16/23 16:02.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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.

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:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/17/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	** (See Notes)
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 1 (H231212-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/16/2023	ND	2.06	103	2.00	0.570	
Toluene*	<0.050	0.050	03/16/2023	ND	2.05	103	2.00	0.880	
Ethylbenzene*	<0.050	0.050	03/16/2023	ND	2.14	107	2.00	0.488	
Total Xylenes*	<0.150	0.150	03/16/2023	ND	6.63	111	6.00	1.94	
Total BTEX	<0.300	0.300	03/16/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/17/2023	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	03/17/2023	ND	196	97.9	200	3.37	
DRO >C10-C28*	97.2	10.0	03/17/2023	ND	195	97.4	200	8.25	
EXT DRO >C28-C36	119	10.0	03/17/2023	ND					

Surrogate: 1-Chlorooctane 95.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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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:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/17/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	** (See Notes)
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 2 (H231212-02)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/16/2023	ND	2.06	103	2.00	0.570		
Toluene*	<0.050	0.050	03/16/2023	ND	2.05	103	2.00	0.880		
Ethylbenzene*	<0.050	0.050	03/16/2023	ND	2.14	107	2.00	0.488		
Total Xylenes*	<0.150	0.150	03/16/2023	ND	6.63	111	6.00	1.94		
Total BTEX	<0.300	0.300	03/16/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2023	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	03/17/2023	ND	196	97.9	200	3.37		
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	195	97.4	200	8.25		
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND						

Surrogate: 1-Chlorooctane 94.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHRISTIAN LLULL
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/17/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	** (See Notes)
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 3 (H231212-03)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	2.06	103	2.00	0.570	
Toluene*	<0.050	0.050	03/17/2023	ND	2.05	103	2.00	0.880	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	0.488	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.63	111	6.00	1.94	
Total BTEX	<0.300	0.300	03/17/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/17/2023	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	03/17/2023	ND	196	97.9	200	3.37	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	195	97.4	200	8.25	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					

Surrogate: 1-Chlorooctane 91.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHRISTIAN LLULL
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/17/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	** (See Notes)
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 1 (H231212-04)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/17/2023	ND	2.06	103	2.00	0.570		
Toluene*	<0.050	0.050	03/17/2023	ND	2.05	103	2.00	0.880		
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	0.488		
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.63	111	6.00	1.94		
Total BTEX	<0.300	0.300	03/17/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2023	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	03/17/2023	ND	196	97.9	200	3.37		
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	195	97.4	200	8.25		
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND						

Surrogate: 1-Chlorooctane 95.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHRISTIAN LLULL
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/17/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	** (See Notes)
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 2 (H231212-05)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/17/2023	ND	2.06	103	2.00	0.570		
Toluene*	<0.050	0.050	03/17/2023	ND	2.05	103	2.00	0.880		
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	0.488		
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.63	111	6.00	1.94		
Total BTEX	<0.300	0.300	03/17/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/17/2023	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	03/17/2023	ND	196	97.9	200	3.37		
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	195	97.4	200	8.25		
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND						

Surrogate: 1-Chlorooctane 93.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

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:

TETRA TECH
 CHRISTIAN LLULL
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/16/2023	Sampling Date:	03/16/2023
Reported:	03/17/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	** (See Notes)
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 3 (H231212-06)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/17/2023	ND	2.06	103	2.00	0.570		
Toluene*	<0.050	0.050	03/17/2023	ND	2.05	103	2.00	0.880		
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	2.14	107	2.00	0.488		
Total Xylenes*	<0.150	0.150	03/17/2023	ND	6.63	111	6.00	1.94		
Total BTEX	<0.300	0.300	03/17/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/17/2023	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	03/17/2023	ND	196	97.9	200	3.37		
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	195	97.4	200	8.25		
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND						

Surrogate: 1-Chlorooctane 92.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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

March 20, 2023

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCA 2C REMEDIATION

Enclosed are the results of analyses for samples received by the laboratory on 03/17/23 11:38.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/17/2023	Sampling Date:	03/17/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 3 (H231228-01)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	1.96	98.2	2.00	2.98	
Toluene*	<0.050	0.050	03/17/2023	ND	1.94	97.2	2.00	4.83	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	1.93	96.3	2.00	4.33	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	5.81	96.9	6.00	3.94	
Total BTEX	<0.300	0.300	03/17/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	03/20/2023	ND	432	108	400	7.69	

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	03/17/2023	ND	184	92.2	200	3.24	
DRO >C10-C28*	<10.0	10.0	03/17/2023	ND	176	87.9	200	4.62	
EXT DRO >C28-C36	<10.0	10.0	03/17/2023	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/17/2023	Sampling Date:	03/17/2023
Reported:	03/20/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 4 (H231228-02)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2023	ND	1.96	98.2	2.00	2.98	
Toluene*	<0.050	0.050	03/17/2023	ND	1.94	97.2	2.00	4.83	
Ethylbenzene*	<0.050	0.050	03/17/2023	ND	1.93	96.3	2.00	4.33	
Total Xylenes*	<0.150	0.150	03/17/2023	ND	5.81	96.9	6.00	3.94	
Total BTEX	<0.300	0.300	03/17/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	03/20/2023	ND	432	108	400	7.69	

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	03/18/2023	ND	184	92.2	200	3.24	
DRO >C10-C28*	<10.0	10.0	03/18/2023	ND	176	87.9	200	4.62	
EXT DRO >C28-C36	<10.0	10.0	03/18/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
** Samples not received at proper temperature of 6°C or below.
*** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Teqra Tech
 Project Manager: Charles Terhune
 Address: 1800 City West Blvd Suite 1000
 City: Houston State: TX Zip: 77042
 Phone #: 281-755-8965 Fax #: -
 Project #: 212C-HW-02235 Project Owner:
 Project Name: MCA 2C Remediation
 Project Location: Malignon NM
 Sampler Name: Charles Terhune

P.O. #: 212C-HW-02235
 Company: Teqra Tech
 Attn: Charles Terhune
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME	ANALYSIS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
<u>H231228</u>	<u>PS-3</u>	<u>X</u>	<u>X</u>	<u>X</u>					<u>✓</u>		<u>03/17</u>	<u>10:34</u>	<u>BTEX</u>	
	<u>PS-4</u>	<u>X</u>		<u>X</u>							<u>03/17</u>	<u>10:36</u>	<u>TPH</u>	
													<u>Chloride</u>	

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Relinquished By: Charles Terhune
 Date: 03/17/23
 Time: 11:38
 Received By: Jessica Keene
 Date: _____
 Time: _____

Turnaround Time: Standard Rush
 Thermometer ID #113
 Correction Factor -0.6°C
 Bacteria (only) 24 HR
 Cool Intact Yes No
 Sample Condition Observed Temp. °C
 Corrected Temp. °C

Delivered By: (Circle One) Observed Temp. °C 3.8
 Corrected Temp. °C 3.2
 Sample Condition: Intact Cool Yes No
 CHECKED BY: (Initials) JK

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



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

March 22, 2023

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCA 2C REMEDIATION

Enclosed are the results of analyses for samples received by the laboratory on 03/20/23 15:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/20/2023	Sampling Date:	03/20/2023
Reported:	03/22/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 4 (H231257-01)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/21/2023	ND	2.21	110	2.00	5.77	
Toluene*	<0.050	0.050	03/21/2023	ND	2.24	112	2.00	6.28	
Ethylbenzene*	<0.050	0.050	03/21/2023	ND	2.18	109	2.00	4.45	
Total Xylenes*	<0.150	0.150	03/21/2023	ND	6.76	113	6.00	4.18	
Total BTEX	<0.300	0.300	03/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	03/21/2023	ND	432	108	400	7.69	

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	03/22/2023	ND	172	85.9	200	7.86	
DRO >C10-C28*	63.4	10.0	03/22/2023	ND	158	79.1	200	13.6	
EXT DRO >C28-C36	32.5	10.0	03/22/2023	ND					

Surrogate: 1-Chlorooctane 92.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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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
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/20/2023	Sampling Date:	03/20/2023
Reported:	03/22/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 4 (H231257-02)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/21/2023	ND	2.21	110	2.00	5.77	
Toluene*	<0.050	0.050	03/21/2023	ND	2.24	112	2.00	6.28	
Ethylbenzene*	<0.050	0.050	03/21/2023	ND	2.18	109	2.00	4.45	
Total Xylenes*	<0.150	0.150	03/21/2023	ND	6.76	113	6.00	4.18	
Total BTEX	<0.300	0.300	03/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/21/2023	ND	432	108	400	7.69	

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	03/22/2023	ND	172	85.9	200	7.86	
DRO >C10-C28*	<10.0	10.0	03/22/2023	ND	158	79.1	200	13.6	
EXT DRO >C28-C36	<10.0	10.0	03/22/2023	ND					

Surrogate: 1-Chlorooctane 96.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/20/2023	Sampling Date:	03/20/2023
Reported:	03/22/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 5 (H231257-03)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/21/2023	ND	2.21	110	2.00	5.77	
Toluene*	<0.050	0.050	03/21/2023	ND	2.24	112	2.00	6.28	
Ethylbenzene*	<0.050	0.050	03/21/2023	ND	2.18	109	2.00	4.45	
Total Xylenes*	<0.150	0.150	03/21/2023	ND	6.76	113	6.00	4.18	
Total BTEX	<0.300	0.300	03/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/21/2023	ND	432	108	400	7.69	

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	03/22/2023	ND	172	85.9	200	7.86	
DRO >C10-C28*	<10.0	10.0	03/22/2023	ND	158	79.1	200	13.6	
EXT DRO >C28-C36	<10.0	10.0	03/22/2023	ND					

Surrogate: 1-Chlorooctane 97.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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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
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/20/2023	Sampling Date:	03/20/2023
Reported:	03/22/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 5 (H231257-04)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/21/2023	ND	2.21	110	2.00	5.77	
Toluene*	<0.050	0.050	03/21/2023	ND	2.24	112	2.00	6.28	
Ethylbenzene*	<0.050	0.050	03/21/2023	ND	2.18	109	2.00	4.45	
Total Xylenes*	<0.150	0.150	03/21/2023	ND	6.76	113	6.00	4.18	
Total BTEX	<0.300	0.300	03/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/21/2023	ND	432	108	400	7.69	

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	03/22/2023	ND	172	85.9	200	7.86	
DRO >C10-C28*	<10.0	10.0	03/22/2023	ND	158	79.1	200	13.6	
EXT DRO >C28-C36	<10.0	10.0	03/22/2023	ND					

Surrogate: 1-Chlorooctane 94.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/20/2023	Sampling Date:	03/20/2023
Reported:	03/22/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 5 (H231257-05)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/21/2023	ND	2.21	110	2.00	5.77	
Toluene*	<0.050	0.050	03/21/2023	ND	2.24	112	2.00	6.28	
Ethylbenzene*	<0.050	0.050	03/21/2023	ND	2.18	109	2.00	4.45	
Total Xylenes*	<0.150	0.150	03/21/2023	ND	6.76	113	6.00	4.18	
Total BTEX	<0.300	0.300	03/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	03/21/2023	ND	432	108	400	7.69	

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	03/22/2023	ND	172	85.9	200	7.86	
DRO >C10-C28*	<10.0	10.0	03/22/2023	ND	158	79.1	200	13.6	
EXT DRO >C28-C36	<10.0	10.0	03/22/2023	ND					

Surrogate: 1-Chlorooctane 91.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



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

March 23, 2023

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCA 2C REMEDIATION

Enclosed are the results of analyses for samples received by the laboratory on 03/21/23 16:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/21/2023	Sampling Date:	03/21/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 6 (H231289-01)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	1.99	99.3	2.00	0.793	
Toluene*	<0.050	0.050	03/22/2023	ND	2.00	99.9	2.00	2.93	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.01	101	2.00	3.01	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.10	102	6.00	1.67	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

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	03/23/2023	ND	432	108	400	7.14	

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	03/23/2023	ND	158	78.9	200	4.77	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	176	87.8	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 134 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/21/2023	Sampling Date:	03/21/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 6 (H231289-02)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	1.99	99.3	2.00	0.793	
Toluene*	<0.050	0.050	03/22/2023	ND	2.00	99.9	2.00	2.93	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.01	101	2.00	3.01	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.10	102	6.00	1.67	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

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	03/23/2023	ND	432	108	400	7.14	

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	03/23/2023	ND	158	78.9	200	4.77	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	176	87.8	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 133 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/21/2023	Sampling Date:	03/21/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 6 (H231289-03)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	1.99	99.3	2.00	0.793	
Toluene*	<0.050	0.050	03/22/2023	ND	2.00	99.9	2.00	2.93	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.01	101	2.00	3.01	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.10	102	6.00	1.67	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

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	03/23/2023	ND	432	108	400	7.14	

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	03/23/2023	ND	158	78.9	200	4.77	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	176	87.8	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 133 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/21/2023	Sampling Date:	03/21/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 7 (H231289-04)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	1.99	99.3	2.00	0.793	
Toluene*	<0.050	0.050	03/22/2023	ND	2.00	99.9	2.00	2.93	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.01	101	2.00	3.01	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.10	102	6.00	1.67	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

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	03/23/2023	ND	432	108	400	7.14	

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	03/23/2023	ND	158	78.9	200	4.77	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	176	87.8	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 124 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/21/2023	Sampling Date:	03/21/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 7 (H231289-05)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	1.99	99.3	2.00	0.793	
Toluene*	<0.050	0.050	03/22/2023	ND	2.00	99.9	2.00	2.93	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.01	101	2.00	3.01	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.10	102	6.00	1.67	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/23/2023	ND	432	108	400	7.14	

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	03/23/2023	ND	158	78.9	200	4.77	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	176	87.8	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

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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
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/21/2023	Sampling Date:	03/21/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 7 (H231289-06)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	1.99	99.3	2.00	0.793	
Toluene*	<0.050	0.050	03/22/2023	ND	2.00	99.9	2.00	2.93	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.01	101	2.00	3.01	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.10	102	6.00	1.67	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	03/23/2023	ND	432	108	400	7.14	

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	03/23/2023	ND	158	78.9	200	4.77	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	176	87.8	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 132 % 49.1-148

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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
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/21/2023	Sampling Date:	03/21/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 8 (H231289-07)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	1.99	99.3	2.00	0.793	
Toluene*	<0.050	0.050	03/22/2023	ND	2.00	99.9	2.00	2.93	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.01	101	2.00	3.01	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.10	102	6.00	1.67	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/23/2023	ND	432	108	400	7.14	

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	03/23/2023	ND	158	78.9	200	4.77	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	176	87.8	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/21/2023	Sampling Date:	03/21/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 8 (H231289-08)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	1.99	99.3	2.00	0.793	
Toluene*	<0.050	0.050	03/22/2023	ND	2.00	99.9	2.00	2.93	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.01	101	2.00	3.01	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.10	102	6.00	1.67	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

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	03/23/2023	ND	432	108	400	7.14	

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	03/23/2023	ND	158	78.9	200	4.77	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	176	87.8	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 135 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/21/2023	Sampling Date:	03/21/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 9 (H231289-09)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	1.99	99.3	2.00	0.793	
Toluene*	<0.050	0.050	03/22/2023	ND	2.00	99.9	2.00	2.93	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.01	101	2.00	3.01	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.10	102	6.00	1.67	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/23/2023	ND	432	108	400	7.14	

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	03/23/2023	ND	158	78.9	200	4.77	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	176	87.8	200	2.38	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 129 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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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

BILL TO

ANALYSIS REQUEST

Company Name: *Tetra Tech, Inc.*
 Project Manager: *Charles Terhune*
 Address: *1500 City West Boulevard Suite 1000*
 City: *Houston* State: *TX* Zip: *77042*
 Phone #: *281-755-8965* Fax #: _____
 Project #: *ZTC-HN-02235* Project Owner: _____
 Project Name: *MCA ZC Remediation*
 Project Location: *Majors, NM*
 Sampler Name: *Brody Lichtenberger*
 P.O. #: ~~281-755-8965~~
 Company: *Tetra Tech, Inc.*
 Attn: *Chuck Terhune*
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____

ESL
P01197406

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.			DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :			
<i>H231289</i>	<i>1 WSM-6</i>	<i>G1</i>	<i>1</i>	<i>X</i>								<i>3/21/23</i>	<i>0815</i>	<i>BTEX by 8021B</i>	
	<i>2 ESW-6</i>	<i>G1</i>	<i>1</i>	<i>X</i>								<i>3/21/23</i>	<i>0935</i>	<i>TPH by 8015M</i>	
	<i>3 FS-6</i>	<i>G1</i>	<i>1</i>	<i>X</i>								<i>3/21/23</i>	<i>0940</i>	<i>Chloride by SM 4500 Cl-B</i>	
	<i>4 WSM-7</i>	<i>G1</i>	<i>1</i>	<i>X</i>								<i>3/21/23</i>	<i>1040</i>		
	<i>5 ESW-7</i>	<i>G1</i>	<i>1</i>	<i>X</i>								<i>3/21/23</i>	<i>1045</i>		
	<i>6 FS-7</i>	<i>G1</i>	<i>1</i>	<i>X</i>								<i>3/21/23</i>	<i>1050</i>		
	<i>7 FS-8</i>	<i>G1</i>	<i>1</i>	<i>X</i>								<i>3/21/23</i>	<i>1055</i>		
	<i>8 WSW-8</i>	<i>G1</i>	<i>1</i>	<i>X</i>								<i>3/21/23</i>	<i>1230</i>		
	<i>9 FS-9</i>	<i>G1</i>	<i>1</i>	<i>X</i>								<i>3/21/23</i>	<i>1300</i>		

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Relinquished By: *Brody Lichtenberger* Date: *3/21/23* Time: *1615*
 Received By: *Guinea Roberts*
 Date: _____ Time: _____
 Verbal Result: Yes No Add'l Phone #: _____
 All Results are emailed. Please provide Email address: _____
 REMARKS: _____

Delivered By: (Circle One) UPS Bus Other: _____
 Observed Temp. °C: *2.3*
 Corrected Temp. °C: *1.7*
 Sample Condition: Cool Intact
 Yes No Yes No
 CHECKED BY: *VR*
 Turnaround Time: _____
 Thermometer ID #113
 Correction Factor -0.5°C
 Standard *RUSH*
 Bacteria (only) *3 day TAT*
 Cool Intact *Yes*
 Bacteria (only) *Yes*
 Sample Condition *Observed*
 Observed Temp. °C: _____
 Corrected Temp. °C: _____

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



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

March 23, 2023

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCA 2C REMEDIATION

Enclosed are the results of analyses for samples received by the laboratory on 03/22/23 15:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 8 (H231323-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	2.04	102	2.00	0.305	
Toluene*	<0.050	0.050	03/22/2023	ND	2.07	103	2.00	0.518	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.16	108	2.00	0.331	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.63	111	6.00	0.172	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

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	03/23/2023	ND	400	100	400	7.69	

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	03/23/2023	ND	168	84.0	200	3.23	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	173	86.6	200	2.04	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 120 % 48.2-134

Surrogate: 1-Chlorooctadecane 137 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 9 (H231323-02)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	2.04	102	2.00	0.305	
Toluene*	<0.050	0.050	03/22/2023	ND	2.07	103	2.00	0.518	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.16	108	2.00	0.331	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.63	111	6.00	0.172	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/23/2023	ND	400	100	400	7.69	

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	03/23/2023	ND	168	84.0	200	3.23		
DRO >C10-C28*	69.9	10.0	03/23/2023	ND	173	86.6	200	2.04		
EXT DRO >C28-C36	48.2	10.0	03/23/2023	ND						

Surrogate: 1-Chlorooctane 129 % 48.2-134

Surrogate: 1-Chlorooctadecane 150 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 9 (H231323-03)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/22/2023	ND	2.04	102	2.00	0.305		
Toluene*	<0.050	0.050	03/22/2023	ND	2.07	103	2.00	0.518		
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.16	108	2.00	0.331		
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.63	111	6.00	0.172		
Total BTEX	<0.300	0.300	03/22/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/23/2023	ND	400	100	400	7.69		

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	03/23/2023	ND	168	84.0	200	3.23		
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	173	86.6	200	2.04		
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND						

Surrogate: 1-Chlorooctane 128 % 48.2-134

Surrogate: 1-Chlorooctadecane 143 % 49.1-148

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 10 (H231323-04)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	2.04	102	2.00	0.305	
Toluene*	<0.050	0.050	03/22/2023	ND	2.07	103	2.00	0.518	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.16	108	2.00	0.331	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.63	111	6.00	0.172	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	03/23/2023	ND	400	100	400	7.69	

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	03/23/2023	ND	168	84.0	200	3.23		
DRO >C10-C28*	39.7	10.0	03/23/2023	ND	173	86.6	200	2.04		
EXT DRO >C28-C36	27.5	10.0	03/23/2023	ND						

Surrogate: 1-Chlorooctane 134 % 48.2-134

Surrogate: 1-Chlorooctadecane 154 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 10 (H231323-05)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	2.04	102	2.00	0.305	
Toluene*	<0.050	0.050	03/22/2023	ND	2.07	103	2.00	0.518	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.16	108	2.00	0.331	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.63	111	6.00	0.172	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/23/2023	ND	400	100	400	7.69	

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	03/23/2023	ND	168	84.0	200	3.23	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	173	86.6	200	2.04	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 96.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 10 (H231323-06)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/22/2023	ND	2.04	102	2.00	0.305		
Toluene*	<0.050	0.050	03/22/2023	ND	2.07	103	2.00	0.518		
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.16	108	2.00	0.331		
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.63	111	6.00	0.172		
Total BTEX	<0.300	0.300	03/22/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/23/2023	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	03/23/2023	ND	168	84.0	200	3.23		
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	173	86.6	200	2.04		
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND						

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 135 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 11 (H231323-07)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	2.04	102	2.00	0.305	
Toluene*	<0.050	0.050	03/22/2023	ND	2.07	103	2.00	0.518	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.16	108	2.00	0.331	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.63	111	6.00	0.172	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

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	03/23/2023	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	03/23/2023	ND	168	84.0	200	3.23	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	173	86.6	200	2.04	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 131 % 48.2-134

Surrogate: 1-Chlorooctadecane 148 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 11 (H231323-08)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/22/2023	ND	2.04	102	2.00	0.305		
Toluene*	<0.050	0.050	03/22/2023	ND	2.07	103	2.00	0.518		
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.16	108	2.00	0.331		
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.63	111	6.00	0.172		
Total BTEX	<0.300	0.300	03/22/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

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	03/23/2023	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	03/23/2023	ND	168	84.0	200	3.23		
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	173	86.6	200	2.04		
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND						

Surrogate: 1-Chlorooctane 132 % 48.2-134

Surrogate: 1-Chlorooctadecane 148 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 12 (H231323-09)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	2.04	102	2.00	0.305	
Toluene*	<0.050	0.050	03/22/2023	ND	2.07	103	2.00	0.518	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.16	108	2.00	0.331	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.63	111	6.00	0.172	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

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	03/23/2023	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	03/23/2023	ND	168	84.0	200	3.23	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	173	86.6	200	2.04	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 128 % 48.2-134

Surrogate: 1-Chlorooctadecane 143 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 12 (H231323-10)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	2.04	102	2.00	0.305	
Toluene*	<0.050	0.050	03/22/2023	ND	2.07	103	2.00	0.518	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.16	108	2.00	0.331	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.63	111	6.00	0.172	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	03/23/2023	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	03/23/2023	ND	168	84.0	200	3.23		
DRO >C10-C28*	221	10.0	03/23/2023	ND	173	86.6	200	2.04		
EXT DRO >C28-C36	172	10.0	03/23/2023	ND						

Surrogate: 1-Chlorooctane 134 % 48.2-134

Surrogate: 1-Chlorooctadecane 163 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 13 (H231323-11)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	2.04	102	2.00	0.305	
Toluene*	<0.050	0.050	03/22/2023	ND	2.07	103	2.00	0.518	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.16	108	2.00	0.331	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.63	111	6.00	0.172	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	03/23/2023	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	03/23/2023	ND	168	84.0	200	3.23	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	173	86.6	200	2.04	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 128 % 48.2-134

Surrogate: 1-Chlorooctadecane 144 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 13 (H231323-12)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/22/2023	ND	2.04	102	2.00	0.305	
Toluene*	<0.050	0.050	03/22/2023	ND	2.07	103	2.00	0.518	
Ethylbenzene*	<0.050	0.050	03/22/2023	ND	2.16	108	2.00	0.331	
Total Xylenes*	<0.150	0.150	03/22/2023	ND	6.63	111	6.00	0.172	
Total BTEX	<0.300	0.300	03/22/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	03/23/2023	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	03/23/2023	ND	168	84.0	200	3.23		
DRO >C10-C28*	161	10.0	03/23/2023	ND	173	86.6	200	2.04		
EXT DRO >C28-C36	106	10.0	03/23/2023	ND						

Surrogate: 1-Chlorooctane 127 % 48.2-134

Surrogate: 1-Chlorooctadecane 159 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/22/2023	Sampling Date:	03/22/2023
Reported:	03/23/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 14 (H231323-13)

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	1.99	99.3	2.00	0.793	
Toluene*	<0.050	0.050	03/23/2023	ND	2.00	99.9	2.00	2.93	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.01	101	2.00	3.01	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.10	102	6.00	1.67	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

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	03/23/2023	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	03/23/2023	ND	168	84.0	200	3.23	
DRO >C10-C28*	<10.0	10.0	03/23/2023	ND	173	86.6	200	2.04	
EXT DRO >C28-C36	<10.0	10.0	03/23/2023	ND					

Surrogate: 1-Chlorooctane 127 % 48.2-134

Surrogate: 1-Chlorooctadecane 143 % 49.1-148

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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.
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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*=Accredited Analyte

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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

BILL TO

ANALYSIS REQUEST

Company Name: Tetra Tech, Inc.
 Project Manager: Charles Terhune
 Address: 1500 City West Boulevard Suite 1000
 City: Houston State: TX Zip: 77042
 Phone #: 281-755-8965 Fax #: _____
 Project #: 212C-HN-02235 Project Owner: _____
 Project Name: MCA 2C Remediation
 Project Location: Majors, NM
 Sampler Name: Brady Lichtenbergs
 P.O. #: DOI197406
 Company: Tetra Tech, Inc.
 Attn: Chue Terhune
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX						PRESERV	SAMPLING	DATE	TIME	ANALYSIS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
<u>A231323</u>	<u>1 ESW-8</u>	<u>G</u>	<u>1</u>	<u>X</u>						<u>X</u>			<u>BTEX by 8021B</u>	
	<u>2 ESW-9</u>	<u>G</u>	<u>1</u>	<u>X</u>						<u>X</u>			<u>TPH by 8015M</u>	
	<u>3 WSW-9</u>	<u>G</u>	<u>1</u>	<u>X</u>						<u>X</u>			<u>Chloride by SM 4500 Cl-B</u>	
	<u>4 ES-10</u>	<u>G</u>	<u>1</u>	<u>X</u>						<u>X</u>				
	<u>5 ESW-10</u>	<u>G</u>	<u>1</u>	<u>X</u>						<u>X</u>				
	<u>6 WSW-10</u>	<u>G</u>	<u>1</u>	<u>X</u>						<u>X</u>				
	<u>7 ESW-11</u>	<u>G</u>	<u>1</u>	<u>X</u>						<u>X</u>				
	<u>8 WSW-11</u>	<u>G</u>	<u>1</u>	<u>X</u>						<u>X</u>				
	<u>9 ESW-12</u>	<u>G</u>	<u>1</u>	<u>X</u>						<u>X</u>				
	<u>10 WSW-12</u>	<u>G</u>	<u>1</u>	<u>X</u>						<u>X</u>				

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Relinquished By: Brady Lichtenbergs
 Date: 3/22/23
 Time: 1555
 Received By: Guillermo Velazquez
 Date: _____
 Time: _____

Delivered By: (Circle One) UPS Observed Temp. °C: 17
 Corrected Temp. °C: 1.1
 Sample Condition: Cool Intact
 Checked By: [Signature]
 Turnaround Time: _____
 Standard: RUSH
 Bacteria (only) Sample Condition: Cool Intact
 Corrected Temp. °C: _____

FORM-006 REV 07/18/22
 Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Tetra Tech, Inc
 Project Manager: Charles Terhune
 Address: 1500 GHWest Boulevard Suite 1000
 City: Houston State: TX Zip: 77042
 Phone #: 281-755-8965 Fax #: _____
 Project #: 217C-HD-02235 Project Owner: _____
 Project Name: MCA 2c Remediation
 Project Location: Mohammar, NM
 Sampler Name: Brody Lichtenberger
 P.O. #: PO1197406
 Company: Tetra Tech, Inc
 Attn: Chuck Terhune
 Address: _____
 City: _____
 State: _____ Zip: _____
 Phone #: _____
 Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	ANALYSIS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:			
H231323	ESW-13 EBL		611			X					3/22/23	1420	BTEX by 8021 B
	12 WSW-13		611			X					3/22/23	1425	TPH by 8015 M
	13 ESW-14		611			X					3/22/23	1500	Chloride by SM 4500 CI-B

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Relinquished By: Brody Lichtenberger Date: 3/22/23 Received By: Jessica [Signature]
 Relinquished By: _____ Date: _____ Received By: _____

Delivered By: (Circle One) Observed Temp. °C: 17 Sample Condition: Cool Intact
 Sampler - UPS - Bus - Other: Corrected Temp. °C: 11 Yes No
 CHECKED BY: (Initials) [Signature]
 Turnaround Time: Standard RUSH
 Thermometer ID #113 24 hour
 Correction Factor -0.5°C Yes No
 Bacteria (only) Sample Condition: Cool Intact Observed Temp. °C: _____
 Yes No Corrected Temp. °C: _____

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



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

March 24, 2023

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCA 2C REMEDIATION

Enclosed are the results of analyses for samples received by the laboratory on 03/23/23 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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 "Mike Snyder". The signature is written in a cursive style with a large, sweeping "M" and "S".

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 14 (H231345-01)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940		
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47		
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87		
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53		
Total BTEX	<0.300	0.300	03/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	03/24/2023	ND	416	104	400	7.41		

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	03/24/2023	ND	168	84.0	200	3.23		
DRO >C10-C28*	511	10.0	03/24/2023	ND	173	86.6	200	2.04		
EXT DRO >C28-C36	281	10.0	03/24/2023	ND						

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 132 % 49.1-148

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* = Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 14 (H231345-02)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	168	84.0	200	3.23	
DRO >C10-C28*	139	10.0	03/24/2023	ND	173	86.6	200	2.04	
EXT DRO >C28-C36	112	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 132 % 49.1-148

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* = Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 15 (H231345-03)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	168	84.0	200	3.23	
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	173	86.6	200	2.04	
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 15 (H231345-04)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940		
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47		
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87		
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53		
Total BTEX	<0.300	0.300	03/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/24/2023	ND	416	104	400	7.41		

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	03/24/2023	ND	210	105	200	14.0		
DRO >C10-C28*	50.6	10.0	03/24/2023	ND	202	101	200	4.72		
EXT DRO >C28-C36	31.4	10.0	03/24/2023	ND						

Surrogate: 1-Chlorooctane 90.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.2 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 15 (H231345-05)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	36.6	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	22.9	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 95.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.3 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 16 (H231345-06)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

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	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 16 (H231345-07)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940		
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47		
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87		
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53		
Total BTEX	<0.300	0.300	03/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

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	03/24/2023	ND	416	104	400	7.41		

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	03/24/2023	ND	210	105	200	14.0		
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	202	101	200	4.72		
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND						

Surrogate: 1-Chlorooctane 79.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.6 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 17 (H231345-08)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

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	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 93.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.0 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 16 (H231345-09)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	29.8	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	13.2	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 74.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 78.4 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 17 (H231345-10)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 89.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.4 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 18 (H231345-11)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 72.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.4 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 18 (H231345-12)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 70.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.1 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 19 (H231345-13)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

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	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	35.9	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	21.9	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 76.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 79.9 % 49.1-148

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* = Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 18 (H231345-14)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

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	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 89.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.1 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 19 (H231345-15)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 73.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.4 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 20 (H231345-16)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/24/2023	ND	416	104	400	7.41	

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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 96.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 19 (H231345-17)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/23/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/23/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/23/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/24/2023	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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 74.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 75.2 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 20 (H231345-18)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/24/2023	ND	2.02	101	2.00	0.940	
Toluene*	<0.050	0.050	03/24/2023	ND	2.05	103	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/24/2023	ND	2.15	108	2.00	1.87	
Total Xylenes*	<0.150	0.150	03/24/2023	ND	6.63	110	6.00	2.53	
Total BTEX	<0.300	0.300	03/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	03/24/2023	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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 80.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.7 % 49.1-148

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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/23/2023	Sampling Date:	03/23/2023
Reported:	03/24/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 21 (H231345-19)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/24/2023	ND	2.04	102	2.00	1.61	
Toluene*	<0.050	0.050	03/24/2023	ND	2.04	102	2.00	1.16	
Ethylbenzene*	<0.050	0.050	03/24/2023	ND	2.12	106	2.00	1.46	
Total Xylenes*	<0.150	0.150	03/24/2023	ND	6.56	109	6.00	1.71	
Total BTEX	<0.300	0.300	03/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	03/24/2023	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	03/24/2023	ND	210	105	200	14.0	
DRO >C10-C28*	<10.0	10.0	03/24/2023	ND	202	101	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	03/24/2023	ND					

Surrogate: 1-Chlorooctane 99.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Tetra Tech, Inc. P.O. #: PO1197406
 Project Manager: Charles Terhune Company: Tetra Tech, Inc
 Address: 1500 CityWest Boulevard Suite 1000 Attn: Chuck Terhune
 City: Houston State: TX Zip: 77042
 Phone #: 281-755-8965 Fax #: _____
 Project #: 212C-HN-02235 Project Owner: _____
 Project Name: MCA 2C Remediation City: _____
 Project Location: Malgosner, NM State: _____ Zip: _____
 Sample Name: Brody Lichtnerberger Phone #: _____
 FOR LAB USE ONLY: _____ Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME	ANALYSIS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
<u>H231345</u>	<u>1 USW-14</u>	<u>G</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>3/23/23</u>	<u>0730</u>	<u>BTEX by 8021B</u>	
	<u>2 FS-14</u>	<u>G</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>3/23/23</u>	<u>0750</u>	<u>TPH by 8015M</u>	
	<u>3 ESU-15</u>	<u>G</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>3/23/23</u>	<u>0800</u>	<u>Chloride by SM4500 Cl-B</u>	
	<u>4 USW-15</u>	<u>G</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>3/23/23</u>	<u>0805</u>		
	<u>5 FS-15</u>	<u>G</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>3/23/23</u>	<u>0910</u>		
	<u>6 ESU-16</u>	<u>G</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>3/23/23</u>	<u>0915</u>		
	<u>7 USW-16</u>	<u>G</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>3/23/23</u>	<u>0920</u>		
	<u>8 ESU-17</u>	<u>G</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>3/23/23</u>	<u>0925</u>		
	<u>9 FS-16</u>	<u>G</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>3/23/23</u>	<u>1020</u>		
	<u>10 USW-17</u>	<u>G</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>3/23/23</u>	<u>1025</u>		

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Relinquished By: Brody Lichtnerberger Date: 3/23/23 Time: 1600
 Received By: [Signature]
 Verbal Result: Yes No Add'l Phone #:
 All Results are emailed. Please provide Email address:
 REMARKS:

Delivered By: (Circle One) UPS Observed Temp. °C: 21.9 Sample Condition: Cool Intact CHECKED BY: [Signature]
 Corrected Temp. °C: 21.3 Yes No Intact Yes No NO
 Turnaround Time: _____ Standard Bacteria (only) Sample Condition
 Thermometer ID #113 RUSH Cool Intact Observed Temp. °C
 Correction Factor -0.6°C No Yes No Corrected Temp. °C
 FORM NO. ORK-3-3-071101ZZ
 † Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Tetra Tech, Inc.
 Project Manager: Charles Terhune
 Address: 1500 CityWest Boulevard Suite 1000
 City: Houston State: TX Zip: 77042
 Phone #: 281-755-8965 Fax #: _____
 Project #: 21C-HN-02735 Project Owner: _____
 Project Name: MCA 2C Remediation
 Project Location: Malgamas, NM
 Sampler Name: Brody Lichtenberger
 P.O. #: 801197406
 Company: Tetra Tech, Inc
 Attn: Chuck Terhune
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.			DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :			
H231345	ESW-18	G 1	1	X								3/23/23	1030	BTEX by 80215	
	WSW-18	G 1	1	X								3/23/23	1115	TPH by 8015M	
	ESW-19	G 1	1	X								3/23/23	1120	Chloride by SM4500 CI-B	
	FS-18	G 1	1	X								3/23/23	1240		
	WSW-19	G 1	1	X								3/23/23	1245		
	ESW-20	G 1	1	X								3/23/23	1250		
	FS-19	G 1	1	X								3/23/23	1500		
	WSW-20	G 1	1	X								3/23/23	1505		
	ESW-21	G 1	1	X								3/23/23	1510		

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Relinquished By: Brody Lichtenberger
 Date: 3/23/23
 Time: 1600
 Received By: [Signature]
 Date: _____
 Time: _____

Delivered By: (Circle One) Observed Temp. °C 21.9
 Corrected Temp. °C 21.3
 Sample Condition Cool Intact Yes No
 Checked By: [Signature]
 Turnaround Time: _____
 Standard Bacteria (only)
 Sample Condition Cool Intact Yes No
 Observed Temp. °C _____
 Corrected Temp. °C _____

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinalabsnm.com



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

March 27, 2023

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCA 2C REMEDIATION

Enclosed are the results of analyses for samples received by the laboratory on 03/24/23 15:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 21 (H231366-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/24/2023	ND	2.07	103	2.00	5.01	
Toluene*	<0.050	0.050	03/24/2023	ND	2.08	104	2.00	5.11	
Ethylbenzene*	<0.050	0.050	03/24/2023	ND	2.16	108	2.00	5.03	
Total Xylenes*	<0.150	0.150	03/24/2023	ND	6.70	112	6.00	5.39	
Total BTEX	<0.300	0.300	03/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

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	03/27/2023	ND	448	112	400	7.41	

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	03/25/2023	ND	172	85.8	200	8.81	
DRO >C10-C28*	<10.0	10.0	03/25/2023	ND	176	88.2	200	9.33	
EXT DRO >C28-C36	<10.0	10.0	03/25/2023	ND					

Surrogate: 1-Chlorooctane 96.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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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
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: SSW - 1 (H231366-02)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/24/2023	ND	2.07	103	2.00	5.01	
Toluene*	<0.050	0.050	03/24/2023	ND	2.08	104	2.00	5.11	
Ethylbenzene*	<0.050	0.050	03/24/2023	ND	2.16	108	2.00	5.03	
Total Xylenes*	<0.150	0.150	03/24/2023	ND	6.70	112	6.00	5.39	
Total BTEX	<0.300	0.300	03/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/27/2023	ND	448	112	400	7.41	

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	03/25/2023	ND	172	85.8	200	8.81	
DRO >C10-C28*	<10.0	10.0	03/25/2023	ND	176	88.2	200	9.33	
EXT DRO >C28-C36	<10.0	10.0	03/25/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: SSW - 2 (H231366-03)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/24/2023	ND	2.07	103	2.00	5.01	
Toluene*	<0.050	0.050	03/24/2023	ND	2.08	104	2.00	5.11	
Ethylbenzene*	<0.050	0.050	03/24/2023	ND	2.16	108	2.00	5.03	
Total Xylenes*	<0.150	0.150	03/24/2023	ND	6.70	112	6.00	5.39	
Total BTEX	<0.300	0.300	03/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/27/2023	ND	448	112	400	7.41	

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	03/25/2023	ND	172	85.8	200	8.81	
DRO >C10-C28*	<10.0	10.0	03/25/2023	ND	176	88.2	200	9.33	
EXT DRO >C28-C36	<10.0	10.0	03/25/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: SSW - 3 (H231366-04)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/24/2023	ND	2.07	103	2.00	5.01	
Toluene*	<0.050	0.050	03/24/2023	ND	2.08	104	2.00	5.11	
Ethylbenzene*	<0.050	0.050	03/24/2023	ND	2.16	108	2.00	5.03	
Total Xylenes*	<0.150	0.150	03/24/2023	ND	6.70	112	6.00	5.39	
Total BTEX	<0.300	0.300	03/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/27/2023	ND	448	112	400	7.41	

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	03/25/2023	ND	172	85.8	200	8.81	
DRO >C10-C28*	10.9	10.0	03/25/2023	ND	176	88.2	200	9.33	
EXT DRO >C28-C36	<10.0	10.0	03/25/2023	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: SSW - 4 (H231366-05)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/24/2023	ND	2.07	103	2.00	5.01	
Toluene*	<0.050	0.050	03/24/2023	ND	2.08	104	2.00	5.11	
Ethylbenzene*	<0.050	0.050	03/24/2023	ND	2.16	108	2.00	5.03	
Total Xylenes*	<0.150	0.150	03/24/2023	ND	6.70	112	6.00	5.39	
Total BTEX	<0.300	0.300	03/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

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	03/27/2023	ND	448	112	400	7.41	

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	03/25/2023	ND	172	85.8	200	8.81	
DRO >C10-C28*	<10.0	10.0	03/25/2023	ND	176	88.2	200	9.33	
EXT DRO >C28-C36	<10.0	10.0	03/25/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: SSW - 5 (H231366-06)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/24/2023	ND	2.15	107	2.00	11.6	
Toluene*	<0.050	0.050	03/24/2023	ND	2.16	108	2.00	11.6	
Ethylbenzene*	<0.050	0.050	03/24/2023	ND	2.25	112	2.00	12.2	
Total Xylenes*	<0.150	0.150	03/24/2023	ND	6.90	115	6.00	12.3	
Total BTEX	<0.300	0.300	03/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

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	03/27/2023	ND	448	112	400	7.41	

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	03/25/2023	ND	172	85.8	200	8.81	
DRO >C10-C28*	<10.0	10.0	03/25/2023	ND	176	88.2	200	9.33	
EXT DRO >C28-C36	<10.0	10.0	03/25/2023	ND					

Surrogate: 1-Chlorooctane 99.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 20 (H231366-07)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/24/2023	ND	2.15	107	2.00	11.6	
Toluene*	<0.050	0.050	03/24/2023	ND	2.16	108	2.00	11.6	
Ethylbenzene*	<0.050	0.050	03/24/2023	ND	2.25	112	2.00	12.2	
Total Xylenes*	<0.150	0.150	03/24/2023	ND	6.90	115	6.00	12.3	
Total BTEX	<0.300	0.300	03/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/27/2023	ND	448	112	400	7.41	

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	03/25/2023	ND	172	85.8	200	8.81	
DRO >C10-C28*	<10.0	10.0	03/25/2023	ND	176	88.2	200	9.33	
EXT DRO >C28-C36	<10.0	10.0	03/25/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 17 (H231366-08)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/24/2023	ND	2.15	107	2.00	11.6	
Toluene*	<0.050	0.050	03/24/2023	ND	2.16	108	2.00	11.6	
Ethylbenzene*	<0.050	0.050	03/24/2023	ND	2.25	112	2.00	12.2	
Total Xylenes*	<0.150	0.150	03/24/2023	ND	6.90	115	6.00	12.3	
Total BTEX	<0.300	0.300	03/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	03/27/2023	ND	448	112	400	7.41	

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	03/25/2023	ND	172	85.8	200	8.81	
DRO >C10-C28*	<10.0	10.0	03/25/2023	ND	176	88.2	200	9.33	
EXT DRO >C28-C36	<10.0	10.0	03/25/2023	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: NSW - 2 (H231366-09)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/24/2023	ND	2.15	107	2.00	11.6	
Toluene*	<0.050	0.050	03/24/2023	ND	2.16	108	2.00	11.6	
Ethylbenzene*	<0.050	0.050	03/24/2023	ND	2.25	112	2.00	12.2	
Total Xylenes*	<0.150	0.150	03/24/2023	ND	6.90	115	6.00	12.3	
Total BTEX	<0.300	0.300	03/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

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	03/27/2023	ND	448	112	400	7.41	

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	03/25/2023	ND	172	85.8	200	8.81	
DRO >C10-C28*	<10.0	10.0	03/25/2023	ND	176	88.2	200	9.33	
EXT DRO >C28-C36	<10.0	10.0	03/25/2023	ND					

Surrogate: 1-Chlorooctane 98.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: SSW - 6 (H231366-10)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/24/2023	ND	2.15	107	2.00	11.6	
Toluene*	<0.050	0.050	03/24/2023	ND	2.16	108	2.00	11.6	
Ethylbenzene*	<0.050	0.050	03/24/2023	ND	2.25	112	2.00	12.2	
Total Xylenes*	<0.150	0.150	03/24/2023	ND	6.90	115	6.00	12.3	
Total BTEX	<0.300	0.300	03/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/27/2023	ND	448	112	400	7.41	

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	03/25/2023	ND	172	85.8	200	8.81	
DRO >C10-C28*	<10.0	10.0	03/25/2023	ND	176	88.2	200	9.33	
EXT DRO >C28-C36	<10.0	10.0	03/25/2023	ND					

Surrogate: 1-Chlorooctane 99.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 9 - A (H231366-11)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/25/2023	ND	2.15	107	2.00	11.6	
Toluene*	<0.050	0.050	03/25/2023	ND	2.16	108	2.00	11.6	
Ethylbenzene*	<0.050	0.050	03/25/2023	ND	2.25	112	2.00	12.2	
Total Xylenes*	<0.150	0.150	03/25/2023	ND	6.90	115	6.00	12.3	
Total BTEX	<0.300	0.300	03/25/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1470	16.0	03/27/2023	ND	448	112	400	7.41	

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	03/25/2023	ND	172	85.8	200	8.81	
DRO >C10-C28*	<10.0	10.0	03/25/2023	ND	176	88.2	200	9.33	
EXT DRO >C28-C36	<10.0	10.0	03/25/2023	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 12 - A (H231366-12)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/25/2023	ND	2.15	107	2.00	11.6	
Toluene*	<0.050	0.050	03/25/2023	ND	2.16	108	2.00	11.6	
Ethylbenzene*	<0.050	0.050	03/25/2023	ND	2.25	112	2.00	12.2	
Total Xylenes*	<0.150	0.150	03/25/2023	ND	6.90	115	6.00	12.3	
Total BTEX	<0.300	0.300	03/25/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

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	03/27/2023	ND	448	112	400	7.41	

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	03/27/2023	ND	191	95.5	200	1.68	
DRO >C10-C28*	<10.0	10.0	03/27/2023	ND	185	92.4	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 130 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 13 - A (H231366-13)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/25/2023	ND	2.15	107	2.00	11.6	
Toluene*	<0.050	0.050	03/25/2023	ND	2.16	108	2.00	11.6	
Ethylbenzene*	<0.050	0.050	03/25/2023	ND	2.25	112	2.00	12.2	
Total Xylenes*	<0.150	0.150	03/25/2023	ND	6.90	115	6.00	12.3	
Total BTEX	<0.300	0.300	03/25/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

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	03/27/2023	ND	448	112	400	7.41	

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	03/27/2023	ND	191	95.5	200	1.68	
DRO >C10-C28*	108	10.0	03/27/2023	ND	185	92.4	200	3.11	
EXT DRO >C28-C36	71.9	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 99.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 1 - A (H231366-14)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/25/2023	ND	2.15	107	2.00	11.6		
Toluene*	<0.050	0.050	03/25/2023	ND	2.16	108	2.00	11.6		
Ethylbenzene*	<0.050	0.050	03/25/2023	ND	2.25	112	2.00	12.2		
Total Xylenes*	<0.150	0.150	03/25/2023	ND	6.90	115	6.00	12.3		
Total BTEX	<0.300	0.300	03/25/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

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	03/27/2023	ND	448	112	400	7.41		

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	03/27/2023	ND	191	95.5	200	1.68		
DRO >C10-C28*	56.4	10.0	03/27/2023	ND	185	92.4	200	3.11		
EXT DRO >C28-C36	65.6	10.0	03/27/2023	ND						

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 11 (H231366-15)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/25/2023	ND	2.15	107	2.00	11.6	
Toluene*	<0.050	0.050	03/25/2023	ND	2.16	108	2.00	11.6	
Ethylbenzene*	<0.050	0.050	03/25/2023	ND	2.25	112	2.00	12.2	
Total Xylenes*	<0.150	0.150	03/25/2023	ND	6.90	115	6.00	12.3	
Total BTEX	<0.300	0.300	03/25/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	03/27/2023	ND	448	112	400	7.41	

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	03/27/2023	ND	191	95.5	200	1.68	
DRO >C10-C28*	65.9	10.0	03/27/2023	ND	185	92.4	200	3.11	
EXT DRO >C28-C36	70.0	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 93.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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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
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 12 (H231366-16)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/25/2023	ND	2.15	107	2.00	11.6	
Toluene*	<0.050	0.050	03/25/2023	ND	2.16	108	2.00	11.6	
Ethylbenzene*	<0.050	0.050	03/25/2023	ND	2.25	112	2.00	12.2	
Total Xylenes*	<0.150	0.150	03/25/2023	ND	6.90	115	6.00	12.3	
Total BTEX	<0.300	0.300	03/25/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	03/27/2023	ND	448	112	400	7.41	

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	03/27/2023	ND	191	95.5	200	1.68	
DRO >C10-C28*	<10.0	10.0	03/27/2023	ND	185	92.4	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 97.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/24/2023	Sampling Date:	03/24/2023
Reported:	03/27/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 13 (H231366-17)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/25/2023	ND	2.15	107	2.00	11.6	
Toluene*	<0.050	0.050	03/25/2023	ND	2.16	108	2.00	11.6	
Ethylbenzene*	<0.050	0.050	03/25/2023	ND	2.25	112	2.00	12.2	
Total Xylenes*	<0.150	0.150	03/25/2023	ND	6.90	115	6.00	12.3	
Total BTEX	<0.300	0.300	03/25/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

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	03/27/2023	ND	432	108	400	3.64	

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	03/27/2023	ND	191	95.5	200	1.68	
DRO >C10-C28*	39.9	10.0	03/27/2023	ND	185	92.4	200	3.11	
EXT DRO >C28-C36	43.1	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 93.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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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: Tetra Tech, Inc. Project Manager: Charles Terhune Address: 1500 CityWest Boulevard Suite 1000 City: Houston State: TX Zip: 77042 Phone #: 281-755-8965 Fax #: _____ Project #: 212C-HN-02235 Project Owner: _____ Project Name: MCA 2C Remediation Project Location: Malysamer, DM Sampler Name: Brody Lichtenberger FOR LAB USE ONLY		P.O. #: P61197406 Company: Tetra Tech, Inc. Attn: Chuck Terhune Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____	
Lab I.D. Sample I.D. H231366 1 WSW-21 2 SSW-1 3 SSW-2 4 SSW-3 5 SSW-4 6 SSW-5 7 FS-20 8 FS-17 9 NSW-2 10 SSW-6		(G)RAB OR (C)OMP. # CONTAINERS MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER: DATE TIME	
Relinquished By: Brody Lichtenberger Date: 3/24/23 Time: 1515 Received By: [Signature] Date: _____ Time: _____		CHECKED BY: (Initials) [Signature] Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: All Results are emailed. Please provide Email address: REMARKS:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: Observed Temp. °C: -0.6 Corrected Temp. °C: -1.2 Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No		Turnaround Time: Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Observed Temp. °C Yes <input type="checkbox"/> No <input type="checkbox"/> Corrected Temp. °C Yes <input type="checkbox"/> No <input type="checkbox"/>	

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Tetra Tech, Inc.</u> Project Manager: <u>Charles Terhune</u>		P.O. #: <u>PO1197466</u> Company: <u>Tetra Tech, Inc</u>	
Address: <u>1500 City West Boulevard Suite 1000</u> City: <u>Houston</u> State: <u>TX</u> Zip: <u>77042</u>		Attn: <u>Chuck Terhune</u> Address: _____ City: _____ State: _____ Zip: _____	
Phone #: <u>281-755-8965</u> Fax #: _____ Project #: <u>212L-HN-02235</u> Project Owner: _____		City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____	
Project Name: <u>MCA 2c Remediation</u> Project Location: <u>Muskogee, NM</u>		State: _____ Zip: _____ Phone #: _____ Fax #: _____	
Sampler Name: <u>Brody Lichtenberger</u>		FOR LAB USE ONLY	
Lab I.D. Sample I.D.			
H33156 11 ESU-229-A - EBL 12 MSU-2212-A - EBL 13 MSU-2313-A - EBL 14 ES-1-A 15 ES-11 16 FS-12 17 FS-13		(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :	
11 611 12 611 13 611 14 611 15 611 16 611 17 611		DATE 3/24/23 1035 3/24/23 1040 3/24/23 1045 3/24/23 1235 3/24/23 1350 3/24/23 1355 3/24/23 1400	
RECEIVED BY: <u>Brody Lichtenberger</u> Date: <u>3/24/23</u> Time: <u>1515</u>		ANALYSIS REQUEST	
Relinquished By: _____ Date: _____ Time: _____		All Results are emailed. Please provide Email address: _____	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____		Turnaround Time: _____ Standard <input checked="" type="checkbox"/> <u>Rush</u> <input type="checkbox"/> Bacteria (only) <input type="checkbox"/> Sample Condition <input type="checkbox"/> Cool Intact <input type="checkbox"/> Observed Temp. °C _____ Yes <input type="checkbox"/> No <input type="checkbox"/> Corrected Temp. °C _____	
Observed Temp. °C: <u>-0.6</u> Corrected Temp. °C: <u>-1.2</u>		CHECKED BY: _____ (Initials) Thermometer ID #113 Correction Factor -0.5°C	
Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Sample Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>		REMARKS:	
Cardiac cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com		BTX by 8021B TPH by 8015M Chloride by SM4500 Cl-B	



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March 28, 2023

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCA 2C REMEDIATION

Enclosed are the results of analyses for samples received by the laboratory on 03/27/23 15:58.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/27/2023	Sampling Date:	03/27/2023
Reported:	03/28/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 14 - A (H231389-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.02	101	2.00	4.48	
Toluene*	<0.050	0.050	03/27/2023	ND	2.03	101	2.00	3.77	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.11	106	2.00	2.71	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.47	108	6.00	1.62	
Total BTEX	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	03/28/2023	ND	416	104	400	7.41	

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	03/28/2023	ND	185	92.3	200	27.3	
DRO >C10-C28*	<10.0	10.0	03/28/2023	ND	176	88.0	200	32.3	
EXT DRO >C28-C36	<10.0	10.0	03/28/2023	ND					

Surrogate: 1-Chlorooctane 91.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/27/2023	Sampling Date:	03/27/2023
Reported:	03/28/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 14 - A (H231389-02)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.02	101	2.00	4.48	
Toluene*	<0.050	0.050	03/27/2023	ND	2.03	101	2.00	3.77	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.11	106	2.00	2.71	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.47	108	6.00	1.62	
Total BTEX	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/28/2023	ND	416	104	400	7.41	

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	03/27/2023	ND	185	92.3	200	27.3	
DRO >C10-C28*	<10.0	10.0	03/27/2023	ND	176	88.0	200	32.3	
EXT DRO >C28-C36	<10.0	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 89.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/27/2023	Sampling Date:	03/27/2023
Reported:	03/28/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 1 (H231389-03)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.02	101	2.00	4.48	
Toluene*	<0.050	0.050	03/27/2023	ND	2.03	101	2.00	3.77	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.11	106	2.00	2.71	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.47	108	6.00	1.62	
Total BTEX	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	03/28/2023	ND	416	104	400	7.41	

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	03/27/2023	ND	185	92.3	200	27.3	
DRO >C10-C28*	<10.0	10.0	03/27/2023	ND	176	88.0	200	32.3	
EXT DRO >C28-C36	<10.0	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/27/2023	Sampling Date:	03/27/2023
Reported:	03/28/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: NSW - 1 (H231389-04)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/27/2023	ND	2.02	101	2.00	4.48		
Toluene*	<0.050	0.050	03/27/2023	ND	2.03	101	2.00	3.77		
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.11	106	2.00	2.71		
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.47	108	6.00	1.62		
Total BTEX	<0.300	0.300	03/27/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	03/28/2023	ND	416	104	400	7.41		

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	03/27/2023	ND	185	92.3	200	27.3		
DRO >C10-C28*	<10.0	10.0	03/27/2023	ND	176	88.0	200	32.3		
EXT DRO >C28-C36	<10.0	10.0	03/27/2023	ND						

Surrogate: 1-Chlorooctane 88.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.7 % 49.1-148

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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
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/27/2023	Sampling Date:	03/27/2023
Reported:	03/28/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 2 (H231389-05)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2023	ND	2.02	101	2.00	4.48	
Toluene*	<0.050	0.050	03/27/2023	ND	2.03	101	2.00	3.77	
Ethylbenzene*	<0.050	0.050	03/27/2023	ND	2.11	106	2.00	2.71	
Total Xylenes*	<0.150	0.150	03/27/2023	ND	6.47	108	6.00	1.62	
Total BTEX	<0.300	0.300	03/27/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	03/28/2023	ND	416	104	400	7.41	

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	03/27/2023	ND	185	92.3	200	27.3	
DRO >C10-C28*	<10.0	10.0	03/27/2023	ND	176	88.0	200	32.3	
EXT DRO >C28-C36	<10.0	10.0	03/27/2023	ND					

Surrogate: 1-Chlorooctane 70.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 72.5 % 49.1-148

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Notes and Definitions

- QR-04 The RPD for the BS/BSD was outside of historical limits.
QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
** Samples not received at proper temperature of 6°C or below.
*** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <i>Tetra Tech, Inc.</i>		BILL TO		ANALYSIS REQUEST																			
Project Manager: <i>Charles Terhune</i>		P.O. #: <i>FD1197406</i>																					
Address: <i>1500 CityWest Boulevard Suite 1000</i>		Company: <i>Tetra Tech, Inc.</i>																					
City: <i>Houston</i>		Attn: <i>Chuck Terhune</i>																					
Phone #: <i>281-755-8965</i>		Address:																					
Project #: <i>2126-HN-02355</i>		City:																					
Project Name: <i>MCA 2C Remediation</i>		State:																					
Project Location: <i>Malsimar, NM</i>		Phone #:																					
Sampler Name: <i>Brody Lichtenbergs</i>		Fax #:																					
FOR LAB USE ONLY		PRESERV.		SAMPLING																			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	DATE	TIME																	
<i>H231389</i>	<i>1 FS-14-A</i>	<i>G 1</i>	<i>1</i>	<input checked="" type="checkbox"/> SOIL	<i>3/27/23</i>	<i>1015</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>BTEX by 8021 B</i>													
	<i>2 WSW-14-A</i>	<i>G 1</i>	<i>1</i>	<input checked="" type="checkbox"/> SOIL	<i>3/27/23</i>	<i>1020</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>TPH by 8015 M</i>													
	<i>3 ESW-1</i>	<i>G 1</i>	<i>1</i>	<input checked="" type="checkbox"/> SOIL	<i>3/27/23</i>	<i>1210</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>Chloride by SM.4500 Cl-B</i>													
	<i>4 NSW-1</i>	<i>G 1</i>	<i>1</i>	<input checked="" type="checkbox"/> SOIL	<i>3/27/23</i>	<i>1450</i>	<i>X</i>	<i>X</i>	<i>X</i>														
	<i>5 FS-2</i>	<i>G 1</i>	<i>1</i>	<input checked="" type="checkbox"/> SOIL	<i>3/27/23</i>	<i>1455</i>	<i>X</i>	<i>X</i>	<i>X</i>														
Relinquished By: <i>Brody Lichtenbergs</i>		Date: <i>3/27/23</i>		Received By: <i>Patricia Kelly</i>		Date: <i>3/27/23</i>		Time: <i>1558</i>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:		All Results are emailed. Please provide Email address:		REMARKS:		Turnaround Time: <i>Standard</i>		Thermometer ID #113 <i>RUSH</i>		Bacteria (only) Sample Condition	
Delivered By: (Circle One)		Observed Temp. °C		Sample Condition		CHECKED BY: (Initials)		Turnaround Time:		Thermometer ID #113		Bacteria (only) Sample Condition		Observed Temp. °C		Corrected Temp. °C		Corrected Temp. °C		Corrected Temp. °C		Corrected Temp. °C	
Sampler - UPS - Bus - Other:		<i>5.1</i>		<input checked="" type="checkbox"/> Cool <input checked="" type="checkbox"/> Intact		<i>YO</i>		<i>24 hours</i>		<i>24 hours</i>		<input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact		<i>24 hours</i>		<i>24 hours</i>		<i>24 hours</i>		<i>24 hours</i>		<i>24 hours</i>	

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



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

March 29, 2023

CHUCK TERHUNE

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCA 2C REMEDIATION

Enclosed are the results of analyses for samples received by the laboratory on 03/28/23 16:04.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/28/2023	Sampling Date:	03/28/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: T - 7 (H231416-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/29/2023	ND	2.04	102	2.00	0.999	
Toluene*	<0.050	0.050	03/29/2023	ND	2.06	103	2.00	0.716	
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	2.14	107	2.00	0.404	
Total Xylenes*	<0.150	0.150	03/29/2023	ND	6.52	109	6.00	2.17	
Total BTEX	<0.300	0.300	03/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	532	16.0	03/29/2023	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	03/29/2023	ND	169	84.5	200	0.312	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	190	94.8	200	3.29	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane 99.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/28/2023	Sampling Date:	03/28/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: ESW - 9 - B (H231416-02)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/29/2023	ND	2.04	102	2.00	0.999		
Toluene*	<0.050	0.050	03/29/2023	ND	2.06	103	2.00	0.716		
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	2.14	107	2.00	0.404		
Total Xylenes*	<0.150	0.150	03/29/2023	ND	6.52	109	6.00	2.17		
Total BTEX	<0.300	0.300	03/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	03/29/2023	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	03/29/2023	ND	169	84.5	200	0.312		
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	190	94.8	200	3.29		
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND						

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/28/2023	Sampling Date:	03/28/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 11 - A (H231416-03)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/29/2023	ND	2.04	102	2.00	0.999		
Toluene*	<0.050	0.050	03/29/2023	ND	2.06	103	2.00	0.716		
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	2.14	107	2.00	0.404		
Total Xylenes*	<0.150	0.150	03/29/2023	ND	6.52	109	6.00	2.17		
Total BTEX	<0.300	0.300	03/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	03/29/2023	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	03/29/2023	ND	169	84.5	200	0.312		
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	190	94.8	200	3.29		
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND						

Surrogate: 1-Chlorooctane 99.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TETRA TECH
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/28/2023	Sampling Date:	03/28/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: FS - 11 - N (H231416-04)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/29/2023	ND	2.04	102	2.00	0.999	
Toluene*	<0.050	0.050	03/29/2023	ND	2.06	103	2.00	0.716	
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	2.14	107	2.00	0.404	
Total Xylenes*	<0.150	0.150	03/29/2023	ND	6.52	109	6.00	2.17	
Total BTEX	<0.300	0.300	03/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/29/2023	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	03/29/2023	ND	169	84.5	200	0.312	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	190	94.8	200	3.29	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane 83.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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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
 CHUCK TERHUNE
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	03/28/2023	Sampling Date:	03/28/2023
Reported:	03/29/2023	Sampling Type:	Soil
Project Name:	MCA 2C REMEDIATION	Sampling Condition:	Cool & Intact
Project Number:	212C - HN - 02235	Sample Received By:	Tamara Oldaker
Project Location:	MALJAMAR, NM		

Sample ID: WSW - 13 - B (H231416-05)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/29/2023	ND	2.04	102	2.00	0.999	
Toluene*	<0.050	0.050	03/29/2023	ND	2.06	103	2.00	0.716	
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	2.14	107	2.00	0.404	
Total Xylenes*	<0.150	0.150	03/29/2023	ND	6.52	109	6.00	2.17	
Total BTEX	<0.300	0.300	03/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

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	03/29/2023	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	03/29/2023	ND	169	84.5	200	0.312	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	190	94.8	200	3.29	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Tetra Tech, Inc</u> Project Manager: <u>Charles Terhune</u> Address: <u>1500 CityWest Boulevard Suite 1000</u> City: <u>Houston</u> State: <u>TX</u> Zip: <u>77042</u> Phone #: <u>281-755-8965</u> Fax #: _____ Project #: <u>212C-HV-02235</u> Project Owner: _____ Project Name: <u>MCA ZC Remediation</u> Project Location: <u>Makamur, NM</u> Sampler Name: <u>Brody Lichtenberger</u>		BILL TO P.O. #: <u>PO1197404</u> Company: <u>Tetra Tech, Inc.</u> Attn: <u>Chuck Terhune</u> Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____	
FOR LAB USE ONLY Lab I.D. _____ Sample I.D. _____ H231416 1 T-7 2 ESW-9-B 3 FS-11-A 4 FS-11-N 5 USW-13-B		(G)RAB OR (C)OMP. _____ # CONTAINERS _____ MATRIX GROUNDWATER _____ WASTEWATER _____ SOIL _____ OIL _____ SLUDGE _____ OTHER : _____ ACID/BASE: _____ ICE / COOL _____ OTHER : _____ PRESERV. _____ SAMPLING _____	
Date: <u>3/28/23</u> Time: <u>1604</u> Date: _____ Time: _____ Relinquished By: <u>Brody Lichtenberger</u> Received By: <u>William Walker</u>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: _____ All Results are emailed. Please provide Email address: _____ REMARKS: _____	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____ Observed Temp. °C <u>3.8</u> Corrected Temp. °C <u>3.2</u> Sample Condition Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Checked BY: <u>YO</u> Turnaround Time: _____ Thermometer ID #113 <u>24</u> hour Correction Factor -0.8°C <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No Bacteria (only) Sample Condition Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No Observed Temp. °C _____ Corrected Temp. °C _____		Turnaround Time: _____ Thermometer ID #113 <u>24</u> hour Correction Factor -0.8°C <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No Bacteria (only) Sample Condition Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No Observed Temp. °C _____ Corrected Temp. °C _____	

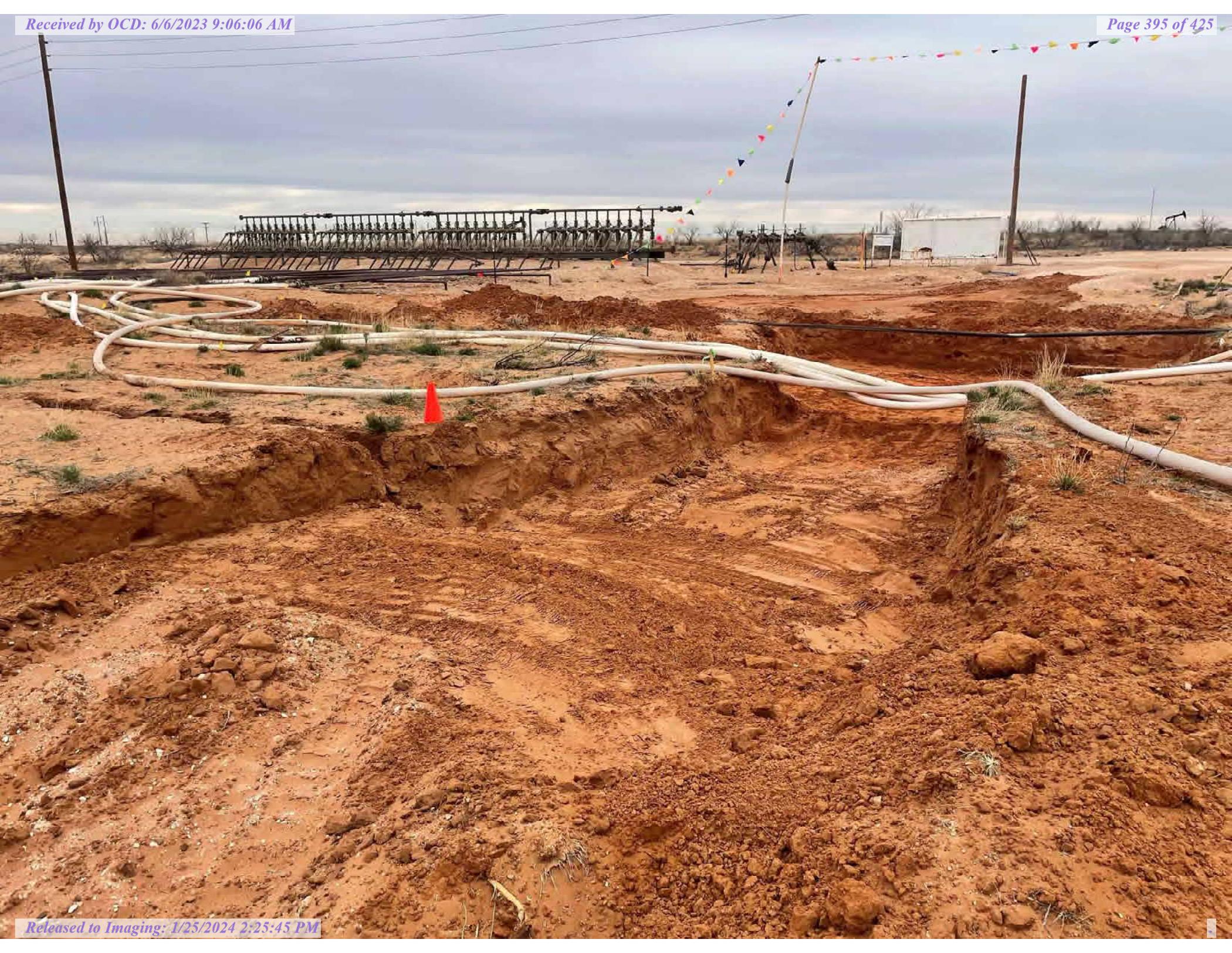
Site Remediation Closure Report
Maverick Permian, LLC
MCA 2C Injection Header Flange and Header East Line Releases
Incident IDs: nRM1930950727 and nAPP2117456525

May 16, 2023

APPENDIX E: PHOTOGRAPHIC DOCUMENTATION











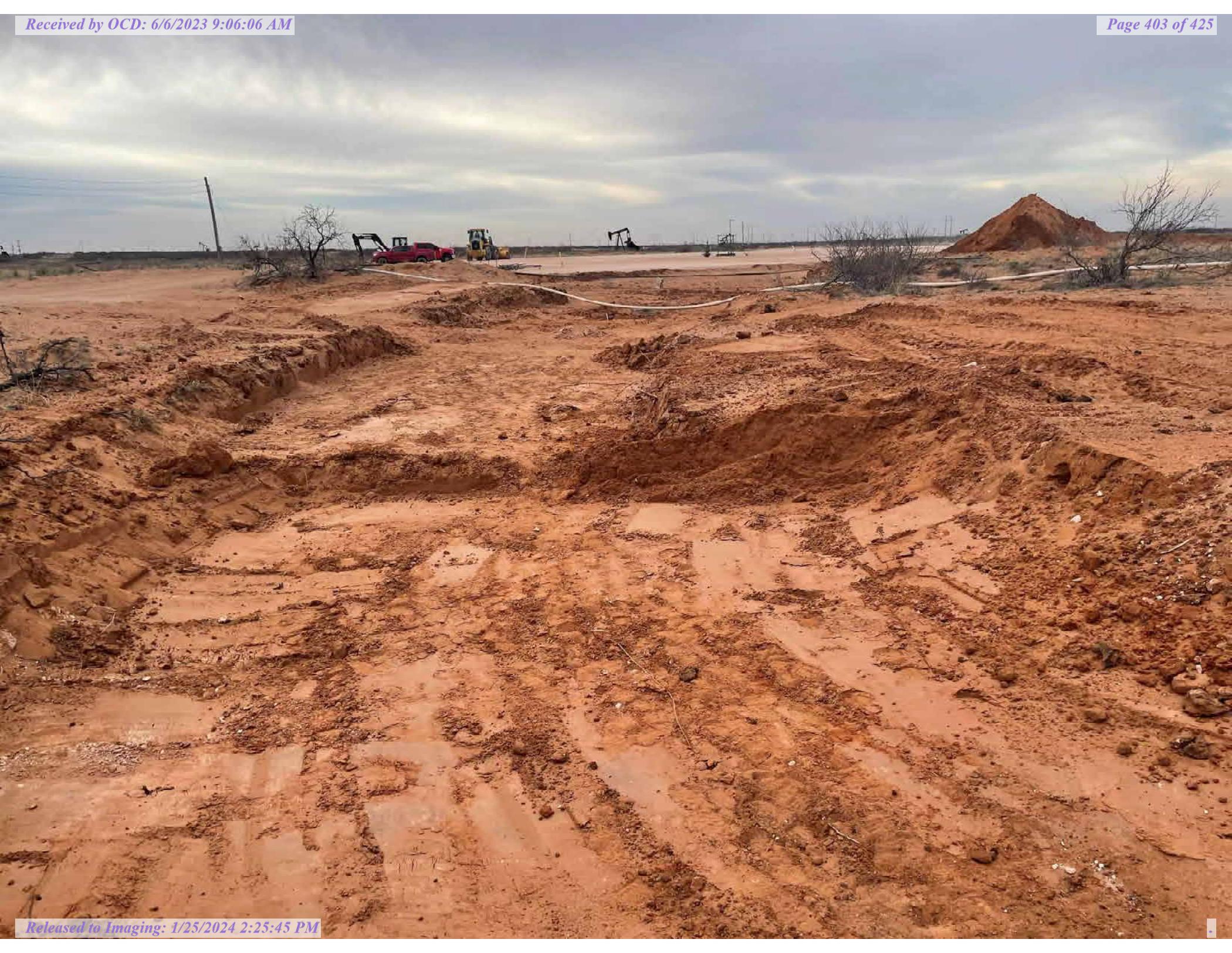
























☀ 178°S (T) LAT: 32.803724 LON: -103.769394 ±4m ▲ 1210m



Site Remediation
Tetra Tech

Maverick - MCA 2G Injection Flange
Apr 06 2023, 14:31:21 MDT

NE

E

SE

S

30

60

90

120

150

180

210

☉ 124°SE (T) LAT: 32.803615 LON: -103.769497 ±4m ▲ 1210m



Site Remediation
Tetra Tech

Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:31:36 MDT

NE

E

SE

S

S

60

90

120

150

180

210

☀ 130°SE (T) LAT: 32.803502 LON: -103.769515 ±4m ▲ 1210m



Site Remediation
Tetra Tech

Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:31:50 MDT

NW

N

NE

E

00

330

0

30

60

90

120

☉ 35°NE (T) LAT: 32.803508 LON: -103.769513 ±4m ▲ 1209m



Site Remediation
Tetra Tech

Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:31:54 MDT



☀ 5°N (T) LAT: 32.803444 LON: -103.769340 ±4m ▲ 1210m



Site Remediation
Tetra Tech

Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:32:09 MDT

SW

W

NW

N

210

240

270

00

330

0

30

☉ 298°NW (T) LAT: 32.803451 LON: -103.769335 ±4m ▲ 1209m



Site Remediation
Tetra Tech

Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:32:14 MDT



☉ 154°SE (T) LAT: 32.803252 LON: -103.769268 ±4m ▲ 1209m



Site Remediation
Tetra Tech

Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:32:34 MDT

E

SE

S

SW

90

120

150

180

210

240

☀ 160°S (T) LAT: 32.803045 LON: -103.769120 ±4m ▲ 1210m



Site Remediation
Tetra Tech

Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:32:53 MDT



☉ 333°NW (T) LAT: 32.802506 LON: -103.768993 ±4m ▲ 1208m



Site Remediation
Tetra Tech

Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:33:37 MDT



☉ 333°NW (T) LAT: 32.802511 LON: -103.768997 ±4m ▲ 1208m



Site Remediation
Tetra Tech

Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:33:41 MDT



SW

W

NW

N



☉ 301°NW (T) LAT: 32.802296 LON: -103.769037 ±4m ▲ 1207m



Site Remediation
Tetra Tech

Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:34:08 MDT

SW

W

NW

N

210 240 270 300 330 0 30

☉ 301°NW (T) LAT: 32.802292 LON: -103.769032 ±4m ▲ 1206m



Site Remediation
Tetra Tech

Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:34:13 MDT

NW

N

NE

E

300

330

0

30

60

90

☉ 15°N (T) LAT: 32.802385 LON: -103.769129 ±4m ▲ 1206m



Site Remediation
Tetra Tech

Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:34:29 MDT

Site Remediation Closure Report
Maverick Permian, LLC
MCA 2C Injection Header Flange and Header East Line Releases
Incident IDs: nRM1930950727 and nAPP2117456525

May 16, 2023

APPENDIX F: NMSLO SEED MIXTURE DETAILS

NMSLO Seed Mix

Sandy (S)

SANDY (S) SITES SEED MIXTURE:

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Sand bluestem	Elida, VNS, So.	2.0	F
Little bluestem	Cimarron, Pastura	3.0	F
Black grama	VNS, Southern	1.0	D
Sand dropseed	VNS, Southern	4.0	S
Plains bristlegrass	VNS, Southern	2.0	D
Forbs:			
Firewheel (Gaillardia)	VNS, Southern	1.0	D
Annual Sunflower	VNS, Southern	1.0	D
Shrubs:			
Fourwing Saltbush	VNS, Southern	1.0	F
		Total PLS/acre	16.0

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

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



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 224315

CONDITIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 224315
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	1/25/2024