TETRA TECH

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:

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.

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

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.

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.

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" after the sample number. 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**.

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

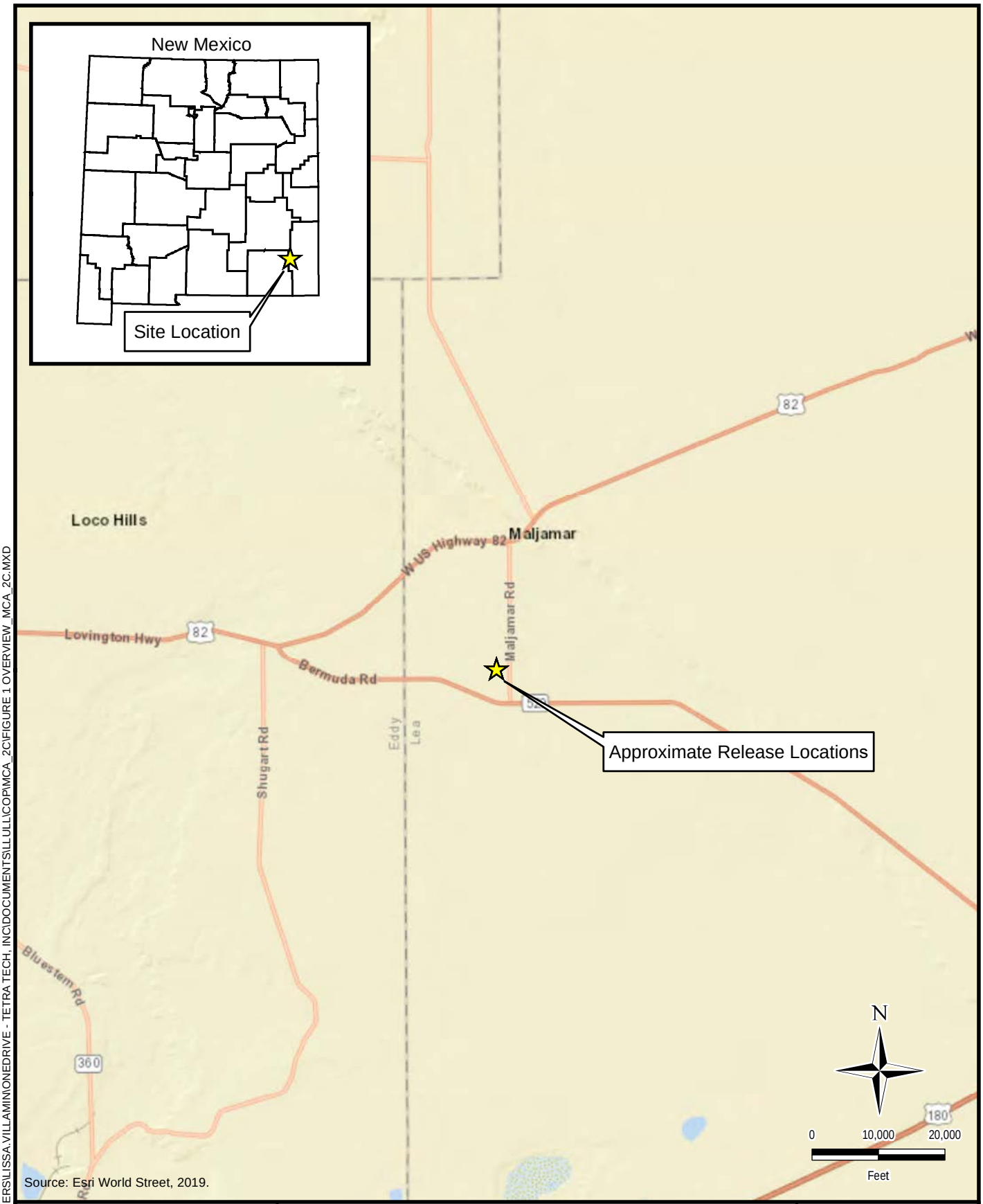
LIST OF ATTACHMENTS

Figures:

Tables:

Appendices:

FIGURES



DOCUMENT PATH: C:\USERS\LISSA.VILLAMIN\ONEDRIVE - TETRA TECH, INC\DOCUMENTS\LLULL\COP\MCA_2C\FIGURE 1 OVERVIEW_MCA_2C.MXD

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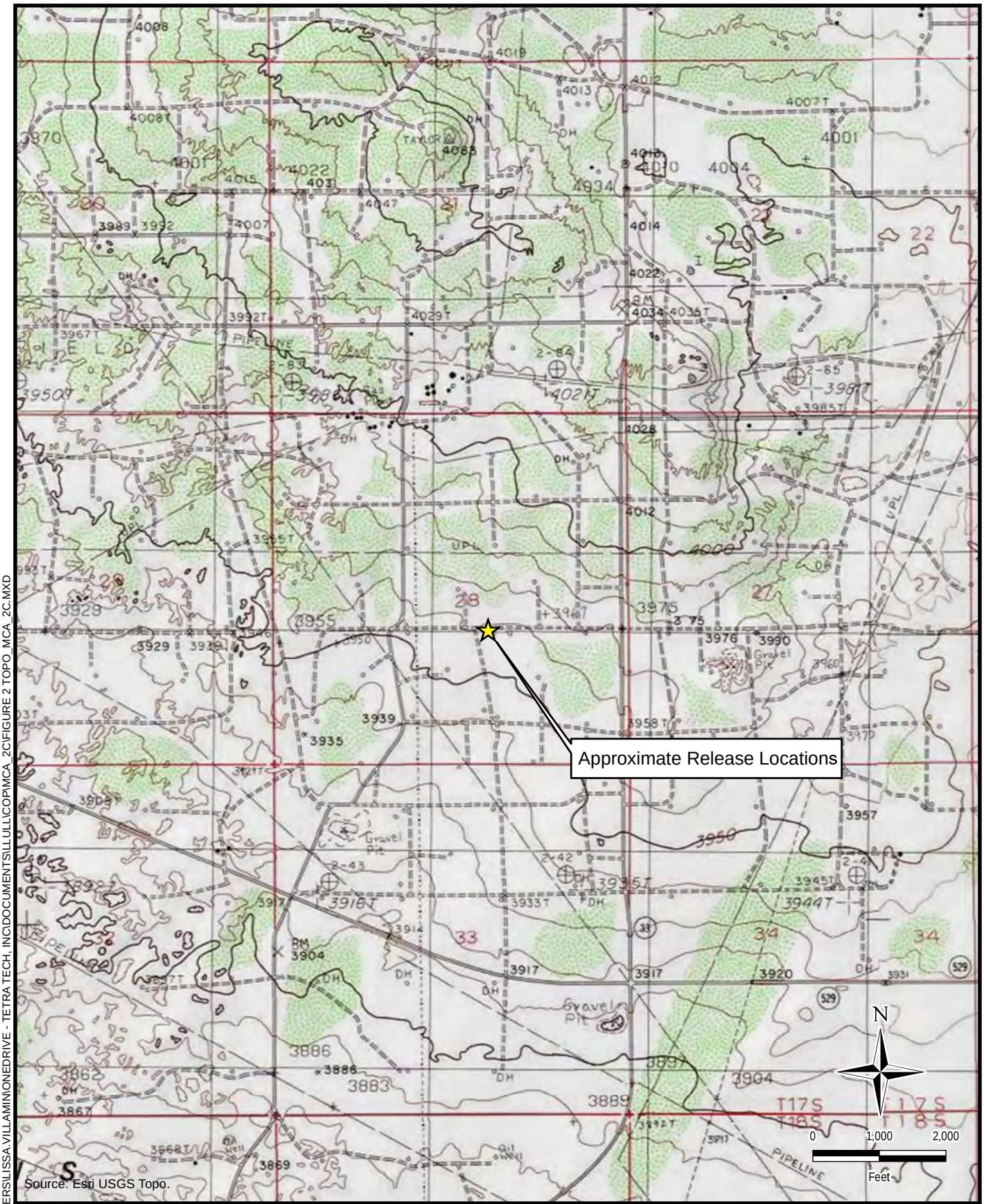
MAVERICK PERMIAN, LLC

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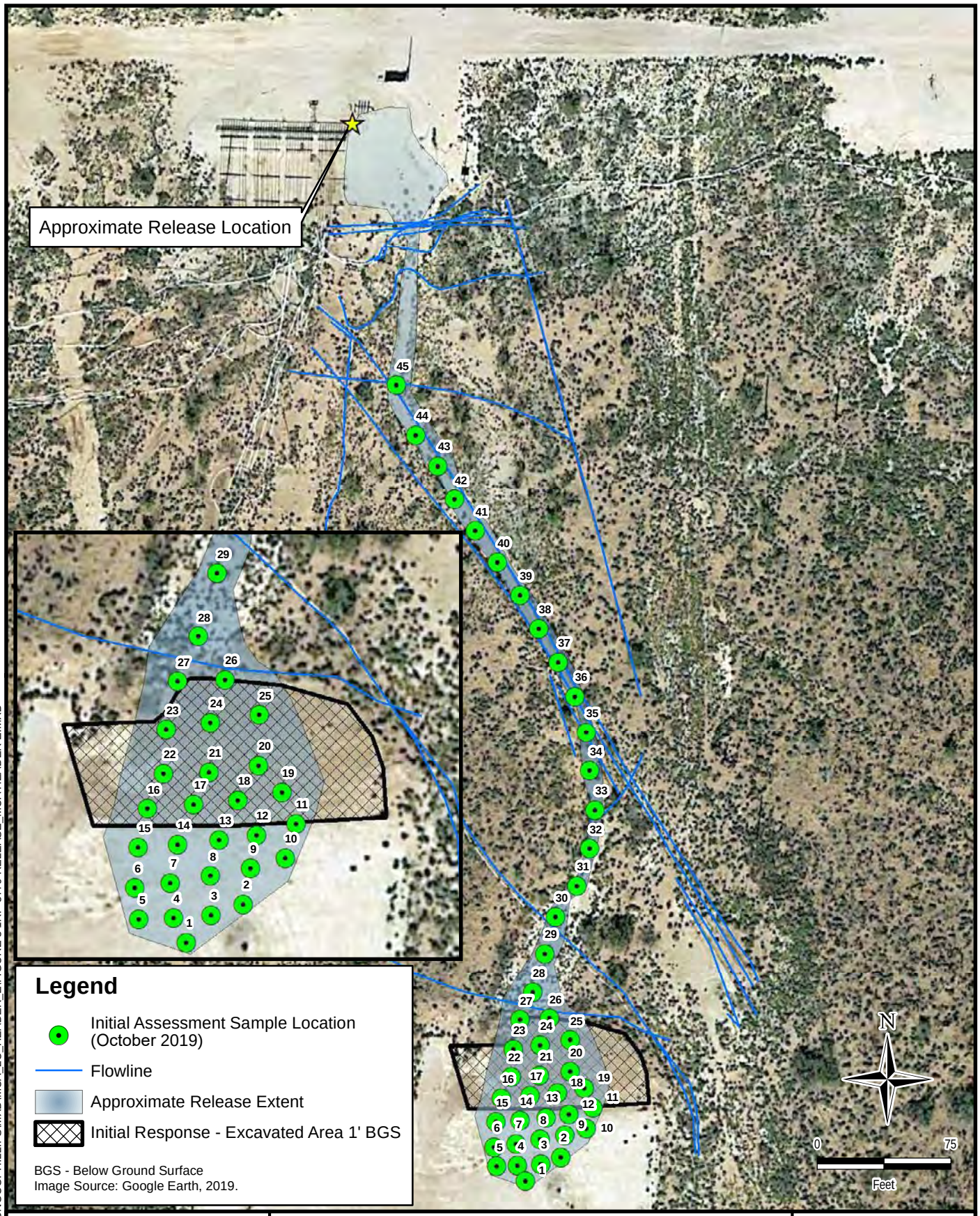
MCA 2C **INJECTION HEADER FLANGE AND** HEADER EAST LINE RELEASES
TOPOGRAPHIC MAP

PROJECT NO.:	212C-HN-02235
DATE:	APRIL 24, 2022
DESIGNED BY:	LMV

Figure No.
2



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

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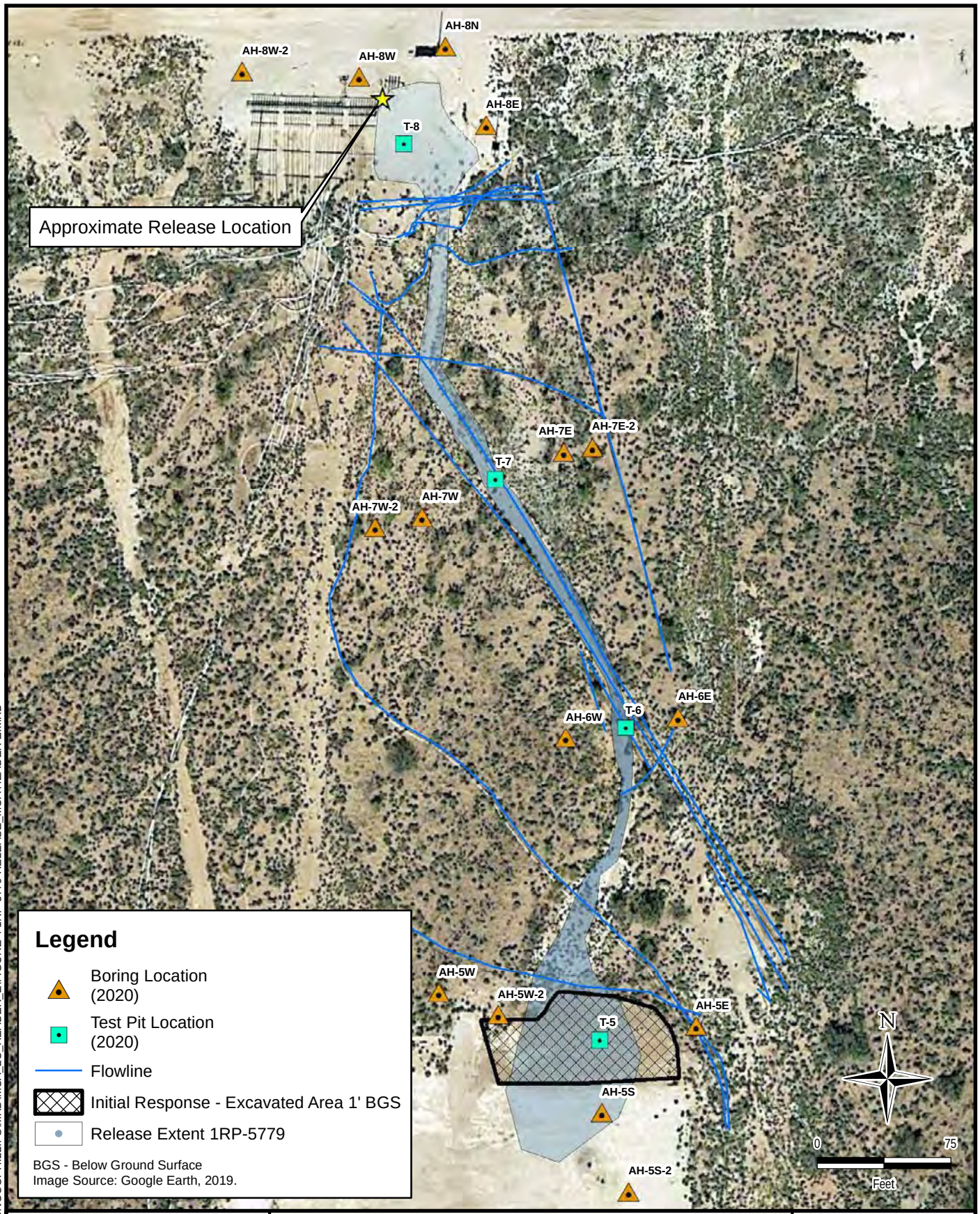
NRM1930650727 (1RP-5779)
(32.803741°, -103.769477°)
LEA COUNTY, NEW MEXICO

MCA 2-C HEADER FLANGE RELEASE
APPROXIMATE RELEASE EXTENT AND INITIAL RESPONSE

PROJECT NO.:	212C-HN-02235
DATE:	JUNE 30, 2021
DESIGNED BY:	AAM

Figure No.
3



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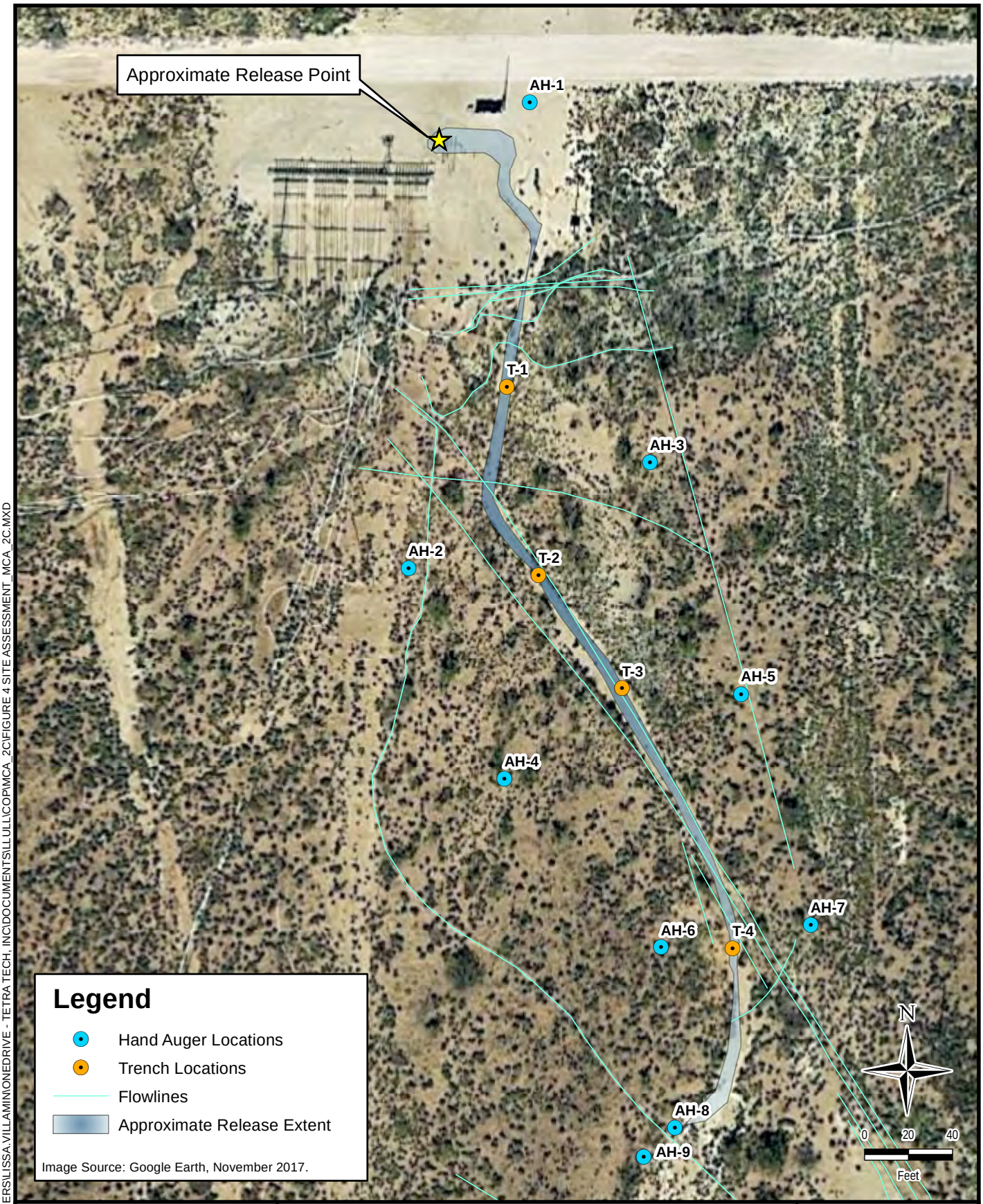
LEA COUNTY, NEW MEXICO

MCA 2-C HEADER FLANGE RELEASE
SITE ASSESSMENT MAP

PROJECT NO.:	212C-HN-02235
DATE:	APRIL 24, 2023
DESIGNED BY:	AAM

Figure No.
4A



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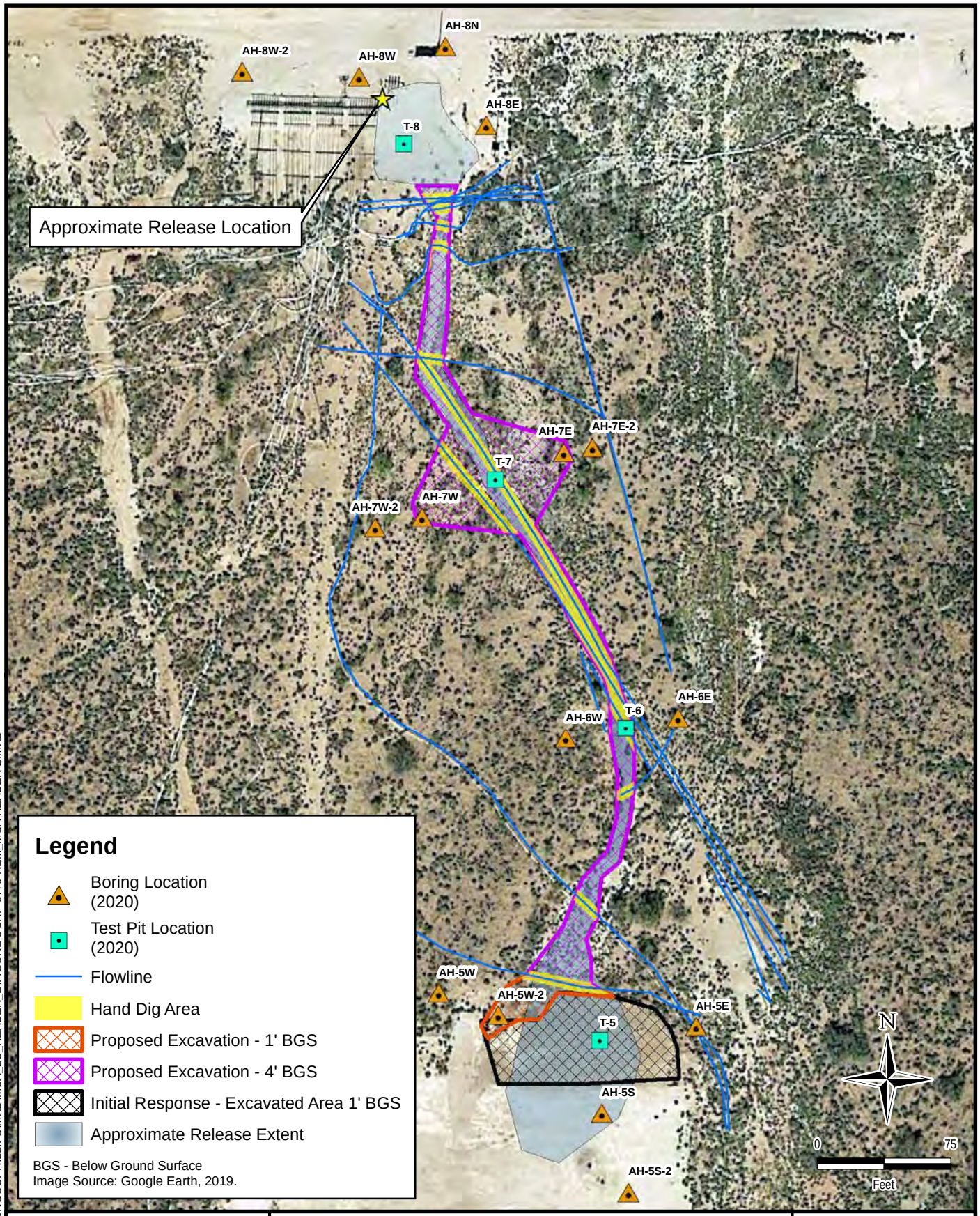
NAPP2117456525
(32.803770°, -103.769476°)
LEA COUNTY, NEW MEXICO

MCA 2C HEADER EAST LINE RELEASE
SITE ASSESSMENT MAP

PROJECT NO.:	212C-HN-02235
DATE:	APRIL 24, 2023
DESIGNED BY:	LMV

Figure No.
4B



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.

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\MCA_2C_HEADER_E\FIGURE 5 1RP-5779 REM_MCA HEADER E.MXD

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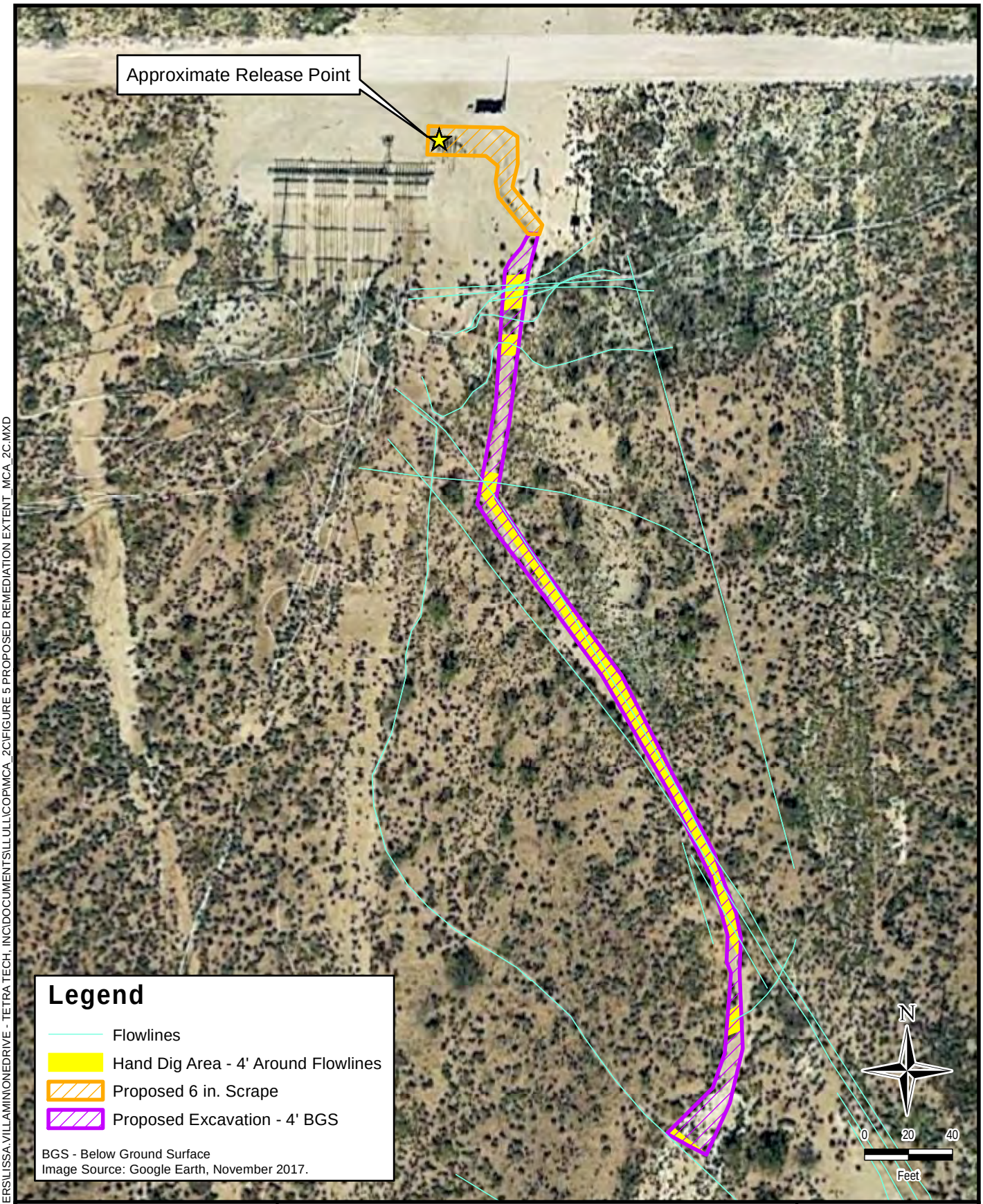
MAVERICK PERMIAN, LLC

nRM1930950727 1RP-5779
(32.803741°, -103.769477°)
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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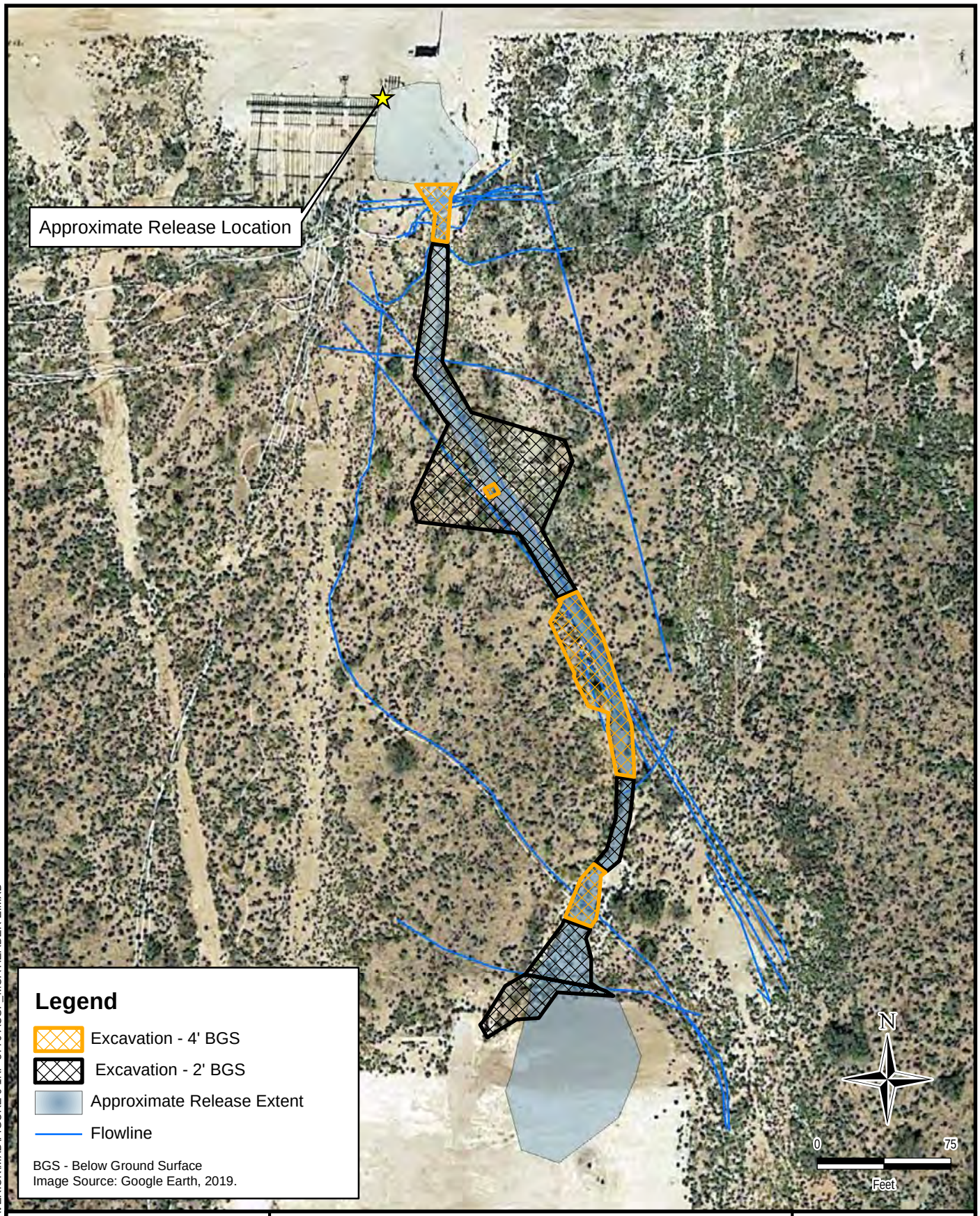
MCA 2C HEADER EAST LINE RELEASE
PROPOSED REMEDIATION EXTENT

PROJECT NO.:	212C-HN-02235
DATE:	APRIL 24, 2023
DESIGNED BY:	LMV

Figure No.
5B



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

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MAVERICK PERMIAN, LLC

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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\MXD\MCA_2C\FIGURE 7A CSP 1RP-5779 ACSP_MCA HEADER E.MXD

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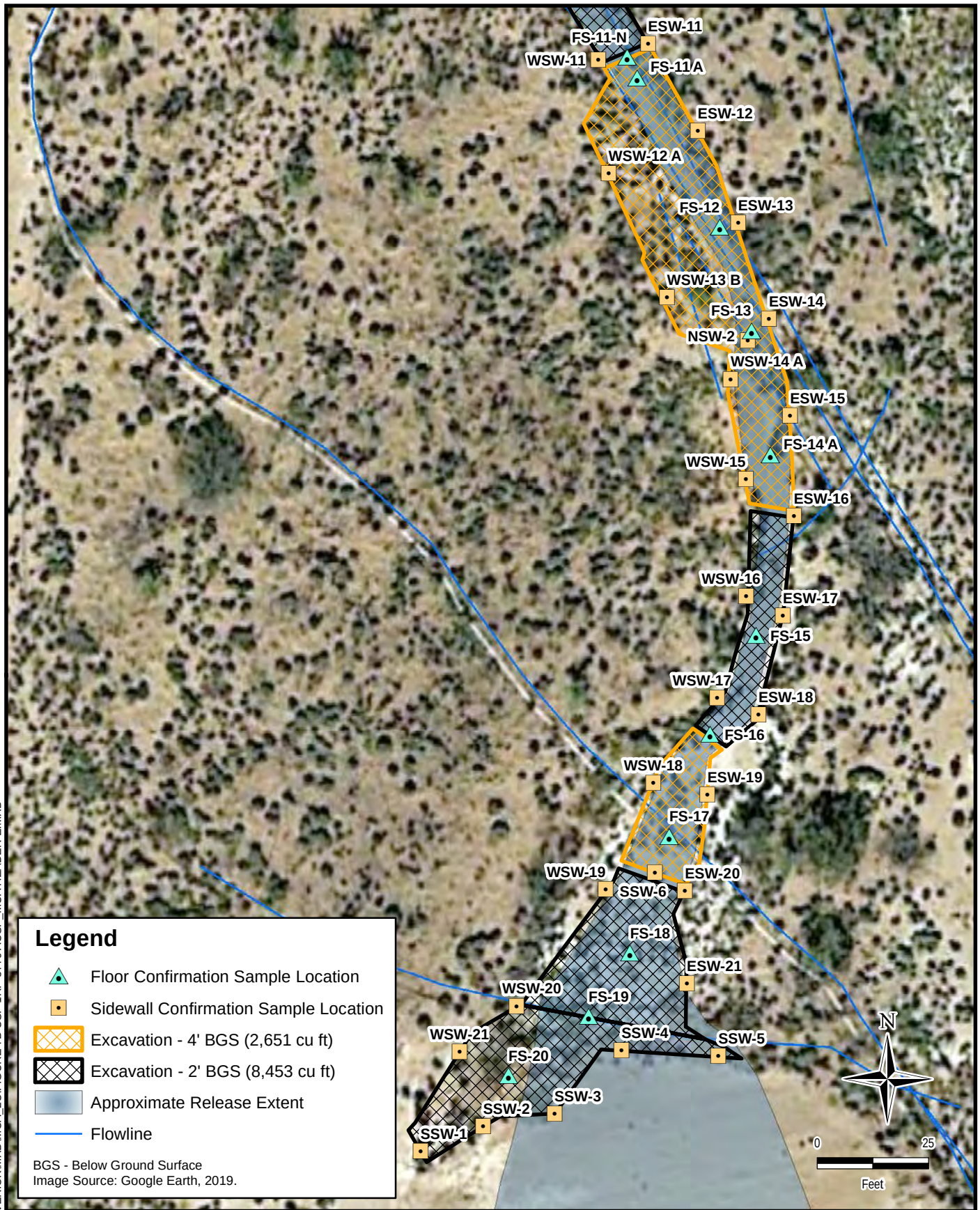
(32.8037°, -103.7694°)
LEA COUNTY, NEW MEXICO

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



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.

DOCUMENT PATH: D:\MAVERICK\MXD\MCA_2C\FIGURE 7B CSP 1RP-5779 ACSP_MCA HEADER E.MXD

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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
CONFIRMATION SAMPLING **LOCATIONS**

PROJECT NO.:	212C-HN-02235
DATE:	MAY 16, 2023
DESIGNED BY:	AAM

Figure No.
7B

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 Requirements [3]			***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	
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**	
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]							
							Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX	GRO		DRO		EXT DRO		Total TPH
			Chloride	PID												C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		(GRO+DRO+EXT DRO)
		feet bgs	ppm	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
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	Field Screening Results		Chloride[1]		BTEX[2]										TPH[3]							
							Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
			Chloride	PID													C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		(GRO+DRO+EXT DRO)
		feet bgs	ppm	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
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		< 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		< 10.0		-
	2/15/2022	2-3	514	-	256		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 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		< 10.0		14.6
	2/15/2022	2-3	499	-	224		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 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		< 10.0		-
	2/15/2022	2-3	562	-	272		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 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		< 10.0		-
	2/15/2022	2-3	53.6	-	16		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 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		< 10.0		-
	2/15/2022	2-3	30	-	32		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 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		< 10.0		-
	2/15/2022	2-3	232	-	128		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 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		< 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		< 10.0		-
TD-1	2/16/2022	0-1	2620	-	**2200**		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
	2/16/2022	2-3	2240	-	**2200**		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
TD-2	2/16/2022	0-1	1180	-	994		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
	2/16/2022	2-3	2500	-	**2440**		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
TD-3	2/16/2022	0-1	-	-	480		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		37.9		< 10.0		37.9
	2/16/2022	2-3	-	-	**1090**		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 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		< 10.0		-
	2/16/2022	2-3	-	-	1580		< 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 standarded 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	Field Screening Results		Chloride[1]		BTEX[2]										TPH[3]							
							Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
																	C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		(GRO+DRO+EXT DRO)
		feet bgs	ppm	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
Recommended Remdiation 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		-		-		-		-		-		-
	3/5/2020	9-10	1320	-	-		-		-		-		-		-		-		-		-		-
	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
T-8	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		-
	2/16/2022	11-12	833	-	832		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
TD-3	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
	2/16/2022	11-12	-	-	1200		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		27.8		< 10.0		27.8
TD-4	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 standarded 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	Field Screening Results		Chloride[1]		BTEX[2]										TPH[3]							
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
																	C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		(GRO+DRO+EXT DRO)
		feet bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	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	Field Screening Results		Chloride[1]		BTEX[2]										TPH[3]							
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
																	C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		(GRO+DRO+EXT DRO)
		feet bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	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		32.5		<10.0		63.4		95.9
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.

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 # *(assigned by OCD)*
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# *(if applicable)*

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)

☑ Crude Oil	Volume Released (bbls) 12.3	Volume Recovered (bbls) 1
☑ 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?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Gasket on the Header leaked on the flange valve.

Form C-141
Page 2

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? ☑ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? it was more than 25 bbls. ((40'X50X2")+(450'X7'X3")+(118'X100'X4"))X13.57%= 123BBLS 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

☑ The source of the release has been stopped.
☑ The impacted area has been secured to protect human health and the environment.
☑ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☑ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: Gustavo Fejervary Title: Environmental Coordinator

Signature: Date: 10/11/19

email: g.fejervary@cop.com Telephone: 432/210-7037

OCD Only

Received by: Ramona Marcus Date: 11/5/2019

State of New Mexico
Oil Conservation Division

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?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ 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)?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ 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?	☐ Yes ☐ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☐ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

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: _____

State of New Mexico
Oil Conservation Division

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: _____

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)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		

Form C-141
Page 2

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? ☐ Yes ☐ 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

☐ The source of the release has been stopped.
☐ The impacted area has been secured to protect human health and the environment.
☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☐ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: _____

OCD Only

Received by: _Ramona Marcus_____ Date: _6/28/2021_____

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

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

CONDITIONS

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

State of New Mexico
Oil Conservation Division

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?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ 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)?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ 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?	☐ Yes ☐ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☐ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

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: _____

State of New Mexico
Oil Conservation Division

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: _____

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-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**

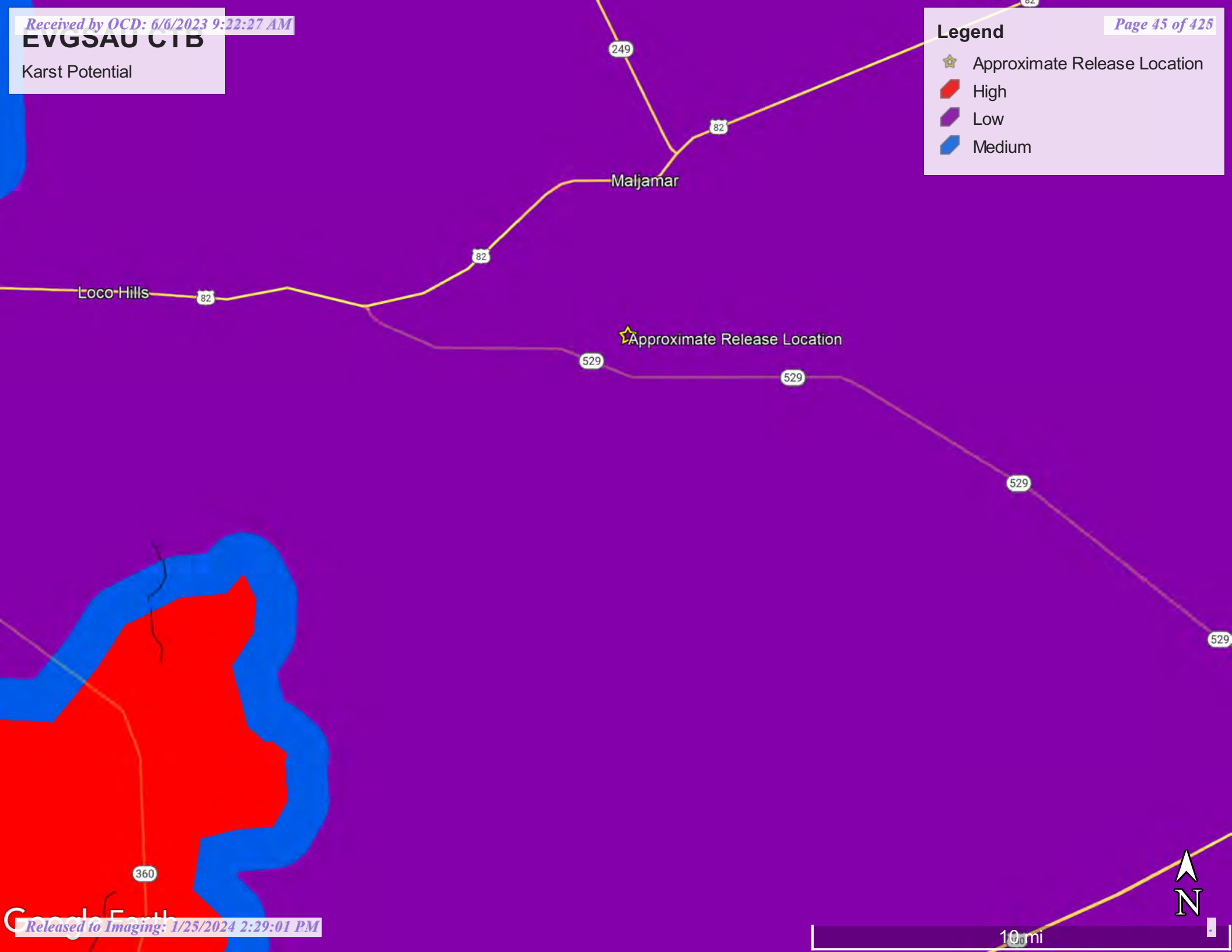
Record Count: 5

UTMNAD83 Radius Search (in meters):

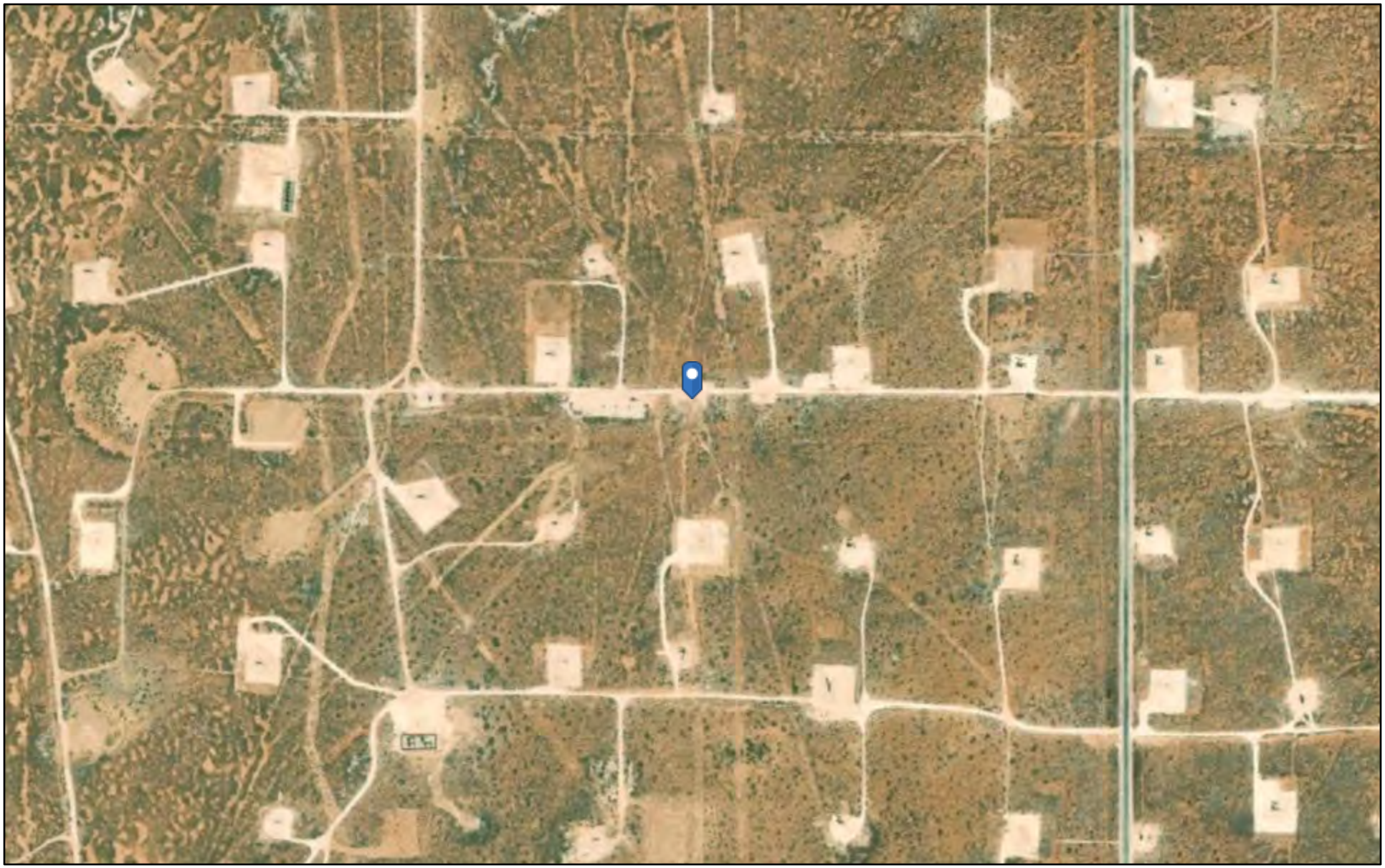
Easting (X): 615207 **Northing (Y):** 3630200 **Radius:** 800

EVGSAU CTB

Karst Potential



OCD Water Bodies



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

OCD District Offices

OSE Water-bodies

PLJV Probable Playas

OSE Streams

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

OCD, Maxar

New Mexico Oil Conservation Division

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

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

CARDINAL Laboratories

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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, SM4500Cl-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, 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	10/28/2019	ND	416	104	400	0.00	

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

Chloride, SM4500Cl-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, SM4500Cl-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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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, SM4500Cl-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, 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	10/28/2019	ND	416	104	400	0.00	

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

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	10/28/2019	ND	416	104	400	0.00	

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

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	10/28/2019	ND	416	104	400	0.00	

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

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	

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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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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, SM4500Cl-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, SM4500Cl-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, SM4500Cl-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, 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 #10 - SURFACE (H903659-19)

Chloride, SM4500Cl-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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Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC -LEA COUNTY NM		

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

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 #11 - SURFACE (H903659-21)

Chloride, SM4500Cl-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, 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	10/29/2019	ND	416	104	400	3.92	

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

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	10/29/2019	ND	416	104	400	3.92	

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

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	

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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, 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	10/29/2019	ND	416	104	400	3.92	

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

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	10/29/2019	ND	416	104	400	3.92	

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

Chloride, SM4500Cl-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, 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	10/29/2019	ND	416	104	400	3.92	

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

Chloride, SM4500Cl-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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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, 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	10/29/2019	ND	416	104	400	0.00	

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

Chloride, SM4500Cl-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, SM4500Cl-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, SM4500Cl-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, 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	10/29/2019	ND	416	104	400	0.00	

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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, SM4500Cl-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, 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	10/29/2019	ND	416	104	400	0.00	

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

Chloride, SM4500Cl-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, SM4500Cl-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, SM4500Cl-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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Project Location:	COPC -LEA COUNTY NM		

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

Chloride, SM4500Cl-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, SM4500Cl-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, 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	10/29/2019	ND	416	104	400	0.00	

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

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	10/29/2019	ND	416	104	400	0.00	

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

Chloride, SM4500Cl-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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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, SM4500Cl-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, SM4500Cl-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, SM4500Cl-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, SM4500Cl-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, 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	10/30/2019	ND	400	100	400	3.92	

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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, 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	400	100	400	3.92	

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

Chloride, SM4500Cl-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, SM4500Cl-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, 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	10/30/2019	ND	400	100	400	3.92	

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

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	10/30/2019	ND	400	100	400	3.92	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 #28 - SURFACE (H903659-55)

Chloride, SM4500Cl-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, SM4500Cl-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, 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	10/30/2019	ND	400	100	400	3.92	

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

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	10/30/2019	ND	400	100	400	3.92	

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

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	10/30/2019	ND	400	100	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 #30 - 2' (H903659-60)

Chloride, SM4500Cl-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, 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	10/30/2019	ND	400	100	400	3.92	

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

Chloride, SM4500Cl-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, 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	10/30/2019	ND	400	100	400	3.92	

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

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	10/30/2019	ND	400	100	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 #33 - SURFACE (H903659-65)

Chloride, SM4500Cl-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, SM4500Cl-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, SM4500Cl-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, SM4500Cl-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, SM4500Cl-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:

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 #35 - 2' (H903659-70)

Chloride, SM4500Cl-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, SM4500Cl-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, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2360**	16.0	10/30/2019	ND	432	108	400	3.77	

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

Chloride, SM4500Cl-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, SM4500Cl-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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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 #38 - SURFACE (H903659-75)

Chloride, SM4500Cl-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, SM4500Cl-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, 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	10/30/2019	ND	432	108	400	3.77	

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

Chloride, SM4500Cl-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, SM4500Cl-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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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 #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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Analytical Results For:

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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 #43 - SURFACE (H903659-85)

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 #43 - 2' (H903659-86)

Chloride, SM4500Cl-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, SM4500Cl-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, SM4500Cl-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, SM4500Cl-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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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	ConocoPhillips	**BILL TO**	
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:	Zip:
Project Location:	Lea County, NM	Phone #:	
Sampler Name:	Justin Wright	Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST
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	Chlorides
H903659															
1	SP#1 - Surface	G				*					*		10-23		✓
2	SP#1 - 2'	G				*					*		10-23		✓
3	SP#2 - Surface	G				*					*		10-23		✓
4	SP#2 - 2'	G				*					*		10-23		✓
5	SP#3 - Surface	G				*					*		10-23		✓
6	SP#3 - 2'	G				*					*		10-23		✓
7	SP#4 - Surface	G				*					*		10-23		✓
8	SP#4 - 2'	G				*					*		10-23		✓
9	SP#5 - Surface	G				*					*		10-23		✓
10	SP#5 - 2'	G				*					*		10-23		✓

Relinquished By:	Date: 10-25-19 Time: 11:15	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address:
Relinquished By:	Date: Time:	Received By:	REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C -4.9 Corrected Temp. °C -4.4	Sample Condition Cool Yes ☑ Intact Yes ☐ No ☐	CHECKED BY: (Initials) T.O.
			Turnaround Time: Standard ☑ Rush ☐ Thermometer ID #97 Correction Factor +0.4 °C
			Bacteria (only) Sample Condition Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.0

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

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	ConocoPhillips	BILL TO	
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:		State:	Zip:
Project Location:		Phone #:	
Sampler Name:	Justin Wright	Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST
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	Chlorides
H903659															
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		✓

Relinquished By:	Date: 10-25-19 Time: 1115	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
			All Results are emailed. Please provide Email address:
Relinquished By:	Date: Time:	Received By:	REMARKS:

Delivered By: (Circle One)	Observed Temp. °C -4.9	Sample Condition Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ✓ Rush ☐	Bacteria (only) Sample Condition Cool Intact Observed Temp. °C
Sampler - UPS - Bus - Other:	Corrected Temp. °C -4.4	☑ Yes ☑ Yes ☐ No ☐ No	TO	Thermometer ID #97 Correction Factor +0.4 °C	☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	ConocoPhillips	**BILL TO**	
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: Zip:	
Project Location:	Lea County, NM	Phone #:	
Sampler Name:	Justin Wright	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chlorides
H903659															
21	SP #11 - Surface	G				*					*		10-23		✓
22	SP #11 - 2'	G				*					*		10-23		✓
23	SP #12 - Surface	G				*					*		10-23		✓
24	SP #12 - 2'	G				*					*		10-23		✓
25	SP #13 - Surface	G				*					*		10-23		✓
26	SP #13 - 2'	G				*					*		10-23		✓
27	SP #14 - Surface	G				*					*		10-23		✓
28	SP #14 - 2'	G				*					*		10-23		✓
29	SP #15 - Surface	G				*					*		10-23		✓
30	SP #15 - 2'	G				*					*		10-23		✓

Relinquished By:	Date: 10-25-23 Time: 11:15	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address:
Relinquished By:	Date: Time:	Received By:	REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 4.9 Corrected Temp. °C 4.4	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) TO
Turnaround Time: Standard ☑ Rush ☐ Thermometer ID #97 Correction Factor + 0.4 °C	Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	Observed Temp. °C Corrected Temp. °C	

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CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	ConocoPhillips	BILL TO	
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: Zip:	
Project Location:	Lea County, NM	Phone #:	
Sampler Name:	Justin Wright	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chlorides
H903659															
31	SP#16 - Surface	G				*					*		10-23		✓
32	SP#16 - 2'	G				*					*		10-23		✓
33	SP#17 - Surface	G				*					*		10-23		✓
34	SP#17 - 2'	G				*					*		10-23		✓
35	SP#18 - Surface	G				*					*		10-23		✓
36	SP#18 - 2'	G				*					*		10-23		✓
37	SP#19 - Surface	G				*					*		10-23		✓
38	SP#19 - 2'	G				*					*		10-23		✓
39	SP#20 - Surface	G				*					*		10-23		✓
40	SP#20 - 2'	G				*					*		10-23		✓

Relinquished By:	Date: 10-25-19 Time: 1115	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address:
Relinquished By:	Date: Time:	Received By:	REMARKS:

Delivered By: (Circle One)	Observed Temp. °C -4.9	Sample Condition: Cool ☑ Yes ☐ No, Intact ☑ Yes ☐ No	CHECKED BY: (Initials) TO	Turnaround Time: Standard ☑ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp. °C -4.4			Thermometer ID #97 Correction Factor +0.4 °C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No, Intact ☐ Yes ☐ No, Observed Temp. °C, Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	ConocoPhillips	**BILL TO**	
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: Zip:
Project Location:	Lea County, NM		Phone #:
Sampler Name:	Justin Wright		Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chlorides	ANALYSIS REQUEST
H903659																
41	SP#21-Surface	G				*					*		10-23		✓	
42	SP#21-2'	G				*					*		10-23		✓	
43	SP#22-Surface	G				*					*		10-23		✓	
44	SP#22-2'	G				*					*		10-23		✓	
45	SP#23-Surface	G				*					*		10-23		✓	
46	SP#23-2'	G				*					*		10-23		✓	
47	SP#24-Surface	G				*					*		10-23		✓	
48	SP#24-2'	G				*					*		10-23		✓	
49	SP#25-Surface	G				*					*		10-23		✓	
50	SP#25-2'	G				*					*		10-23		✓	

Relinquished By:	Date: 10/05/19 Time: 11:15	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address:
			REMARKS:
Delivered By: (Circle One)	Observed Temp. °C 4.9	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials) JD
Sampler - UPS - Bus - Other:	Corrected Temp. °C 4.4		Turnaround Time: Standard ☑ Rush ☐
			Thermometer ID #97 Correction Factor +0.4 °C
			Bacteria (only) Sample Condition: Cool ☐ Yes ☐ Nc; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	ConocoPhillips	**BILL TO**	
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: Zip:	
Project Location:	Lea County, NM	Phone #:	
Sampler Name:	Justin Wright	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chlorides
H903659															
51	SP#26 - Surface	G				*					*		10-23		✓
52	SP#26 - 2'	G				*					*		10-23		✓
53	SP#27 - Surface	G				*					*		10-23		✓
54	SP#27 - 2'	G				*					*		10-23		✓
55	SP#28 - Surface	G				*					*		10-23		✓
56	SP#28 - 2'	G				*					*		10-23		✓
57	SP#29 - Surface	G				*					*		10-23		✓
58	SP#29 - 2'	G				*					*		10-23		✓
59	SP#30 - Surface	G				*					*		10-23		✓
60	SP#30 - 2'	G				*					*		10-23		✓

Relinquished By:	Date: 10-25-19 Time: 11:15	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
			All Results are emailed. Please provide Email address:
Relinquished By:	Date: Time:	Received By:	REMARKS:

Delivered By: (Circle One)	Observed Temp. °C 4.9	Sample Condition Cool ☑ Yes Intact ☑ Yes	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp. °C -4.4	☐ No ☐ No	T.O.	Thermometer ID #97 Correction Factor +0.4 °C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	ConocoPhillips	BILL TO	
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: Zip:	
Project Location:	Lea County, NM	Phone #:	
Sampler Name:	Justin Wright	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chlorides
H903659															
61	SP#31 - Surface	G				*					*		10-23		✓
62	SP#31 - 2'	G				*					*		10-23		✓
63	SP#32 - Surface	G				*					*		10-23		✓
64	SP#32 - 2'	G				*					*		10-23		✓
65	SP#33 - Surface	G				*					*		10-23		✓
66	SP#33 - 2'	G				*					*		10-23		✓
67	SP#34 - Surface	G				*					*		10-23		✓
68	SP#34 - 2'	G				*					*		10-23		✓
69	SP#35 - Surface	G				*					*		10-23		✓
70	SP#35 - 2'	G				*					*		10-23		✓

Relinquished By:	Date: 10-25-19 Time: 11:15	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address:
Relinquished By:	Date: Time:	Received By:	REMARKS:

Delivered By: (Circle One)	Observed Temp. °C -4.9	Sample Condition Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐	Bacteria (only) Sample Condition Cool Intact Observed Temp. °C
Sampler - UPS - Bus - Other:	Corrected Temp. °C -4.4	☑ Yes ☑ Yes ☐ No ☐ No	TO	Thermometer ID #97 Correction Factor +0.4 °C	☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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: Zip:	
Project Location:	Lea County, NM	Phone #:	
Sampler Name:	Justin Wright	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chlorides
H903659															
71	SP#36-Surface	G				*					*		10-23		✓
72	SP#36-2'	G				*					*		10-23		✓
73	SP#37-Surface	G				*					*		10-23		✓
74	SP#37-2'	G				*					*		10-23		✓
75	SP#38-Surface	G				*					*		10-23		✓
76	SP#38-2'	G				*					*		10-23		✓
77	SP#39-Surface	G				*					*		10-23		✓
78	SP#39-2'	G				*					*		10-23		✓
79	SP#40-Surface	G				*					*		10-23		✓
80	SP#40-2'	G				*					*		10-23		✓

Relinquished By:	Date: 10-25-23 Time: 11:15	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
			All Results are emailed. Please provide Email address:
Relinquished By:	Date: Time:	Received By:	REMARKS:

Delivered By: (Circle One)	Observed Temp. °C -4.9	Sample Condition Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No	CHECKED BY: (Initials) TO	Turnaround Time: Standard ☑ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp. °C -4.4			Thermometer ID #97 Correction Factor +0.4 °C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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: Zip:	
Project Location:	Lea County, NM	Phone #:	
Sampler Name:	Justin Wright	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chlorides
H903659															
81	SP#41 - Surface	G				*					*		10-23		✓
82	SP#41 - 2'	G				*					*		10-23		✓
83	SP#42 - Surface	G				*					*		10-23		✓
84	SP#42 - 2'	G				*					*		10-23		✓
85	SP#43 - Surface	G				*					*		10-23		✓
86	SP#43 - 2'	G				*					*		10-23		✓
87	SP#44 - Surface	G				*					*		10-23		✓
88	SP#44 - 2'	G				*					*		10-23		✓
89	SP#45 - Surface	G				*					*		10-23		✓
90	SP#45 - 2'	G				*					*		10-23		✓

Relinquished By:	Date: 10-25-19 Time: 11:15	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address:
Relinquished By:	Date: Time:	Received By:	REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 4.9 Corrected Temp. °C 4.4	Sample Condition Cool: Yes / No Intact: Yes / No	CHECKED BY: (Initials) TO.
Turnaround Time: Standard ☑ Rush ☐	Thermometer ID #97 Correction Factor +0.4 °C	Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	Observed Temp. °C Corrected Temp. °C

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Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

March 24, 2020

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 Llull 901 West Wall Suite 100 Midland, TX 79701

Entire Report Reviewed By:

Chris McCord
Project Manager

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

TABLE OF CONTENTS

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

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

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

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 11:52	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 03:53	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 03:54	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/18/20 22:18	FM	Mt. Juliet, TN

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

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 12:01	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445448	1	03/16/20 08:41	03/17/20 14:41	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 04:14	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/18/20 19:46	FM	Mt. Juliet, TN

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

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 12:49	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 04:34	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 04:35	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/18/20 19:59	FM	Mt. Juliet, TN

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

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 12:58	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 04:55	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 04:55	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 21:26	KME	Mt. Juliet, TN

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

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	5	03/18/20 08:48	03/18/20 13:08	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 05:15	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 05:15	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	20	03/17/20 16:06	03/18/20 00:15	KME	Mt. Juliet, TN

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

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

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

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

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

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

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

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

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 03:35	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1447538	1	03/16/20 09:14	03/20/20 16:07	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 10:41	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 01:00	JDG	Mt. Juliet, TN

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

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 03:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 07:31	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 11:02	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 01:13	JDG	Mt. Juliet, TN

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

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 03:54	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 07:53	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 11:23	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	50	03/20/20 15:35	03/21/20 03:19	JDG	Mt. Juliet, TN

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

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 04:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 08:25	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 11:43	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 01:26	JDG	Mt. Juliet, TN

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

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 00:58	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 09:13	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 12:04	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 01:38	JDG	Mt. Juliet, TN

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

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

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

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

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

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

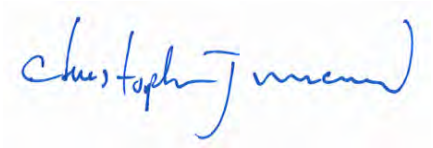
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	5	03/17/20 20:08	03/18/20 06:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by 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

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

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

Total Solids by Method 2540 G-2011

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

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	2.79	B J	0.829	10.4	1	03/18/2020 20:10	WG1444779

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	0.0568	B J	0.0226	0.104	1	03/17/2020 00:27	WG1445119
(S) a,a,a-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
	mg/kg		mg/kg	mg/kg		date / time	
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) Toluene-d8	*98.4*			*75.0-131*		*03/17/2020 00:32*	WG1445122
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*03/17/2020 00:32*	WG1445122
(S) 1,2-Dichloroethane-d4	*132*	J1		*70.0-130*		*03/17/2020 00:32*	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	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) o-Terphenyl	*66.7*			*18.0-148*		*03/18/2020 21:53*	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
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
	mg/kg		mg/kg	mg/kg		date / time	
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
	mg/kg		mg/kg	mg/kg		date / time	
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
	mg/kg		mg/kg	mg/kg		date / time	
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
	mg/kg		mg/kg	mg/kg		date / time	
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

Total Solids by Method 2540 G-2011

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

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	2.64	B J	0.828	10.4	1	03/18/2020 20:29	WG1444779

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	0.0226	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
	mg/kg		mg/kg	mg/kg		date / time	
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

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	7.90		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

Total Solids by Method 2540 G-2011

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

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

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.16	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
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
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	38.0		0.836	10.5	1	03/18/2020 20:48	WG1444779

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	0.0350	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

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		0.000421	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

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	4.21	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

Total Solids by Method 2540 G-2011

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	628		0.873	11.0	1	03/18/2020 10:55	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	0.0649	B J	0.0238	0.110	1	03/17/2020 02:10	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	*93.5*			*77.0-120*		*03/17/2020 02:10*	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		0.000457	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) Toluene-d8	*99.4*			*75.0-131*		*03/17/2020 02:13*	WG1445122
(S) 4-Bromofluorobenzene	*113*			*67.0-138*		*03/17/2020 02:13*	WG1445122
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*03/17/2020 02:13*	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	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) o-Terphenyl	*70.9*			*18.0-148*		*03/17/2020 21:13*	WG1445151

Total Solids by Method 2540 G-2011

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

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	2630		4.39	55.1	5	03/18/2020 11:14	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	0.0670	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

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		0.000441	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

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	4.41	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

Total Solids by Method 2540 G-2011

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

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	233		0.877	11.0	1	03/18/2020 11:23	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	0.0347	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

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	03/17/2020 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

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

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

Total Solids by Method 2540 G-2011

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

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	84.6		0.878	11.0	1	03/18/2020 11:42	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	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
	mg/kg		mg/kg	mg/kg		date / time	
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

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	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

Total Solids by Method 2540 G-2011

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

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	2.50	J	0.829	10.4	1	03/18/2020 11:52	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	0.0312	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	9.00		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

Total Solids by Method 2540 G-2011

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

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	209		0.841	10.6	1	03/18/2020 12:01	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	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3.18	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

Total Solids by Method 2540 G-2011

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

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	19.2		0.813	10.2	1	03/18/2020 12:49	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	0.0273	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
	mg/kg		mg/kg	mg/kg		date / time	
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

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	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

Total Solids by Method 2540 G-2011

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

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	33.7		0.827	10.4	1	03/18/2020 12:58	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	0.0362	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
	mg/kg		mg/kg	mg/kg		date / time	
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

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	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

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

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

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

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

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

Total Solids by Method 2540 G-2011

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

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	722		0.851	10.7	1	03/18/2020 13:17	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	0.0251	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

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		0.000428	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

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	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

Total Solids by Method 2540 G-2011

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

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	1.38	J	0.830	10.4	1	03/18/2020 13:27	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	0.0323	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.54	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

Total Solids by Method 2540 G-2011

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

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	3.41	J	0.832	10.5	1	03/18/2020 13:36	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	0.0247	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

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 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
	mg/kg		mg/kg	mg/kg		date / time	
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

Total Solids by Method 2540 G-2011

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

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	1.27	J	0.851	10.7	1	03/18/2020 13:46	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	0.0324	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

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		1.72	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

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

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

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

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

Total Solids by Method 2540 G-2011

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

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	3.62	J	0.841	10.6	1	03/18/2020 14:24	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	0.0546	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
	mg/kg		mg/kg	mg/kg		date / time	
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

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	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

Total Solids by Method 2540 G-2011

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

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	1950		4.55	57.1	5	03/18/2020 14:34	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	0.0493	B J	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

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		0.000457	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

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	8.71		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

Total Solids by Method 2540 G-2011

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

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	1100		4.38	55.0	5	03/18/2020 14:43	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	0.0522	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

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		0.000440	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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.45	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

Total Solids by Method 2540 G-2011

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

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	446		0.832	10.5	1	03/18/2020 14:53	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	0.0392	B J	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

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 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

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	1.76	J	1.68	4.19	1	03/20/2020 07:19	WG1446556
C28-C40 Oil Range	1.61	J	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

Total Solids by Method 2540 G-2011

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

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	3.69	J	0.839	10.6	1	03/18/2020 15:02	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	0.0548	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	9.98		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

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

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

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

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

Total Solids by Method 2540 G-2011

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

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

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	0.0408	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.19	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

Total Solids by Method 2540 G-2011

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

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	174		4.18	52.5	5	03/18/2020 00:24	WG1445291

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	0.0377	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

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 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

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 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

Total Solids by Method 2540 G-2011

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

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

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	0.0556	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)	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 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

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	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

Total Solids by Method 2540 G-2011

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

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	1580		4.43	55.7	5	03/18/2020 00:53	WG1445291

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	0.0442	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

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		0.000445	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

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	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.0		1	03/19/2020 01:04	WG1445648

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	1360		4.28	53.8	5	03/18/2020 01:02	WG1445291

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	0.0372	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

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		0.000430	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

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	6.49		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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.7		1	03/19/2020 01:04	WG1445648

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	1320		4.34	54.5	5	03/18/2020 01:12	WG1445291

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	0.0379	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.7		1	03/19/2020 01:04	WG1445648

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	381		0.840	10.6	1	03/18/2020 01:40	WG1445291

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	0.0440	B J	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	10.3		1.70	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.4		1	03/19/2020 01:04	WG1445648

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	71.0		0.889	11.2	1	03/18/2020 02:09	WG1445291

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	0.0439	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

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		0.000447	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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	10.6		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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.2		1	03/19/2020 01:04	WG1445648

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	158		0.891	11.2	1	03/18/2020 02:18	WG1445291

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	0.0381	B J	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

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		0.000448	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

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	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*	J7		*18.0-148*		*03/21/2020 03:57*	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.4		1	03/19/2020 01:04	WG1445648

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	40.3		0.889	11.2	1	03/18/2020 02:28	WG1445291

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	0.0243	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
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.08	J	1.80	4.47	1	03/21/2020 13:02	WG1447675
C28-C40 Oil Range	2.72	J	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.0		1	03/19/2020 01:04	WG1445648

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	69.4		0.811	10.2	1	03/18/2020 02:37	WG1445291

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	0.189	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
	mg/kg		mg/kg	mg/kg		date / time	
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

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		1.64	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.7		1	03/19/2020 00:54	WG1445649

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	248		0.822	10.3	1	03/18/2020 02:47	WG1445291

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	0.0414	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

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		1.66	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.1		1	03/19/2020 00:54	WG1445649

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	4360		17.1	215	20	03/18/2020 02:57	WG1445291

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	0.0496	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

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 10:00	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

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	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	03/19/2020 00:54	WG1445649

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	3800		17.0	214	20	03/18/2020 03:06	WG1445291

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	0.0451	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

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	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

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

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

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

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

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

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

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	B J	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

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

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.4		1	03/19/2020 00:54	WG1445649

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	295		0.842	10.6	1	03/18/2020 03:54	WG1445291

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	0.0606	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)	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 11:23	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

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	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

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

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

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

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.9		1	03/19/2020 00:54	WG1445649

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	2.92	B J	0.804	10.1	1	03/18/2020 00:58	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	0.0670	B J	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
	mg/kg		mg/kg	mg/kg		date / time	
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

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		1.63	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	03/19/2020 00:54	WG1445649

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	3.32	B J	0.823	10.3	1	03/18/2020 01:51	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	0.0556	B J	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3.79	J	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.6		1	03/19/2020 00:54	WG1445649

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	2.67	B J	0.806	10.1	1	03/18/2020 02:09	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	0.0675	B J	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

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	1.91	J	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.0		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	3.96	B J	0.828	10.4	1	03/18/2020 02:27	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	0.0729	B J	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.15	J	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.9		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	838		4.33	54.4	5	03/18/2020 02:45	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	0.0648	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

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		0.000435	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

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	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

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

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

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

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

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

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.6		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	3030		8.50	107	10	03/18/2020 04:15	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		0.0232	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.46	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.2		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	42.6		0.853	10.7	1	03/18/2020 04:32	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		0.0233	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

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		1.73	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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.5		1	03/19/2020 00:43	WG1445651

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	3.39	B J	0.833	10.5	1	03/18/2020 05:26	WG1445292

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	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) 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 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

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	8.83		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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.5		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	45.7		0.850	10.7	1	03/18/2020 05:44	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		0.0232	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

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		0.000428	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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.82	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.9		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	225		4.80	60.3	5	03/18/2020 06:02	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	0.177		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

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		0.000483	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

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	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

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	B J	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	J	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

Method Blank (MB)

(MB) R3510267-1 03/19/20 01:48

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

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	

Method Blank (MB)

(MB) R3510263-1 03/19/20 01:36

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

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	

Method Blank (MB)

(MB) R3510262-1 03/19/20 01:27

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

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	

Method Blank (MB)

(MB) R3510259-1 03/19/20 01:04

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

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

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	

Method Blank (MB)

(MB) R3510249-1 03/19/20 00:54

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

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	

Method Blank (MB)

(MB) R3510245-1 03/19/20 00:43

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.0160			

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

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	

Method Blank (MB)

(MB) R3510072-1 03/18/20 16:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	1.57	J	0.795	10.0

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) mg/kg	DUP Result (dry) mg/kg	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 mg/kg	DUP Result mg/kg	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 mg/kg	LCS Result mg/kg	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 mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	500	11200	12900	12900	328	335	1	80.0-120	E V	E V	0.270	20

Method Blank (MB)

(MB) R3509981-1 03/18/20 10:14

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		0.795	10.0

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) mg/kg	DUP Result (dry) mg/kg	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) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	3.69	3.75	1	1.62	J	20

Laboratory Control Sample (LCS)

(LCS) R3509981-2 03/18/20 10:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	529	209	797	737	111	99.8	1	80.0-120			7.77	20

Method Blank (MB)

(MB) R3509647-1 03/17/20 23:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	2.44	J	0.795	10.0

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) mg/kg	DUP Result (dry) mg/kg	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 mg/kg	DUP Result mg/kg	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 mg/kg	LCS Result mg/kg	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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	528	381	901	886	98.5	95.6	1	80.0-120			1.68	20

Method Blank (MB)

(MB) R3509727-1 03/17/20 21:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	2.37	J	0.795	10.0

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) mg/kg	DUP Result (dry) mg/kg	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) mg/kg	DUP Result (dry) mg/kg	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 mg/kg	LCS Result mg/kg	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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	523	432	975	978	104	104	1	80.0-120			0.271	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	J	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*	

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	J	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*	

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	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*

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*	

Method Blank (MB)

(MB) R3509759-3 03/17/20 10:26

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)	*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 mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
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*				

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*

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*	

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	J	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*	

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*	

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	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*99.4*			*77.0-120*

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*	

Method Blank (MB)

(MB) R3509307-3 03/16/20 23:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL 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 mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.112	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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.136	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*				

Method Blank (MB)

(MB) R3509519-2 03/17/20 11:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL 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 mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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 mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
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*				

Method Blank (MB)

(MB) R3510640-3 03/18/20 07:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL 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 mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.122	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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.134	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*				

Method Blank (MB)

(MB) R3511093-2 03/17/20 17:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL 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*

Laboratory Control Sample (LCS)

(LCS) R3511093-1 03/17/20 16:14

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

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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.131	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*				

Method Blank (MB)

(MB) R3509778-1 03/17/20 20:10

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	*70.1*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3509778-2 03/17/20 20:23

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

Method Blank (MB)

(MB) R3510563-1 03/19/20 21:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*64.3*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3510563-2 03/19/20 21:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	53.3	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*				

Method Blank (MB)

(MB) R3510569-1 03/19/20 22:30

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	*75.4*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3510569-2 03/19/20 22:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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 mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	50.0	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

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		

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.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

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	LAO00356
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

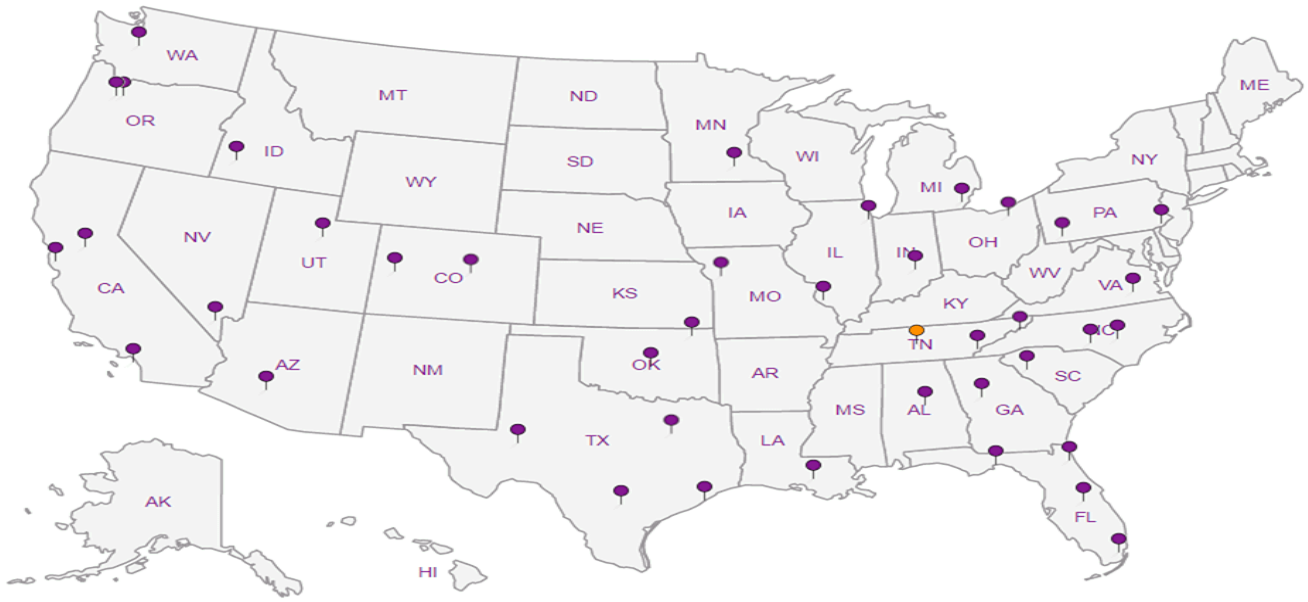
Third Party Federal Accreditations

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.



ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
ConocoPhillips - Tetra Tech	212C-MD-02119	L1199114	03/24/20 18:17	101 of 109

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

1199114

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	COP MCA 2 C Header Release	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Adrian
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's, 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
-01	AH-4E (0-1')	3/3/2020	1100		X				X			1	N	X		X												X					
02	AH-4E (3-4')	3/3/2020	1110		X				X			1	N	X		X												X					
03	AH-4W (0-1')	3/3/2020	1120		X				X			1	N	X		X												X					
04	AH-4W (3-4')	3/3/2020	1130		X				X			1	N	X		X												X					
05	T-5 (1-2')	3/5/2020	1150		X				X			1	N	X		X												X					
06	T-5 (3-4')	3/5/2020	1200		X				X			1	N	X		X												X					
07	T-5 (5-6')	3/5/2020	1210		X				X			1	N	X		X												X					
08	T-5 (7-8')	3/5/2020	1220		X				X			1	N	X		X												X					
09	AH-5S (0-1')	3/5/2020	1300		X				X			1	N	X		X												X					
10	AH-5S (3-4')	3/5/2020	1310		X				X			1	N	X		X												X					

Relinquished by: Adrian Date: 3/12/20	Time: 14:15	Received by:	Date: 3/12/20 Time: 14K
Relinquished by: Date: 3/12/20	Time: 17:00	Received by: SOA	Date: 3/12/20 Time: 17:00
Relinquished by: Date:	Time:	Received by: W Taylor	Date: 3/13/20 Time: 8:00

LAB USE ONLY
Sample Temperature

REMARKS:
- [X] Standard
- [ ] RUSH: Same Day 24 hr. 48 hr. 72 hr.
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

MP AB
.5+.2=.7

RAD SCREEN: <0.5 mR/hr

ORIGINAL COPY

Containers Received 66

03-132

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

1199114

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	COP MCA 2 C Header Release	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Adrian
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
11	AH-5E (0-1')	3/5/2020	1100		X				X			1	N	X		X												X						
12	AH-5E (3-4')	3/5/2020	1110		X				X			1	N	X		X												X						
13	AH-5W (0-1')	3/5/2020	1120		X				X			1	N	X		X												X						
14	AH-5W (3-4')	3/5/2020	1130		X				X			1	N	X		X												X						
15	T-6(1-2')	3/5/2020	1150		X				X			1	N	X		X												X						
	T-6 (3-4')	3/5/2020	1200		X				X			1	N	X		X												X						X
	T-6 (7-8')	3/5/2020	1210		X				X			1	N	X		X												X						X
16	T-6(9-10')	3/5/2020	1220		X				X			1	N	X		X												X						
17	AH-6E (0-1')	3/5/2020	1300		X				X			1	N	X		X												X						
18	AH-6E (3-4')	3/5/2020	1310		X				X			1	N	X		X												X						

Relinquished by: Edward Dow	Date: 3/12/20	Time: 14:15	Received by: [signature] Date: 3/12/20 Time: 14:15
Relinquished by: [signature]	Date: 3/12/20	Time: 17:00	Received by: Swa Date: 3/12/20 Time: 17:00
Relinquished by:	Date:	Time:	Received by: W Taylor Date: 3/13/20 Time: 8:00

ORIGINAL COPY

Containers Received 66

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] Standard
- [ ] RUSH: Same Day 24 hr. 48 hr. 72 hr.
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

1/9 9114

Client Name:	Conoco Phillips	Site Manager:	Christian Llull
Project Name:	COP MCA 2 C Header Release	Contact Info:	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Adrian
Comments:	COPTETRA Acctnum		

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
19	AH-6W (0-1')	3/5/2020	1100		X			X		1	N	X		X												X						
20	AH-6W (3-4')	3/5/2020	1110		X			X		1	N	X		X												X						
21	AH-7W (0-1')	3/5/2020	1120		X			X		1	N	X		X												X						
22	AH-7W (3-4')	3/5/2020	1130		X			X		1	N	X		X												X						
23	T-7(1-2')	3/5/2020	1150		X			X		1	N	X		X												X						
	T-7 (3-4')	3/5/2020	1200		X			X		1	N	X		X												X						
	T-7 (5-6')	3/5/2020	1210		X			X		1	N	X		X												X						X
	T-7(9-10')	3/5/2020	1220		X			X		1	N	X		X												X						X
24	T-7 (17.5')	3/5/2020	1300		X			X		1	N	X		X												X						X
25	AH-7E (0-1')	3/5/2020	1310		X			X		1	N	X		X												X						

Relinquished by: Adrian Date: 3/12/20 Time: 14:15
Received by: Date: 3/12/20 Time: 14:15

Relinquished by: Date: 3/12/20 Time: 17:00
Received by: SCA Date: 3/12/20 Time: 7:00

Relinquished by: Date: Time:
Received by: Date: 3/13/20 Time: 8:00

ORIGINAL COPY

Containers Received 66

LAB USE ONLY
Sample Temperature

REMARKS:
- [X] Standard
- [ ] RUSH: Same Day 24 hr. 48 hr. 72 hr.
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

1199114

Client Name:	Conoco Phillips	Site Manager:	Christian Llull
Project Name:	COP MCA 2 C Header Release	Contact Info:	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Adrian
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
26	AH-7E (3-4')	3/5/2020	1100		X				X		1	N	X		X												X					
27	AH-8N (0-1')	3/6/2020	1120		X				X		1	N	X		X												X					
28	AH-8N (3-4')	3/6/2020	1130		X				X		1	N	X		X												X					
29	T-8(1-2')	3/6/2020	1150		X				X		1	N	X		X												X					
30	T-8 (3-4')	3/6/2020	1200		X				X		1	N	X		X												X					
31	T-8 (7-8')	3/6/2020	1210		X				X		1	N	X		X												X					
32	T-8(9-10')	3/6/2020	1220		X				X		1	N	X		X												X					
33	AH-8E (0-1')	3/6/2020	1300		X				X		1	N	X		X												X					
34	AH-8E (3-4')	3/6/2020	1310		X				X		1	N	X		X												X					

Relinquished by: Adrian Da	Date: 3/12/20	Time: 14:15	Received by:	Date: 3/12/20	Time: 14:15
Relinquished by:	Date: 3/12/20	Time: 17:00	Received by: SOA	Date: 3/12/20	Time: 17:00
Relinquished by:	Date:	Time:	Received by: W Tucker	Date: 3/13/20	Time: 8:00

ORIGINAL COPY

Containers Received 66

LAB USE ONLY
Sample Temperature

REMARKS:
- [X] Standard
- [ ] RUSH: Same Day 24 hr. 48 hr. 72 hr.
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

1199114

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	COP MCA 2 C Header Release	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Adrian
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
35	AH-8W (0-1')	3/6/2020	1100		X			X		1	N	X		X												X						
36	AH-8W (3-4')	3/6/2020	1110		X			X		1	N	X		X												X						
37	AH-9E (0-1')	3/6/2020	1120		X			X		1	N	X		X												X						
38	AH-9E (3-4')	3/6/2020	1130		X			X		1	N	X		X												X						
39	T-9 (1-2')	3/6/2020	1150		X			X		1	N	X		X												X						
40	T-9 (3-4')	3/6/2020	1200		X			X		1	N	X		X												X						
41	T-9 (7-8')	3/6/2020	1210		X			X		1	N	X		X												X						
42	T-9(9-10')	3/6/2020	1220		X			X		1	N	X		X												X						
43	AH-9W (0-1')	3/6/2020	1300		X			X		1	N	X		X												X						
44	AH-9W (3-4')	3/6/2020	1310		X			X		1	N	X		X												X						

Relinquished by: Adrian Brown	Date: 3/12/20	Time: 14:15	Received by: [signature]	Date: 3/12/20	Time: 14:15
Relinquished by: [signature]	Date: 3/12/20	Time: 17:00	Received by: SCA	Date: 3/12/20	Time: 17:00
Relinquished by:	Date:	Time:	Received by: W Tucker	Date: 3/13/20	Time: 8:00

ORIGINAL COPY

LAB USE ONLY
Sample Temperature

REMARKS:
- [X] Standard
- [ ] RUSH: Same Day 24 hr. 48 hr. 72 hr.
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

1199114

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	COP MCA 2 C Header Release	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Adrian
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2020)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B / BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
45	AH-10E (0-1')	3/9/2020	1100		X				X		1	N	X		X												X						
46	AH-10E (3-4')	3/9/2020	1110		X				X		1	N	X		X												X						
47	AH-10W (0-1')	3/9/2020	1120		X				X		1	N	X		X												X						
48	AH-10W (3-4')	3/9/2020	1130		X				X		1	N	X		X												X						
49	T-10 (1-2')	3/9/2020	1150		X				X		1	N	X		X												X						
	T-10 (5-6')	3/9/2020	1200		X				X		1	N	X		X												X						X
	T-10 (9-10')	3/9/2020	1210		X				X		1	N	X		X												X						X
50	T-10(14-15')	3/9/2020	1220		X				X		1	N	X		X												X						
51	T-9(16'-17')	3/10/2020	1300		X				X		1	N	X		X												X						
52	AH-11W(0-1')	3/10/2020	1050		X				X		1	N	X		X												X						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Adrian Baca	3/12/20	14:15	[signature]	3/12/20	14:15
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	3/12/20	17:00	Scott	3/12/20	17:00
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
			W Taylor	3/13/20	8:00

ORIGINAL COPY

Containers Received 60

LAB USE ONLY
Sample Temperature

REMARKS:
- [X] Standard
- [ ] RUSH: Same Day 24 hr. 48 hr. 72 hr.
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Analysis Request of Chain of Custody Record

COPTETRA

Page : 7 of 7

Tetra Tech, Inc.

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

1199114

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	COP MCA 2 C Header Release	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Adrian
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE		# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
53	AH-11W (3-4')	3/10/2020	1100		X				X			1	N	X		X												X						
54	AH-11E (0-1')	3/10/2020	1110		X				X			1	N	X		X												X						
55	AH-11E (3-4')	3/10/2020	1120		X				X			1	N	X		X												X						
56	T-11 (1-2')	3/10/2020	1130		X				X			1	N	X		X												X						
	T-11 (5-6')	3/10/2020	1150		X				X			1	N	X		X												X						X
	T-11 (9-10')	3/10/2020	1200		X				X			1	N	X		X												X						X
57	T-11 (14-15')	3/10/2020	1210		X				X			1	N	X		X												X						

Relinquished by:	Date: 3/12/20	Time: 14:15	Received by: Date: 3/12/20 Time: 14:15
Relinquished by:	Date: 3/12/20	Time: 17:00	Received by: Date: 3/12/20 Time: 17:00
Relinquished by:	Date:	Time:	Received by: Date: 3/13/20 Time: 8:00

ORIGINAL COPY

Containers Received 66

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] Standard
- [ ] RUSH: Same Day 24 hr. 48 hr. 72 hr.
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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: Willie Taylor		

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?			

Pace Analytical®
National Center for Testing & Innovation

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 Llull 901 West Wall Suite 100 Midland, TX 79701

Entire Report Reviewed By:

Chris McCord
Project Manager

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

TABLE OF CONTENTS

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

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/13/20 23:32	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507601	1	07/10/20 21:04	07/12/20 00:21	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 13:59	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 13:15	KLM	Mt. Juliet, TN

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

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/13/20 23:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507601	1	07/10/20 21:04	07/12/20 00:41	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 14:19	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 12:33	KLM	Mt. Juliet, TN

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

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 00:09	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507601	1	07/10/20 21:04	07/12/20 01:02	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 14:39	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 11:19	KLM	Mt. Juliet, TN

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

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 00:27	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507601	1	07/10/20 21:04	07/12/20 01:22	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 14:59	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/17/20 16:09	FM	Mt. Juliet, TN

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

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 01:04	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507601	1	07/10/20 21:04	07/12/20 01:43	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 15:19	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 13:28	KLM	Mt. Juliet, TN

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

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 01:22	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507601	1	07/10/20 21:04	07/12/20 02:03	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 15:39	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 14:01	KLM	Mt. Juliet, TN

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

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 02:54	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 03:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 15:59	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/17/20 00:20	KLM	Mt. Juliet, TN

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

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 03:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 04:07	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 16:18	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 12:19	KLM	Mt. Juliet, TN

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

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 03:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 04:29	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 16:38	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 23:39	KLM	Mt. Juliet, TN

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

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 03:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 04:52	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 16:58	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 23:53	KLM	Mt. Juliet, TN

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

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

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

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

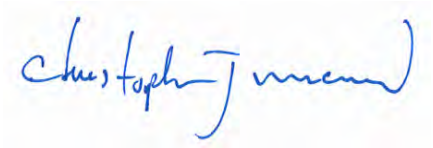
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 05:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by 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

Report Revision History

Level II Report - Version 1: 07/20/20 17:24

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	07/14/2020 23:35	WG1508708

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.85	21.4	1	07/13/2020 23:32	WG1507969

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	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
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3.23	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.4		1	07/14/2020 23:35	WG1508708

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.54	20.7	1	07/13/2020 23:50	WG1507969

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		0.0225	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.53	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.9		1	07/14/2020 23:35	WG1508708

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	11.8	J	11.1	24.1	1	07/14/2020 00:09	WG1507969

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	0.0282	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
	mg/kg		mg/kg	mg/kg		date / time	
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

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		1.94	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.6		1	07/14/2020 23:35	WG1508708

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.83	21.4	1	07/14/2020 00:27	WG1507969

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	07/12/2020 01:22	WG1507601
(S) a,a,a-Trifluorotoluene(FID)	*89.1*			*77.0-120*		*07/12/2020 01:22*	WG1507601

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		0.000499	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
	mg/kg		mg/kg	mg/kg		date / time	
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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.6		1	07/14/2020 23:35	WG1508708

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.23	20.1	1	07/14/2020 01:04	WG1507969

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	0.0251	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

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		0.000469	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
	mg/kg		mg/kg	mg/kg		date / time	
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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.8		1	07/14/2020 23:35	WG1508708

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		10.7	23.3	1	07/14/2020 01:22	WG1507969

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	0.0304	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

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		0.000623	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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.80	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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	81.3		1	07/14/2020 23:35	WG1508708

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		11.3	24.6	1	07/14/2020 02:54	WG1507969

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		0.0267	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

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		0.000682	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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	9.48		1.98	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

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.2		1	07/14/2020 23:35	WG1508708

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.27	20.2	1	07/14/2020 03:13	WG1507969

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		0.0219	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

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		0.000471	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

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	1.86	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.7		1	07/14/2020 23:22	WG1508709

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.23	20.1	1	07/14/2020 03:31	WG1507969

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		0.0218	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
	mg/kg		mg/kg	mg/kg		date / time	
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

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	6.11		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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.5		1	07/14/2020 23:22	WG1508709

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		10.5	22.8	1	07/14/2020 03:50	WG1507969

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		0.0248	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
	mg/kg		mg/kg	mg/kg		date / time	
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

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	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.6		1	07/14/2020 23:22	WG1508709

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	49.4		9.23	20.1	1	07/14/2020 04:08	WG1507969

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		0.0218	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
	mg/kg		mg/kg	mg/kg		date / time	
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

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	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.9		1	07/14/2020 23:22	WG1508709

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.90	21.5	1	07/14/2020 04:27	WG1507969

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		0.0234	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
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	10.1		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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.1		1	07/14/2020 23:22	WG1508709

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	13.1	J	9.29	20.2	1	07/14/2020 04:45	WG1507969

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		0.0219	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.35		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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.3		1	07/14/2020 23:22	WG1508709

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	16.6	J	9.27	20.1	1	07/14/2020 05:03	WG1507969

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		0.0219	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)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
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

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	7.36		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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.7		1	07/14/2020 23:22	WG1508709

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	53.9		9.42	20.5	1	07/14/2020 05:22	WG1507969

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		0.0222	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
	mg/kg		mg/kg	mg/kg		date / time	
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

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	7.58		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

Method Blank (MB)

(MB) R3549748-1 07/14/20 23:35

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

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	

Method Blank (MB)

(MB) R3549745-1 07/14/20 23:22

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

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	

Method Blank (MB)

(MB) R3549168-1 07/13/20 22:36

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

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) mg/kg	DUP Result (dry) mg/kg	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) mg/kg	DUP Result (dry) mg/kg	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 mg/kg	LCS Result mg/kg	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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	583	U	591	596	101	102	1	80.0-120			0.871	20

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*	

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*	

Method Blank (MB)

(MB) R3549987-2 07/12/20 12:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*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 mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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*	

Method Blank (MB)

(MB) R3550795-2 07/14/20 10:15

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*102*			*75.0-131*
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*91.0*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3550795-1 07/14/20 09:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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) mg/kg	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
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*				

Method Blank (MB)

(MB) R3550539-1 07/16/20 10:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	0.442	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 mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
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) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	59.0	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*				

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.

ACCREDITATIONS & LOCATIONS

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	LAO00356
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

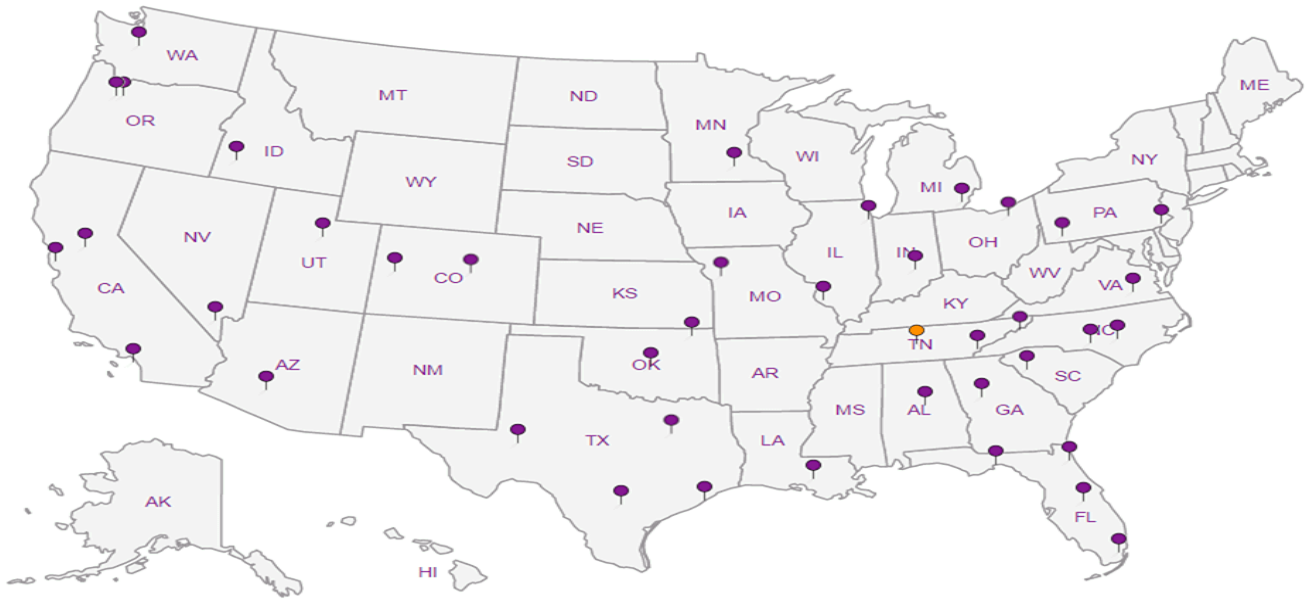
Third Party Federal Accreditations

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.



ConocoPhillips - Tetra Tech

901 West Wall
Suite 100
Midland, TX 79701

Billing Information:
Accounts Payable
901 West Wall
Suite 100
Midland, TX 79701

Pres Chk

Report to: Christian Llull

Email To: christian.llull@tetratech.com

Project Description: COP MCA 2-C Header Release

City/State Collected: Hobbs, NM

Please Circle: PT MT (CT) ET

Phone: 512-338-1667

Client Project # 212C-MD-02119

Lab Project # COPTETRA-212CMD02119

Collected by (print): JOHN MAYLER

Site/Facility ID # LEA COUNTY, NEW MEXICO

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

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D135

Table # 1738345

Acctnum: COPTETRA

Template: T170394

Prelogin: P784175

PM: 526 - Chris McCord

PB: 7/1/20 MG

Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CHLORIDE-300 4ozClr-NoPres	GRO,V8260BTEX 4ozClr-NoPres	TPH-DRO/ORO 4ozClr-NoPres	Remarks	Sample # (lab only)
AH-1S	Grab	SS	0'-1'	7/8/20	12:00	1	X	X	X		-01
AH-1S		SS	2'-3'		12:30						-02
AH-5S		SS	0'-1'		13:30						-03
AH-5S		SS	2'-3'		14:00						-04
AH-7W		SS	0'-1'		14:30						-05
AH-7W		SS	2'-3'		15:00						-06
AH-7E		SS	0'-1'		15:30						-07
AH-7E		SS	2'-3'		16:00						-08
AH-11W		SS	0'-1'		16:30						-09
AH-11W		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 _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking # 451016595120

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	7/9/20	10:30	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 4.1 °C Bottles Received: 16

Date: 7.10.20 Time: 0830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ConocoPhillips - Tetra Tech

901 West Wall
Suite 100
Midland, TX 79701

Billing Information:
Accounts Payable
901 West Wall
Suite 100
Midland, TX 79701

Pres Chk

Report to: Christian Llull

Email To: christian.llull@tetratech.com

Project Description: COP MCA 2-C Header Release

City/State Collected: Hobbs, NM

Please Circle: PT MT (CT) 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):

Immediately Packed on Ice N ___ Y X

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

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 # L1238345

Table #

Acctnum: COPTETRA

Template: T170394

Prelogin: P784175

PM: 526 - Chris McCord

PB: 7/1/20 mm

Shipped Via: FedEx Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CHLORIDE-300 4ozClr-NoPres	GRO,V8260BTEX 4ozClr-NoPres	TPH-DRO/ORO 4ozClr-NoPres	Remarks	Sample # (lab only)
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 ____

Samples returned via: __ UPS __ FedEx __ Courier ____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	7/19/20	10:30		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.7 °C Bottles Received: VC
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7-18-20 Time: 0800

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

Troy Dunlap

Pace Analytical®
National Center for Testing & Innovation

Login #: L1238345	Client: COPTETRA	Date: 7/10/20	Evaluated by: Troy Dunlap

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time	X	Login Clarification Needed		**If Broken Container:**
	Temperature not in range		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	pH not in range.		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Cour
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					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:								

Login Instructions:

Client notified.

ConocoPhillips - Tetra Tech

901 West Wall
Suite 100
Midland, TX 79701

Billing Information:
Accounts Payable
901 West Wall
Suite 100
Midland, TX 79701

Pres Chk

Report to: Christian Llull

Email To: christian.llull@tetratech.com

Project Description: COP MCA 2-C Header Release

City/State Collected: Hobbs, NM

Please Circle: PT MT (CT) ET

Phone: 512-338-1667

Client Project # 212C-MD-02119

Lab Project # COPTETRA-212CMD02119

Collected by (print): JOHN MILLER

Site/Facility ID # LEA COUNTY, NEW MEXICO

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

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

Analysis / Container / Preservative

Chain of Custody Page 1 of 3

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

D135

Table # 1238345

Acctnum: COPTETRA

Template: T170394

Prelogin: P784175

PM: 526 - Chris McCord

PB: 7/1/20 MG

Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CHLORIDE-300 4ozClr-NoPres	GRO,V8260BTEX 4ozClr-NoPres	TPH-DRO/ORO 4ozClr-NoPres	Remarks	Sample # (lab only)
AH-1S-2	Grab	SS	0'-1'	7/8/20	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 _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking # 4510 1655 5120

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
[signature]	7/9/20	10:30	Kelsey Kilcrease		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.7 °C Bottles Received: 16	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/10/20 Time: 0830	Hold: Condition: NCF / OK

ConocoPhillips - Tetra Tech

901 West Wall
Suite 100
Midland, TX 79701

Billing Information:
Accounts Payable
901 West Wall
Suite 100
Midland, TX 79701

Pres Chk

Report to: Christian Llull

Email To: christian.llull@tetratech.com

Project Description: COP MCA 2-C Header Release

City/State Collected: Hobbs, NM

Please Circle: PT MT (CT) 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

Immediately Packed on Ice N___ Y 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 # L1238345

Table #

Acctnum: COPTETRA

Template: T170394

Prelogin: P784175

PM: 526 - Chris McCord

PB: 7/1/20 mm

Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CHLORIDE-300 4ozClr-NoPres	GRO,V8260BTEX 4ozClr-NoPres	TPH-DRO/ORO 4ozClr-NoPres	Remarks	Sample # (lab only)
AH-9W-2	Grab	SS	0'-1'	7/18/20	17:30	1	X	X	X		-11
AH-9W-2		SS	2'-3'		18:00						-12
AH-9N		SS	0'-1'		18:30						-13
AH-9N		SS	2'-3'		19:00						-14
AH-8W-2		SS	0'-1		19:30						-15
AH-8W-2		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 _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	7/19/20	10:30		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.7 °C Bottles Received: VC
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7-18-20 Time: 0800

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

Chris McCord

From: Dickerson, Ryan <Ryan.Dickerson@tetratech.com>
Sent: Tuesday, July 21, 2020 1:37 PM
To: Chris McCord
Cc: Llull, Christian
Subject: L1238345 COC Revision
Attachments: COC edits_L1238345.pdf

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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APPENDIX D
Laboratory Analytical Data

Part 2
Shallow and Deep Soil Assessments
nAPP2117456525

CARDINAL Laboratories

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, 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	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 (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, SM4500Cl-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

CARDINAL Laboratories

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, 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	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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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, 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	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, 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	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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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, SM4500Cl-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, 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	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, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	02/16/2022	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, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/16/2022	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, 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	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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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, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/16/2022	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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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, 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	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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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 - 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, 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	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**304**	16.0	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

182

Company Name: ~~Tetra Tech~~ ConocoPhillips	BILL TO
Project Manager: Christian Llull	P.O. #:
Address: Christian.Llull@tetratech.com	Company: Tetra Tech
City: State: Zip:	Attn: Christian Llull
Phone #: Fax #:	Address: by email
Project #: 212C-MD-02119 Project Owner:	City:
Project Name: MCA 2C Header East "2" Release	State: Zip:
Project Location: Lea County, NM	Phone #:
Sampler Name: Colton Brickerhoff	Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH	BTEX	Chlorides
H220575																	
1	AH-1 (0-1')	G	1			X							2/15/22		X	X	X
2	AH-1 (2'-3')																
3	AH-2 (0-1')																
4	AH-2 (2'-3')																
5	AH-3 (0-1')																
6	AH-3 (2'-3')																
7	AH-4 (0-1')																
8	AH-4 (2'-3')																
9	AH-5 (0-1')																
10	AH-5 (2'-3')																

Relinquished By: Colton Brickerhoff	Date: 2/15/22 Time: 1305	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☑ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: Christian.Llull@tetratech.com
			REMARKS:

Delivered By: (Circle One)	Observed Temp. °C 22.8	Sample Condition Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐	Bacteria (only) Sample Condition Cool Intact Observed Temp. °C
Sampler - UPS - Bus - Other:	Corrected Temp. °C 22.3	☐ Yes ☑ Yes ☑ No ☐ No	TO	Thermometer ID #113 Correction Factor -0.5°C	☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

2/2

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: ~~Tetra Tech~~ COP / ConocoPhillips	BILL TO
Project Manager: Christian Llull	P.O. #:
Address: Christian.Llull@tetratech.com	Company: Tetra Tech
City: State: Zip:	Attn: Christian Llull
Phone #: Fax #:	Address: by email
Project #: 212C-MD-02119 Project Owner:	City:
Project Name: MCA 2E Header East "2" Release	State: Zip:
Project Location: Lea County, NM	Phone #:
Sampler Name: Colton Brickerstaff	Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST												
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH	BTEX	Chlorides										
H220575																										
11	AH-6 (0-1')	G	1			X							2/15/22		X	X	X									
12	AH-6 (2-3')																									
13	AH-7 (0-1')																									
14	AH-7 (2-3')																									
15	AH-8 (0-1')																									
16	AH-8 (2-3')																									

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 consequental 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.

Relinquished By: Colton Brickerstaff	Date: 2/15/22 Time: 1305	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☑ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: Christian.Llull@tetratech.com
			REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 22.8 Corrected Temp. °C 22.3	Sample Condition Cool: ☐ Yes ☑ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) TO
Turnaround Time: Standard ☑ Rush ☐	Thermometer ID #113 Correction Factor -0.5°C	Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	Observed Temp. °C Corrected Temp. °C

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

FORM-006 R 3.2 10/07/21

CARDINAL Laboratories

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

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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 (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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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, 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 *85.1 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *90.8 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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 (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, SM4500Cl-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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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, SM4500Cl-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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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, SM4500Cl-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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 (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, 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*	<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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 (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, SM4500Cl-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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CARDINAL Laboratories

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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, SM4500Cl-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, SM4500Cl-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, SM4500Cl-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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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, SM4500Cl-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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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, SM4500Cl-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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CARDINAL Laboratories

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 (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, SM4500Cl-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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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, SM4500Cl-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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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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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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 (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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 (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, SM4500Cl-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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 (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, SM4500Cl-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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, SM4500Cl-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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 (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, SM4500Cl-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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 (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, SM4500Cl-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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 (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, SM4500Cl-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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 (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, SM4500Cl-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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	ConocoPhillips
Project Manager:	Christian Llull
Address:	Christian.Llull@tetratech.com
City:	State: Zip:
Phone #:	Fax #:
Project #:	212C-MD-02119 Project Owner:
Project Name:	MCA 2C Header East "2" Release
Project Location:	Lea County, NM
Sampler Name:	Colton Bickerstaff

BILL TO

P.O. #:	
Company:	Tetra Tech
Attn:	Christian Llull
Address:	by email
City:	
State: Zip:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	TPH	BTEX	Chlorides
H220609																	
1	T-1 (0-1')	G	1			X							2/16/22		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')																

Relinquished By:	Date: 2/16/22	Received By:	Verbal Result: ☐ Yes ☑ No Add'l Phone #:
Colton Bickerstaff	Time: 1508	Tamara Oldaker	All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	Christian.Llull@tetratech.com
	Time:		REMARKS:

Delivered By: (Circle One)	Observed Temp. °C 22.8	Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No	CHECKED BY: (Initials) TO	Turnaround Time: Standard ☑ Rush ☐	Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C
Sampler - UPS - Bus - Other:	Corrected Temp. °C 22.3			Thermometer ID #113 Correction Factor -0.5°C	Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2/3

Company Name:	ConocoPhillips
Project Manager:	Christian Llull [redacted] (CB)
Address:	Christian.Llull@etechtech.com
City:	State: Zip:
Phone #:	Fax #:
Project #:	212C-MD-02119 Project Owner:
Project Name:	MCA 2C Header Bolt "2" Release
Project Location:	Lea County NM
Sampler Name:	Colton Bickerstaff

BILL TO

P.O. #:	
Company:	Tetra Tech
Attn:	Christian Llull
Address:	by email
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	TPH	BTEX	Chlorides
H220609																	
11	T-2 (9'-10')	G	1			X							2/16/22		X	X	X
12	T-2 (11'-12')																
13	T-3 (0-1')																
14	T-3 (2'-3')																
15	T-3 (4'-5')																
16	T-3 (6'-7')																
17	T-3 (9'-10')																
18	T-3 (11'-12')																
19	T-4 (0-1')																
20	T-4 (2'-3')																

Relinquished By:	Date: 2/16/22	Received By:	Verbal Result: ☐ Yes ☑ No Add'l Phone #:
Colton Bickerstaff	Time: 1508	Tamara Oldaker	All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	Christian.Llull@etechtech.com
	Time:		REMARKS:

Delivered By: (Circle One)	Observed Temp. °C 22.8	Sample Condition Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐	Bacteria (only) Sample Condition Cool Intact Observed Temp. °C
Sampler - UPS - Bus - Other:	Corrected Temp. °C 22.3	☐ Yes ☑ Yes ☑ No ☐ No	TB	Thermometer ID #113 Correction Factor -0.5°C	☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

3/3

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	ConocoPhillips
Project Manager:	Christian Llull
Address:	Christian.Llull@tetratech.com
City:	State: Zip:
Phone #:	Fax #:
Project #:	212C-MD-02119 Project Owner:
Project Name:	MCA 2C Header East 2" Release
Project Location:	Lea County, NM
Sampler Name:	Colton Bickerstaff

BILL TO

P.O. #:	
Company:	Tetra Tech
Attn:	Christian Llull
Address:	by email
City:	
State: Zip:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING DATE	SAMPLING TIME	TPH	BTEX	Chlorides
H220609																	
21	T-4 (4'-5')	G	1			X							2/16/22		X	X	X
22	T-4 (6'-7')																
23	T-4 (9'-10')																
24	T-4 (11'-12')																

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 consequental 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.

Relinquished By: Colton Bickerstaff	Date: 2/16/22 Time: 1508	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☑ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: Christian.Llull@tetratech.com
			REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 22.8 Corrected Temp. °C 22.3	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐ Thermometer ID #113 Correction Factor -0.5°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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CARDINAL Laboratories

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 accreditated 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,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/22/2022	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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1/1

Company Name:	ConocoPhillips
Project Manager:	Christian Llull
Address:	Christian.Llull@tetratech.com
City:	State: Zip:
Phone #:	Fax #:
Project #:	212C-MD-02119 Project Owner:
Project Name:	MCA 2L Header Bolt "2" Release
Project Location:	Lea County, NM
Sampler Name:	Colton Blankenship

BILL TO

P.O. #:	
Company:	Tetra Tech
Attn:	Christian Llull
Address:	by email
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	TPH	BTEX	Chlorides
H220655-1	AH-9 (0-1')	G	1			X					X		2/21/22		X	X	X

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.

Relinquished By: Colton Blankenship	Date: 2/21/22 Time: 1235	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☑ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: Christian.Llull@tetratech.com
			REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 1.6 Corrected Temp. °C 1.1	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐ Thermometer ID #113 Correction Factor -0.5°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.2 10/07/21

† 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

CARDINAL Laboratories

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, SM4500Cl-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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, SM4500Cl-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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, SM4500Cl-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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, SM4500Cl-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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, 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	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Tetra Tech
Project Manager:	Charles Terhune
Address:	1500 City West Blvd STE 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:	Maljamar, NM
Sampler Name:	Charles Terhune

BILL TO

P.O. #:	212C-HN-02235
Company:	Tetra Tech
Attn:	Charles Terhune
Address:	
City:	Houston
State:	TX Zip: 77042
Phone #:	281-755-8965
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX	TPH	Chloride
H231212																	
1	ES-1	G				X					X		03/16	13:25	X	X	X
2	ESE-2 ESW-2	G				X					X		03/16	13:49	X	X	X
3	ESE-3 ESW-3	G				X					X		03/16	14:02	X	X	X
4	WSW-1	G				X					X		03/16	14:08	X	X	X
5	WSW-2	G				X					X		03/16	14:22	X	X	X
6	WSW-3	G				X					X		03/16	14:34	X	X	X

Relinquished By:	Date: 03/16	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Charles Terhune	Time: 16:02		All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One)	Observed Temp. °C 21.9	Sample Condition Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Rush ☑ 24 Hr
Sampler - UPS - Bus - Other:	Corrected Temp. °C 21.3	☐ Yes ☑ Yes ☐ No ☐ No	T.O.	Thermometer ID #113 Correction Factor -0.6°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

FORM-006 R 3.3 07/16/22

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

CARDINAL Laboratories

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, 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	03/18/2023	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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Tetra Tech
Project Manager: Charles Terhune
Address: 1500 CityWest Blvd, 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: Maljamar, NM
Sampler Name: Charles Terhune

BILL TO
P.O. #: 212C-HN-02235
Company: Tetra Tech
Attn: Charles Terhune
Address: Same
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	BTEX	TPH	Chloride
H231228 1	FS-3	X				X					X		03/17	10:34	X	X	X
2	FS-4	X				X					X		03/17	10:36	X	X	X

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.

Relinquished By: Charles Terhune [signature] Date: 03/17/23 Time: 11:38 Received By: Tamara Oldaker [signature]

Relinquished By: Date: Time: Received By:

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

REMARKS:

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

Observed Temp. °C 3.8
Corrected Temp. °C 3.2

Sample Condition
Cool: ☑ Yes ☐ No
Intact: ☑ Yes ☐ No

CHECKED BY: (Initials) TO

Turnaround Time: Standard ☐ Rush ☑ 24 HR
Thermometer ID #113
Correction Factor -0.6°C

Bacteria (only) Sample Condition
Cool ☐ Yes ☐ No
Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

FORM-006 R 3.3 07/18/22

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

CARDINAL Laboratories

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, 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	03/21/2023	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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, 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	03/21/2023	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, SM4500Cl-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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: 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, 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	03/21/2023	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

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

Company Name: Tetra Tech
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: Maljamar, NM
Sampler Name: Brody Lichtenberger

BILL TO

P.O. #: 212C-HN-02235/700
Company: Tetra Tech, Inc.
Attn: Chuck Terhune
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	SAMPLING TIME	BTEX by 8021B	TPH by 8015M	Chloride by SM4500Cl-B
H23257																	
1	WSW-4	G	1			X							3/20/23	0835	X	X	X
2	ESW-4	G	1			X							3/20/23	1240	X	X	X
3	WSW-5	G	1			X							3/20/23	1250	X	X	X
4	ESW-5	G	1			X							3/20/23	1255	X	X	X
5	FS-5	G	1			X							3/20/23	1300	X	X	X

Relinquished By: Brody Lichtenberger Date: 3/20/23 Time: 1555 Received By:
Relinquished By: Date: Time: Received By:

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

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C 1.9 Corrected Temp. °C 1.3
Sample Condition Cool ☑ Yes Intact ☑ Yes
CHECKED BY: (Initials)
Turnaround Time: Standard ☐ Rush ☒ Bacteria (only) Sample Condition Cool Intact Observed Temp. °C

CARDINAL Laboratories

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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

CARDINAL Laboratories

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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, 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	03/23/2023	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

CARDINAL Laboratories

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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, 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	03/23/2023	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, 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	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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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, 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	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

CARDINAL Laboratories

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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 - 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, 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	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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, 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	03/23/2023	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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, 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	03/23/2023	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

EBL
P011974O6

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 ZC Remediation
Project Location:	Maljamar, NM
Sampler Name:	Brody Lichtenberger

BILL TO

P.O. #:	~~212C-HN-02235/200~~
Company:	Tetra Tech, Inc.
Attn:	Chuck Terhune
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX by 8021B	TPH by 8015M	Chloride by SM4500 Cl-B
H231289																	
1	WSW-6	G	1			X					X		3/21/23	0815	X	X	X
2	ESW-6	G	1			X					X		3/21/23	0935	X	X	X
3	FS-6	G	1			X					X		3/21/23	0940	X	X	X
4	WSW-7	G	1			X					X		3/21/23	1040	X	X	X
5	ESW-7	G	1			X					X		3/21/23	1045	X	X	X
6	FS-7	G	1			X					X		3/21/23	1050	X	X	X
7	FS-8	G	1			X					X		3/21/23	1055	X	X	X
8	WSW-8	G	1			X					X		3/21/23	1230	X	X	X
9	FS-9	G	1			X					X		3/21/23	1300	X	X	X

Relinquished By: Brody Lichtenberger	Date: 3/21/23 Time: 1615	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address:
Relinquished By:	Date: Time:	Received By:	REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 2.3 Corrected Temp. °C 1.7	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Rush ☒ 3day TAT Thermometer ID #113 Correction Factor -0.6°C Bacteria (only) Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.3 07/18/22

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

CARDINAL Laboratories

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: 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, 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

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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: 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, 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	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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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, 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

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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: 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, 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	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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, 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	03/23/2023	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: 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, 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	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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, 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	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: 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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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, 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

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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: 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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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, 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	03/23/2023	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

CARDINAL Laboratories

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

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 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: Maljamar, NM
Sampler Name: Brody Lichtenberger

BILL TO
P.O. #: PO1197406
Company: Tetra Tech, Inc.
Attn: Chuck Terhune
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX by 8021B	TPH by 8015M	Chloride by SM4500 Cl-B
H231323																	
1	ESW-8	G	1			X					X		3/22/23	1015	X	X	X
2	ESW-9	G	1			X					X		3/22/23	1020	X	X	X
3	WSW-9	G	1			X					X		3/22/23	1025	X	X	X
4	FS-10	G	1			X					X		3/22/23	1030	X	X	X
5	ESW-10	G	1			X					X		3/22/23	1235	X	X	X
6	WSW-10	G	1			X					X		3/22/23	1240	X	X	X
7	ESW-11	G	1			X					X		3/22/23	1245	X	X	X
8	WSW-11	G	1			X					X		3/22/23	1250	X	X	X
9	ESW-12	G	1			X					X		3/22/23	1410	X	X	X
10	WSW-12	G	1			X					X		3/22/23	1415 (EBL)	X	X	X

Relinquished By: Brody Lichtenberger Date: 3/22/23 Time: 1555
Received By: Tamara Oldaker

Relinquished By: Date: Time:
Received By:

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

Observed Temp. °C 1.7
Corrected Temp. °C 1.1

Sample Condition: Cool Yes / Intact Yes; Cool No / Intact No

CHECKED BY: (Initials) TS

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

REMARKS:

Turnaround Time: Standard ☐ Rush ☒ 24 hour

Thermometer ID #113
Correction Factor -0.6°C

Bacteria (only) Sample Condition
Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

FORM-006 R 3.3 07/18/22

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

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: TetraTech, 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: Maljamar, NM
Sampler Name: Brody Lichtenberger

BILL TO

P.O. #: PO1977406
Company: TetraTech, Inc.
Attn: Chuck Terhune
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX by 8021B	TPH by 8015M	Chloride by SM4500 Cl-B
H231323	EBL										✓						
11	ESW-13	G	1			X					X		3/22/23	1420	X	X	X
12	WSW-13	G	1			X					X		3/22/23	1425	X	X	X
13	ESW-14	G	1			X					X		3/22/23	1500	X	X	X

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 consequental 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.

Relinquished By: Brody Lichtenberger Date: 3/22/23 Time: 1555
Received By:
Relinquished By: Date: Time:
Received By:

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

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C 1.7 Corrected Temp. °C 1.1
Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials) JO

Turnaround Time: Standard ☐ Rush ☒ 24 hour
Thermometer ID #113 Correction Factor -0.6°C
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.3 07/18/22

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

CARDINAL Laboratories

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 accreditated 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,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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, 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	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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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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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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 - 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, 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*	**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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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, SM4500Cl-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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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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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, 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 *79.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *83.6 %* *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 - 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, 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 *93.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *99.0 %* *49.1-148*

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CARDINAL Laboratories

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 - 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, 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	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, 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 *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:

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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:

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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: 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, 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*	**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*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CARDINAL Laboratories

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 - 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, 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 *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

CARDINAL Laboratories

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 - 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*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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, 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	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

CARDINAL Laboratories

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 - 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, 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	03/24/2023	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*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, SM4500Cl-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*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

		BILL TO	
Company Name:	Tetra Tech, Inc.	P.O. #:	PO1197406
Project Manager:	Charles Terhune	Company:	Tetra Tech, Inc
Address:	1500 City West Boulevard Suite 1000	Attn:	Chuck Terhune
City:	Houston State: TX Zip: 77042	Address:	
Phone #:	281-755-8965 Fax #:	City:	
Project #:	212C-HN-02235 Project Owner:	State:	Zip:
Project Name:	MCA 2C Remediation	Phone #:	
Project Location:	Maljamar, NM	Fax #:	
Sampler Name:	Brody Lichtenberger		

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST		
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	BTEX by 8021B	TPH by 8015M	Chloride by SM4500 Cl-B
H231345																	
1	WSW-14	G	1			X					X		3/23/23	0730	X	X	X
2	FS-14	G	1			X					X		3/23/23	0750	X	X	X
3	ESW-15	G	1			X					X		3/23/23	0800	X	X	X
4	WSW-15	G	1			X					X		3/23/23	0805	X	X	X
5	FS-15	G	1			X					X		3/23/23	0910	X	X	X
6	ESW-16	G	1			X					X		3/23/23	0915	X	X	X
7	WSW-16	G	1			X					X		3/23/23	0920	X	X	X
8	ESW-17	G	1			X					X		3/23/23	0925	X	X	X
9	FS-16	G	1			X					X		3/23/23	1020	X	X	X
10	WSW-17	G	1			X					X		3/23/23	1025	X	X	X

Relinquished By: Brody Lichtenberger	Date: 3/23/23 Time: 1600	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 2.9 Corrected Temp. °C 2.3	Sample Condition Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No	CHECKED BY: (Initials) TO
			REMARKS:
			Turnaround Time: Standard ☐ Rush ☒ 24 hour
			Thermometer ID #113 Correction Factor -0.6°C
			Bacteria (only) Sample Condition Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

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

CARDINAL Laboratories

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 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:	Maljamar, NM
Sampler Name:	Brody Lichtenberger

BILL TO

P.O. #:	PO1197406
Company:	Tetra Tech, Inc
Attn:	Chuck Terhune
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX by 8021B	TPH by 8015M	Chloride by SM4500 Cl-B
H231345																	
11	ESW-18	G	1			X					X		3/23/23	1030	X	X	X
12	WSW-18	G	1			X					X		3/23/23	1115	X	X	X
13	ESW-19	G	1			X					X		3/23/23	1120	X	X	X
14	FS-18	G	1			X					X		3/23/23	1240	X	X	X
15	WSW-19	G	1			X					X		3/23/23	1245	X	X	X
16	ESW-20	G	1			X					X		3/23/23	1250	X	X	X
17	FS-19	G	1			X					X		3/22/23	1500	X	X	X
18	WSW-20	G	1			X					X		3/23/23	1505	X	X	X
19	ESW-21	G	1			X					X		3/23/23	1510	X	X	X

Relinquished By:	Date: 3/23/23	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Brody Lichtenberger	Time: 1600		All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One)	Observed Temp. °C 2.9	Sample Condition: Cool ☑ Yes ☐ No / Intact ☐ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ / Rush ☒ 24 hour
Sampler - UPS - Bus - Other:	Corrected Temp. °C 2.3			Thermometer ID #113 Correction Factor -0.6°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ Nc / Intact ☐ Yes ☐ No — Observed Temp. °C — Corrected Temp. °C

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

CARDINAL Laboratories

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

CARDINAL Laboratories

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, 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 *106 %* *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 - 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, 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 *101 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *106 %* *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 - 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, 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	03/27/2023	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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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, 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 *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: 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, 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 *99.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *104 %* *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 - 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, SM4500Cl-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, SM4500Cl-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, 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 *99.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *103 %* *49.1-148*

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Analytical Results For:

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CHUCK TERHUNE
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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, SM4500Cl-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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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, 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	03/27/2023	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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, 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*	**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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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, SM4500Cl-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

CARDINAL Laboratories

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, SM4500Cl-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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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, 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	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Tetra Tech, Inc.	**BILL TO**	
Project Manager:	Charles Terhune	P.O. #:	PO#97406
Address:	1500 CityWest Boulevard Suite 1000	Company:	Tetra Tech, Inc
City:	Houston State: TX Zip: 77042	Attn:	Chuck Terhune
Phone #:	281-755-8965 Fax #:	Address:	
Project #:	212C-HN-02235 Project Owner:	City:	
Project Name:	MCA 2C Remediation	State:	Zip:
Project Location:	Malaamar, NM	Phone #:	
Sampler Name:	Brody Lichtenberger	Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST		
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	BTEX by 8021B	TPH by 8015M	Chloride by SM 4500 Cl-B
H23136											✓						
1	WSW-21	G	1			X					X		3/24/23	0800	X	X	X
2	SSW-1	G	1			X					X		3/24/23	0805	X	X	X
3	SSW-2	G	1			X					X		3/24/23	0810	X	X	X
4	SSW-3	G	1			X					X		3/24/23	0815	X	X	X
5	SSW-4	G	1			X					X		3/24/23	0820	X	X	X
6	SSW-5	G	1			X					X		3/24/23	0825	X	X	X
7	FS-20	G	1			X					X		3/24/23	0855	X	X	X
8	FS-17	G	1			X					X		3/24/23	0900	X	X	X
9	NSW-2	G	1			X					X		3/24/23	0905	X	X	X
10	SSW-6	G	1			X					X		3/24/23	0910	X	X	X

Relinquished By: Brody Lichtenberger	Date: 3/24/23 Time: 1515	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address:
Relinquished By:	Date: Time:	Received By:	REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 0.6 Corrected Temp. °C 1.2	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Rush ☒ 24 hour Thermometer ID #113 Correction Factor -0.6°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.3 07/18/22

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

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Tetra Tech, Inc.	**BILL TO**	
Project Manager:	Charles Terhune	P.O. #:	PO1197406
Address:	1500 City West Boulevard Suite 1000	Company:	Tetra Tech, Inc
City:	Houston State: TX Zip: 77042	Attn:	Chuck Terhune
Phone #:	281-755-8965 Fax #:	Address:	
Project #:	212C-HN-02235 Project Owner:	City:	
Project Name:	MCA 2C Remediation	State:	Zip:
Project Location:	Monument, NM	Phone #:	
Sampler Name:	Brody Lichtenberger	Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL ✓	OTHER:	SAMPLING: DATE	TIME	BTEX by 8021B	TPH by 8015M	Chloride by SM4500 Cl-B
H231866																	
11	ESW-~~27~~9-A, EBL	G	1			X					X		3/24/23	1035	X	X	X
12	WSW-~~33~~12-A - EBL	G	1			X					X		3/24/23	1040	X	X	X
13	WSW-~~23~~13-A, EBL	G	1			X					X		3/24/23	1045	X	X	X
14	FS-1-A	G	1			X					X		3/24/23	1235	X	X	X
15	FS-11	G	1			X					X		3/24/23	1350	X	X	X
16	FS-12	G	1			X					X		3/24/23	1355	X	X	X
17	FS-13	G	1			X					X		3/24/23	1400	X	X	X

Relinquished By: Brody Lichtenberger	Date: 3/24/23 Time: 1515	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address:
Relinquished By:	Date: Time:	Received By:	REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C -0.6 Corrected Temp. °C -1.2	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) AO	Turnaround Time: Standard ☐ Rush ☒ Thermometer ID #113 Correction Factor -0.6°C 24 hour

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

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

CARDINAL Laboratories

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

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: 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, 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	03/28/2023	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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, SM4500Cl-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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: 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, 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 *88.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *92.7 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Tetra Tech, Inc.	**BILL TO**	
Project Manager:	Charles Terhune	P.O. #:	PO1197406
Address:	1500 City West Boulevard Suite 1000	Company:	Tetra Tech, Inc.
City:	Houston State: TX Zip: 77042	Attn:	Chuck Terhune
Phone #:	281-755-8965 Fax #:	Address:	
Project #:	212C-HN-02235 Project Owner:	City:	
Project Name:	MCA 2C Remediation	State: Zip:	
Project Location:	Maljamar, NM	Phone #:	
Sampler Name:	Brody Lichtenberger	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX by 8021B	TPH by 8015M	Chloride by SM4500 Cl-B
H231389																	
1	FS-14-A	G	1			X					X		3/27/23	1015	X	X	X
2	WSW-14-A	G	1			X					X		3/27/23	1020	X	X	X
3	ESW-1	G	1			X					X		3/27/23	1210	X	X	X
4	NSW-1	G	1			X					X		3/27/23	1450	X	X	X
5	FS-2	G	1			X					X		3/27/23	1455	X	X	X

Relinquished By:	Date: 3/27/23	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Brody Lichtenberger	Time: 1558		All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One)	Observed Temp. °C 5.1	Sample Condition Cool / Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Rush ☒
Sampler - UPS - Bus - Other:	Corrected Temp. °C 4.5	☑ Yes ☑ Yes ☐ No ☐ No	TO	Thermometer ID #113 Correction Factor -0.6°C 24 hour

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

FORM-006 R 3.3 07/18/22

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

CARDINAL Laboratories

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 accreditated 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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: 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, SM4500Cl-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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: 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, 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	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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: 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, 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	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*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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, 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	03/29/2023	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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Tetra Tech, Inc	**BILL TO**	
Project Manager:	Charles Terhune	P.O. #:	PO1197406
Address:	1500 City West Boulevard Suite 1000	Company:	Tetra Tech, Inc.
City:	Houston State: TX Zip: 77042	Attn:	Chuck Terhune
Phone #:	281-755-8965 Fax #:	Address:	
Project #:	212C-HN-02235 Project Owner:	City:	
Project Name:	MCA 2C Remediation	State:	Zip:
Project Location:	Mulvemar, NM	Phone #:	
Sampler Name:	Brody Lichtenberger	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX by 8021B	TPH by 8015M	Chloride by SM4500 Cl-B
H231416																	
1	T-7	G	1			X					X		3/28/23	0835	X	X	X
2	ESW-9-B	G	1			X					X		3/28/23	0840	X	X	X
3	FS-11-A	G	1			X					X		3/28/23	1115	X	X	X
4	FS-11-N	G	1			X					X		3/28/23	1120	X	X	X
5	NSW-13-B	G	1			X					X		3/28/23	1140	X	X	X

Relinquished By: Brody Lichtenberger	Date: 3/28/23 Time: 1604	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address: REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 3.8 Corrected Temp. °C 3.2	Sample Condition Cool ☑ Yes Intact ☑ Yes / ☐ No ☐ No	CHECKED BY: (Initials) TO
Turnaround Time: Standard ☐ Rush ☒ 24 hour	Thermometer ID #113 Correction Factor -0.6°C	Bacteria (only) Sample Condition Cool ☐ Yes Intact ☐ Yes / ☐ Nc ☐ No	Observed Temp. °C Corrected Temp. °C

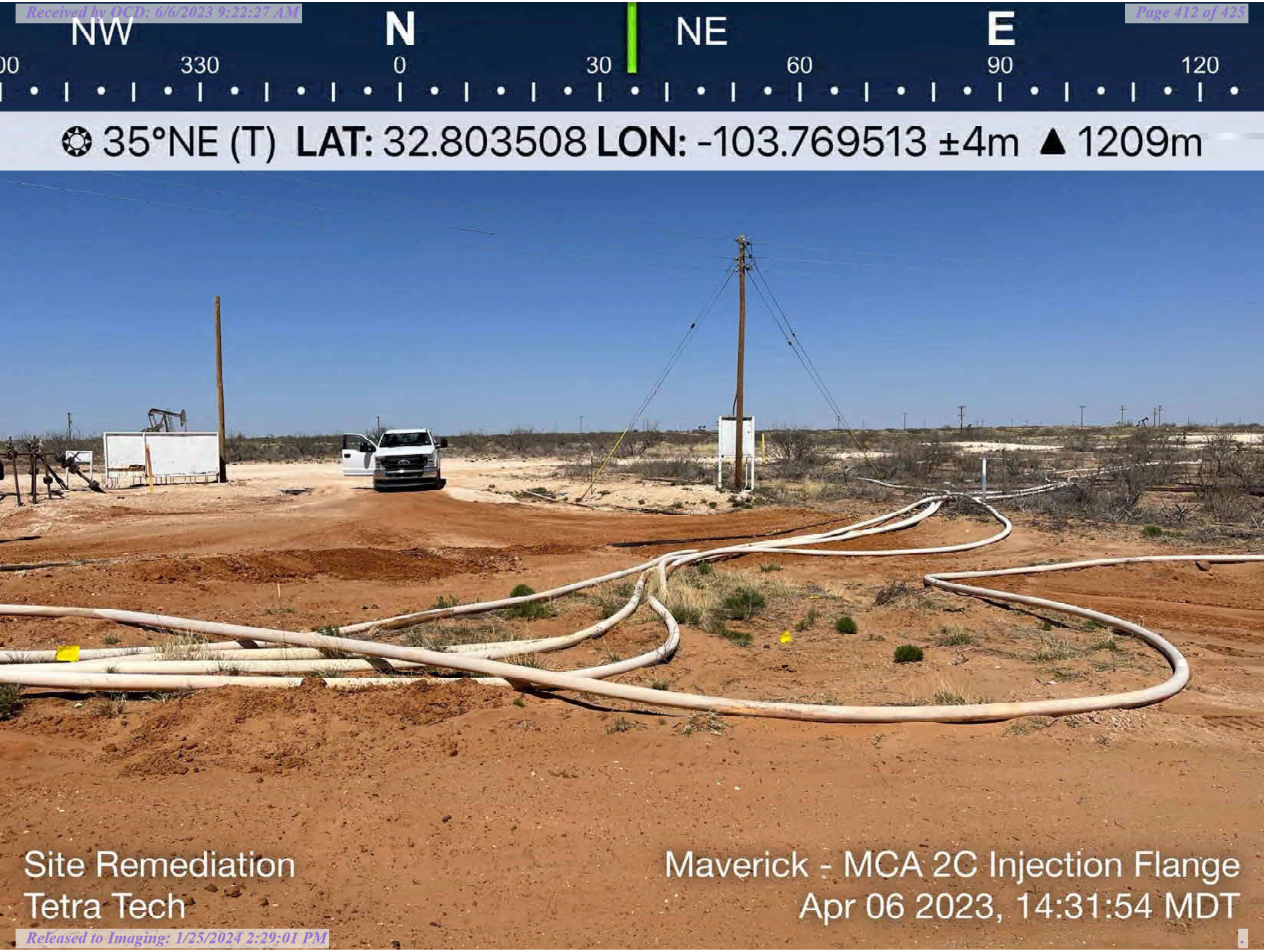
FORM-006 R 3.3 07/18/22

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

APPENDIX E: PHOTOGRAPHIC DOCUMENTATION


E
SE
S
SW
W
90
120
150
180
210
240
270
178°S (T) LAT: 32.803724 LON: -103.769394 ±4m ▲1210m
Site Remediation
Tetra Tech
Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:31:21 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

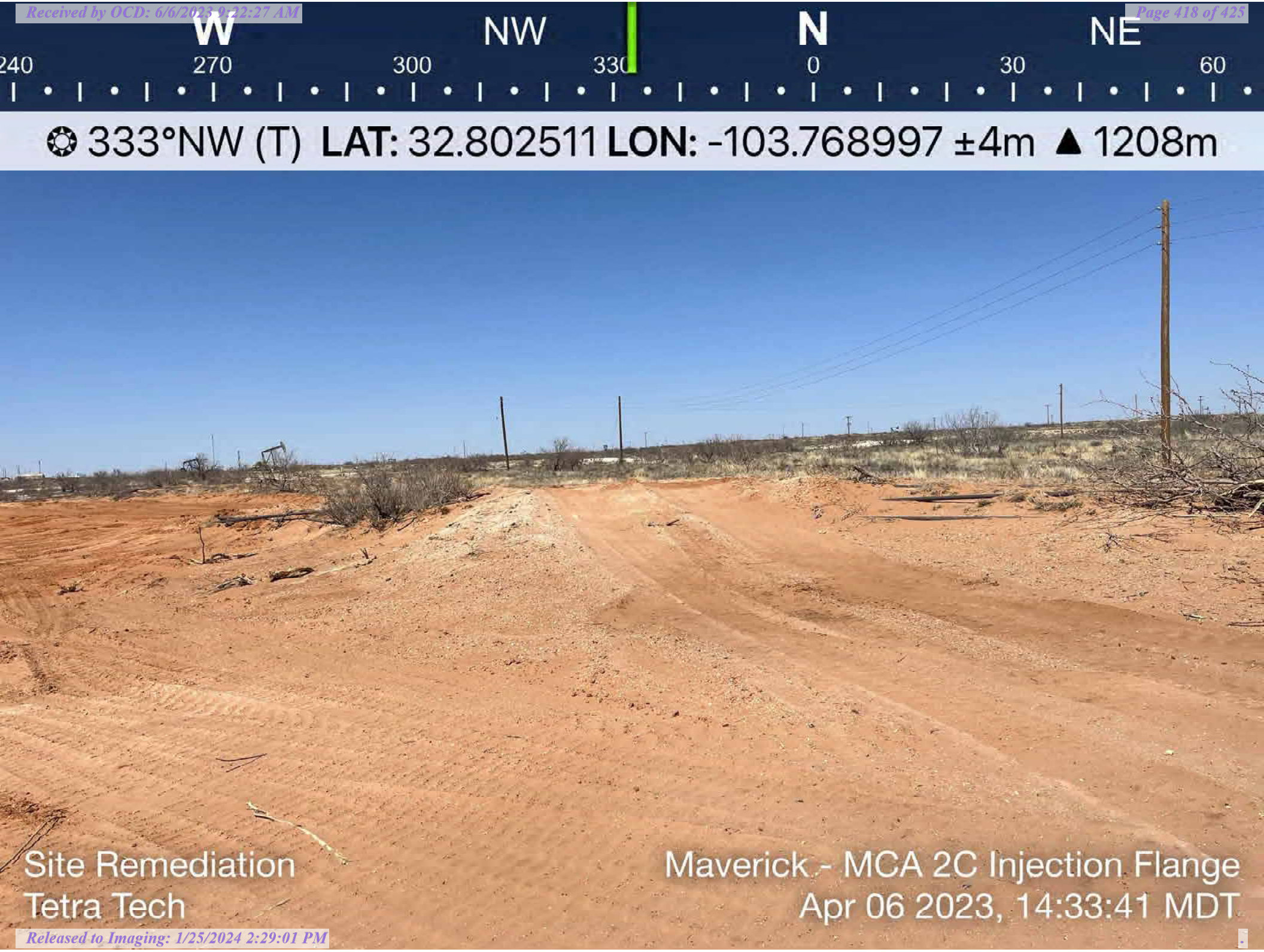

NW
N
NE
E
00
330
0
30
60
90
120
35°NE (T) LAT: 32.803508 LON: -103.769513 ±4m ▲ 1209m
Site Remediation
Tetra Tech
Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:31:54 MDT

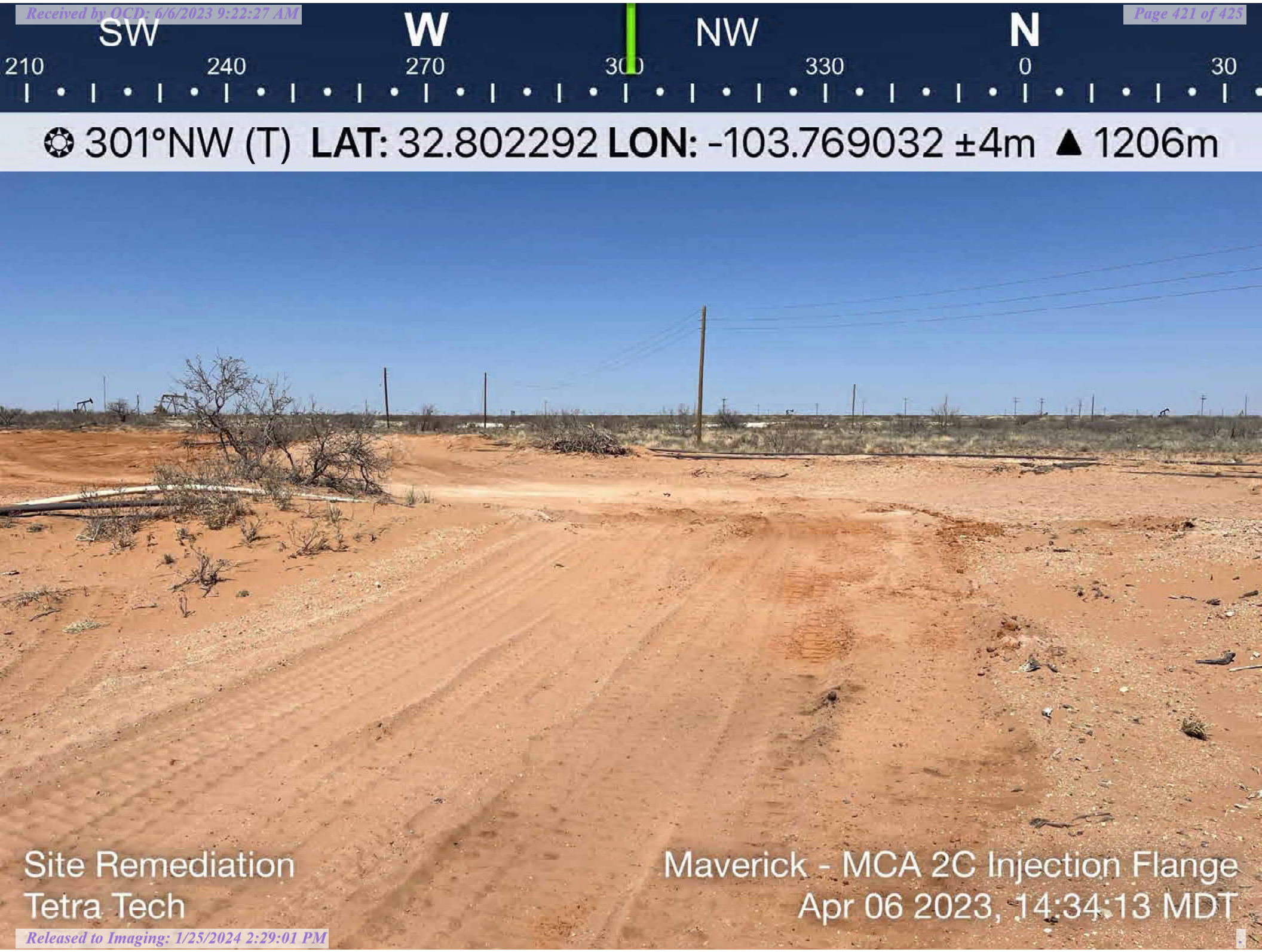

NW
N
NE
E
300
330
0
30
60
90
5°N (T) LAT: 32.803444 LON: -103.769340 ±4m ▲ 1210m
Site Remediation
Tetra Tech
Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:32:09 MDT

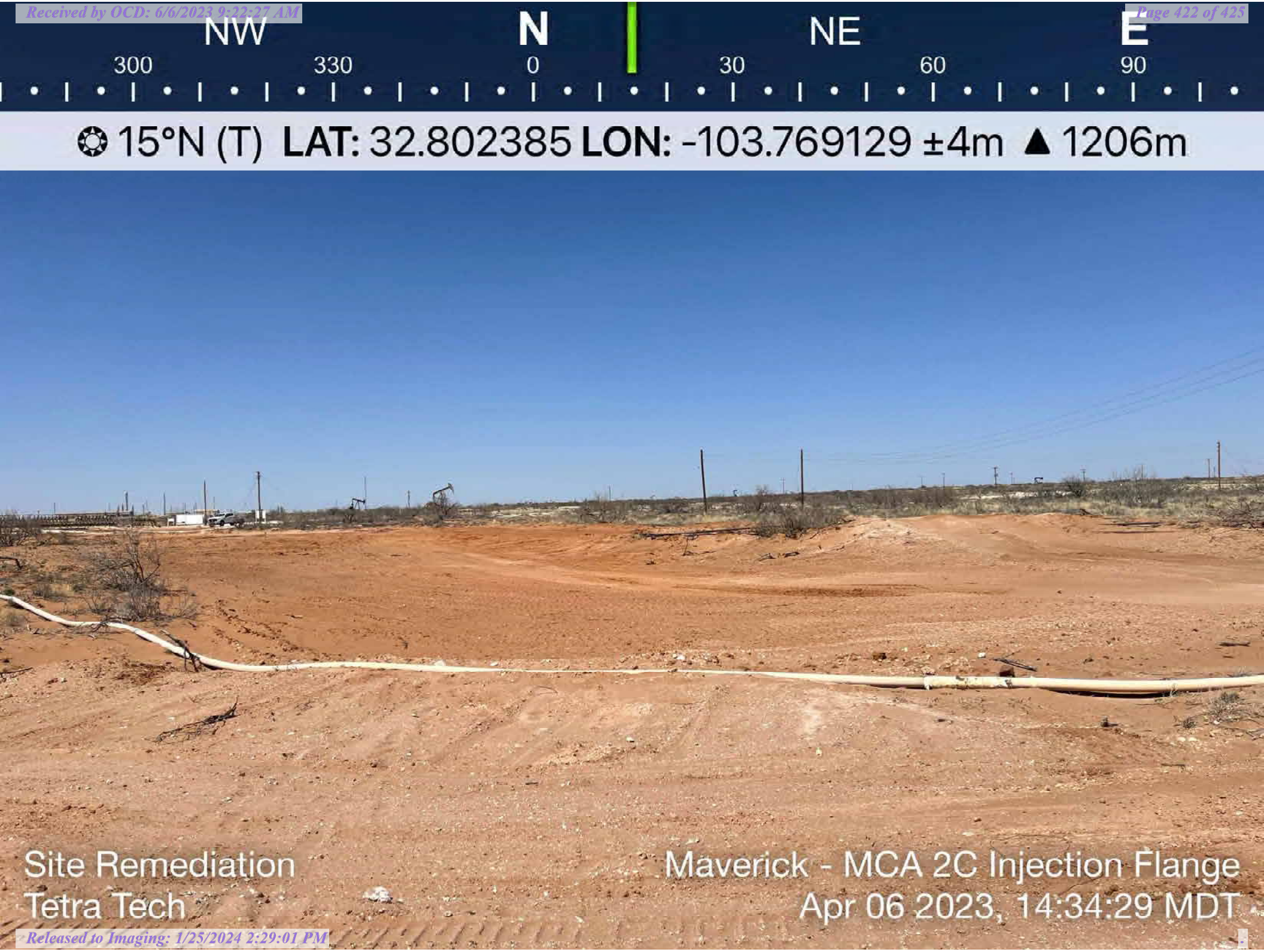

E
SE
S
SW
60
90
120
150
180
210
240
154°SE (T) LAT: 32.803252 LON: -103.769268 ±4m ▲ 1209m
Site Remediation
Tetra Tech
Maverick - MCA 2C Injection Flange
Apr 06 2023, 14:32:34 MDT


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


W
NW
N
NE
240
270
300
330
0
30
60
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


W
NW
N
NE
240
270
300
330
0
30
60
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
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

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 224316

CONDITIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 224316
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	1/25/2024