TETRA TECH

June 26, 2025

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

**Re: REVISED Remediation Closure Report**
**Reclamation Report**
**ConocoPhillips Company (COG Production, LLC)**
**Windward Federal #002H FL Release**
**Unit Letter D, Section 30, Township 24 South, Range 32 East**
**Lea County, New Mexico**
**Incident ID# NAPP2413732369**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips Company (ConocoPhillips) to assess a COG Production, LLC (Concho) release that occurred at a water transfer line associated with the Windward Federal #002H (fAPP2132638253). The release footprint is located in Public Land Survey System (PLSS) Unit Letter D, Section 30, Township 24 South, Range 32 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.194511°, -103.719572° as shown on Figures 1 and 2.

## BACKGROUND

According to the New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report, the release was discovered on May 3, 2024 and was caused by a hole in a water transfer line. The release consisted of 4.1217 barrels (bbls) of produced water, of which 0 bbls were reported recovered. The release occurred off pad. The NMOCD received the initial C-141 on May 16, 2024, and subsequently assigned the release the Incident ID nAPP2413732369. The initial C-141 form is included in Appendix A.

The May 2024 release partially overlaps a prior release that occurred on April 1, 2024. The April 2024 release is associated with the Windward West CTB and was assigned Incident ID nAPP2409948979. According to the NMOCD C-141 Initial Report, the nAPP2409948979 release was caused by a hole in a water transfer line and consisted of 12.7488 barrels (bbls) of produced water, of which 10 bbls were reported recovered.

## LAND OWNERSHIP

According to the NMOCD Oil and Gas Map, the Site is located on federal lands managed by the Bureau of Land Management (BLM). This Closure Report will be provided to the BLM for review and approval.

## SITE CHARACTERIZATION

A site characterization was performed and no sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, playa lakes, stream bodies, wetlands, incorporated

Tetra Tech
901 West Wall St., Suite 100, Midland, TX 79701
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.29 New Mexico Administrative Code (NMAC). The Site is in an area of low karst potential.

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there is one (1) water well located within ½ mile (800 meters) of the Site at a depth of 120 feet bgs with no groundwater elevation reported. This dry water well provides a reasonable determination to establish groundwater as greater than 100 bgs in the ½ mile radius. The minimum depth to groundwater based on data from one (1) well located approximately 1.26 miles (2,028 meters) away from the Site is 135 feet below ground surface (bgs). The site characterization data are presented in Appendix B.

## REGULATORY FRAMEWORK

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

Based on the site characterization, depth to groundwater, and in accordance with Table I of 19.15.29.12 NMAC, the recommended remedial action levels (RRALs) for the Site are as follows:

| Constituent | Site RRALs |
|---|---|
| **Chloride** | 20,000 mg/kg |
| **TPH (GRO+DRO+ORO)** | 2,500 mg/kg |
| **TPH (GRO+DRO)** | 1,000 mg/kg |
| **BTEX** | 50 mg/kg |
| **Benzene** | 10 mg/kg |

Additionally, in accordance with the NMOCD guidance *Procedures for Implementation of the Spill Rule (19.15.29 NMAC)* (September 6, 2019), the following reclamation requirements for surface soils (0-4 ft bgs) outside of active oil and gas operations are as follows:

| Constituent | Reclamation Requirements |
|---|---|
| **Chloride** | 600 mg/kg |
| **TPH** | 100 mg/kg |

## INITIAL RESPONSE AND REMEDIAL ACTIVITIES

The release extent is indicated in Figure 3. In accordance with 19.15.29.8. B. (4) NMAC that states “the responsible party may commence remediation immediately after discovery of a release,” ConocoPhillips elected to begin remediation of the impacted area in April 2024. The visibly impacted material was initially excavated by scraping the surface to a depth of 1 foot bgs. The initial response extent is indicated in Figure 4.

## ASSESSMENT ACTIVITIES

Tetra Tech, on behalf of ConocoPhillips, conducted assessment sampling in the vicinity of the coincidental release extent to evaluate current soil concentration levels and guide the anticipated remediation. On July 24, 2024, Tetra Tech personnel oversaw the installation of six (6) boreholes (BH-1 through BH-6) and six (6) hand auger borings (AH-24-1 and H-1 through H-6) within and around the combined release extent with a drilling rig. The July 2024 sampling locations are presented in Figure 3.

A total of thirty-four (34) soil samples were collected and sent to Cardinal Laboratories in Hobbs, New Mexico (Cardinal) to be analyzed for chloride via Standard Method 4500Cl-B, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. Analytical results from the July 2024 soil assessment are summarized

in Table 2. Chloride concentrations were detected in surface soils (0-4 feet bgs) at five boring locations and one hand auger location at levels above the reclamation limit of 600 mg/kg. There were no analytical results exceeding the chloride RRAL of 20,000 mg/kg. All analytical results were below the reclamation limits and Site RRALs for all other constituents. Following the July 2024 assessment activities, the release extents were considered fully delineated.

## REMEDIATION WORK PLAN AND REGULATORY APPROVAL

Tetra Tech, on behalf of ConocoPhillips, prepared a Remediation Work Plan dated September 12, 2024 and submitted it to the NMOCD and the BLM for approval. A separate work plan was submitted to the NMOCD for the initial release (Incident ID nAPP2409948979).

The Remediation Work Plan was approved via email by Shelly Wells of the NMOCD on September 17, 2024, with the following conditions:

- *"Remediation plan approved with conditions. Confirmation samples are to be collected every 200 square feet from the base and walls of the excavation. Submit remediation closure report to the OCD by 12/16/2024."*

The Remediation Work Plan was submitted to the BLM via email on September 25, 2024, and approved by Crisha Morgan on October 11, 2024.

## 2024 REMEDIATION/RECLAMATION ACTIVITIES

From October 15-23, 2024, Tetra Tech personnel were onsite to supervise the remedial activities proposed in the approved Remediation Work Plan, including excavation, disposal, and confirmation sampling. Prior to confirmation sampling, on October 11, 2024, the NMOCD district office was first notified via the OCD Portal in accordance with Subsection D of 19.15.29.12 NMAC. An additional C-141N was submitted to continue confirmation sampling on October 17, 2024. Regulatory correspondence is included in Appendix C.

Impacted soils were excavated as indicated in Figure 4. The areas within the release footprint were excavated to a maximum depth of 4 feet below surrounding grade. Due to safety concerns associated with working around pressurized lines, impacted soils were excavated by hand or hydro-excavation within 4 feet of subsurface lines. Heavy machinery remained outside this buffer zone to avoid any associated risk or disturbance. Photographs from the excavated areas prior to backfill are provided in Appendix D.

Following excavation, confirmation floor and sidewall samples were collected from the entire remediated area and submitted for laboratory analysis to verify efficacy of remediation activities. Per the NMOCD approved confirmation sampling plan, confirmation samples were collected such that each discrete sample (sidewall and floor) was representative of no more than 200 square feet of excavated area. A total of seven (7) confirmation floor sample locations and eight (8) confirmation sidewall sample locations were collected for laboratory analysis during remedial activities. Confirmation sidewall sample locations were categorized with the cardinal direction (N, E, S, W) followed by SW-#. Confirmation floor sample locations were labeled with FS-#. Final excavated areas, depths and confirmation sample locations are indicated in Figure 4.

Collected confirmation samples were placed into laboratory-provided sample containers, transferred under chain-of-custody, and analyzed within appropriate holding times by Cardinal. The soil samples were analyzed for TPH (GRO+DRO+MRO) by EPA Method 8015M, BTEX via EPA Method 8021B, and chlorides by SM4500Cl-B. The analytical results were directly compared to the reclamation limits and established Site RRALs to demonstrate compliance.

The results of the October 2024 confirmation sampling events are summarized in Table 3. All final confirmation soil samples (floor and sidewall) were below the applicable cleanup levels for all analyzed constituents. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E. All excavated material was transported offsite for proper disposal. Approximately 305 cubic yards of

material (soil and hydrovac slurry) were transported to the Northern Delaware Basin Landfill facility in Jal, NM.

Once acceptable confirmation sample results were received, the excavation was backfilled with clean material to pre-release grade. In accordance with 19.15.29.12 NMAC, the reclaimed area contained a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method SM4500Cl-B. The soil cover included a top layer consisting of one foot of suitable material to establish vegetation at the site. The backfilled areas in the pasture were seeded following backfilling, to aid in revegetation. Based on the soils of the site, the BLM Seed Mix #2 was used for seeding and was planted in the amount specified in the pounds pure live seed (PLS) per acre. One (1) representative 5-point composite sample was collected from the backfill material used for the reclamation of the project site. Soil backfill composite sampling results are summarized in Table 4. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E.

## REMEDIATION CLOSURE AND REGULATORY REJECTION

Tetra Tech, on behalf of ConocoPhillips, prepared a Remediation and Reclamation Closure Report dated November 22, 2024, and submitted it to the NMOCD for approval. A separate closure report was submitted to the NMOCD for the second release (Incident ID NAPP2409948979).

The Remediation and Reclamation Closure Report was rejected via email by Shelly Wells of the NMOCD on December 10, 2025, with the following conditions:

- *"Remediation closure and reclamation denied for the following:*
  - *1)According to the remediation plan approved on 9/17/24 samples were to be analyzed for all constituents but on pg. 4 of report you state: "The soils samples were not analyzed for BTEX, in accordance with the 2024 Remediation Work Plan conditions of approval." Remove conflicting information.*
  - *2)To the question "What is the estimated surface area (in square feet) that will be remediated" you answered 2383 which means at least 12 floor samples should have been collected from the excavation. In remediation plan approval on 9/17/24, you had requested to sample every 400 square feet and had proposed to collect 10 floor samples and 10 sidewall samples. The conditions of approval stated you were to sample every 200 square feet which should have resulted in more samples being collected than the requested 20.*
  - *3)In approved remediation plan, The Proposed Remediation Map, Figure 5 showed the excavation extending south past the point of release but Figure 5 in submitted closure report shows the excavation did not extend through this area. Confirmation samples will need to be collected around points of release to ensure all contaminants are removed and entire release area meets reclamation standards.*
- *Resubmit remediation closure report to the OCD by 3/10/25.*

Comment #1 references a clerical error in the rejected closure report, as all collected confirmation samples from the previous remedial activities were indeed analyzed for TPH, BTEX and chloride. Comments #2 and #3 have been addressed by the additional remedial activities performed at the site. A 90-day extension was requested by Tetra Tech on March 4, 2025, and approved by the NMOCD. Copies of the regulatory correspondence are included in Appendix C.

## 2025 REMEDIATION ACTIVITIES

Based on Comment #3 in the OCD rejection, the initial site photographs of the release were reviewed and evaluated. It appears that the previous confusion at the site stemmed from the relocation of the water transfer line post-release. Additionally, the associated figures also did not accurately depict the orientation of this line or the power poles in the vicinity of the release. Based on figure revisions and the review of the initial photographs, Tetra Tech personnel remobilized to the site to evaluate conditions on the east side of the new location of the water transfer line. Tetra Tech personnel collected several surface and subsurface samples from this area to field screen for salinity using an ExStik. This work was completed to determine a

more accurate footprint of the release on the east side of the water transfer line. From the field screening results, a clear depiction of the additional area required for remediation was discerned.

Based on these field screening results and the NMOCD rejection, Tetra Tech personnel were onsite from May 20 to May 23, 2025 to conduct additional excavation, disposal, and confirmation sampling in these areas. Prior to confirmation sampling, on May 15, 2025, the NMOCD district office was notified via the OCD Portal in accordance with Subsection D of 19.15.29.12 NMAC. Regulatory correspondence is included in Appendix C.

Impacted soils were excavated as indicated in Figure 5. The areas identified east and southeast of the release point were excavated to a maximum depth of 4 feet below surrounding grade. Due to safety concerns associated with working around pressurized lines, impacted soils were excavated by hand within 2 feet of the surface line within the release footprint/previous excavation extent. Heavy machinery remained outside this buffer zone to avoid any associated risk or disturbance. A 10-foot diameter buffer was established around the electrical pole, and heavy machinery remained outside this buffer zone. This area was excavated by hand to the maximum extent possible to limit hazardous risk associated with electrical lines and to safeguard the structural integrity of the pole itself. Photographs from the excavated areas prior to backfill are provided in Appendix D.

Following excavation, confirmation floor and sidewall samples were collected from the excavated area and submitted for laboratory analysis to verify efficacy of remediation activities. Per the NMOCD conditions of approval, confirmation samples were collected such that each sample (sidewall and floor) was representative of no more than 200 square feet of excavated area. The square footage of the additional area remediated was approximately 399 sf. A total of three (3) confirmation floor sample locations and four (4) confirmation sidewall sample locations were used for laboratory analysis during remedial activities. Confirmation sidewall sample locations were categorized with the cardinal direction (N, E, S, W) followed by SW-#. Confirmation floor sample locations were labeled with FS-#. Final excavated areas, depths and confirmation sample locations are indicated in Figure 5.

Collected confirmation samples were placed into laboratory-provided sample containers, transferred under chain-of-custody, and analyzed within appropriate holding times by Cardinal. The soil samples were analyzed for TPH (GRO+DRO+MRO) by EPA Method 8015M, BTEX by EPA Method 8021B, and chloride by SM4500Cl-B. The analytical results were directly compared to the reclamation limits and established Site RRALs to demonstrate compliance.

The results of the May 2025 confirmation sampling events are summarized in Table 5. All final confirmation soil samples (floor and sidewall) were below the applicable cleanup levels for all analyzed constituents. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E. All excavated material was transported offsite for proper disposal. Approximately 104 cubic yards of material were transported to the Northern Delaware Basin Landfill facility in Jal, NM.

## RECLAMATION ACTIVITIES

Based on 19.15.29.13 NMAC, areas disturbed by the remediation have been reclaimed. Collected confirmation samples were placed into laboratory-provided sample containers, transferred under chain-of-custody, and analyzed within appropriate holding times by Cardinal. The soil samples were analyzed for TPH (GRO+DRO+MRO) by EPA Method 8015M, BTEX by EPA Method 8021B, and chlorides by SM4500Cl-B. The analytical results were directly compared to the reclamation requirements and established Site RRALs to demonstrate compliance. All final confirmation soil samples (floor and sidewall) were below the reclamation limits for chloride, TPH, and BTEX. Excavated areas, depths and confirmation sample locations are indicated in Figure 5. The results of the May 2025 confirmation sampling event are summarized in Table 4.

Once acceptable confirmation sample results were received, the excavation was backfilled with clean material to pre-release grade. In accordance with 19.15.29.12 NMAC, the reclaimed area contained a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride

concentrations less than 600 mg/kg as analyzed by SM4500Cl-B. The soil cover included a top layer consisting of one foot of suitable material to establish vegetation at the site. The backfilled areas in the pasture were seeded following backfilling, to aid in revegetation. Based on the soils of the site, the BLM Seed Mix #2 was used for seeding and was planted in the amount specified in the pounds pure live seed (PLS) per acre. One (1) representative 5-point composite sample was collected from the backfill material used for the reclamation of the project site. Soil backfill composite sampling results are summarized in Table 5.

Site inspections will be performed annually to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate. Reclamation activities have been implemented in consultation with the BLM.

## CONCLUSION

ConocoPhillips respectfully requests closure of Incident ID nAPP2413732369 based on the confirmation sampling results and additional remedial activities performed. A closure report will be submitted to the NMOCD for the second release (Incident ID nAPP2413732369). The final C-141 forms are enclosed in Appendix A. If you have any questions concerning the additional remedial actions performed at the Site, please call me at (512) 596-8201.

Sincerely,
**Tetra Tech, Inc.**

Lisbeth Chavira
Project Manager

Christian M. Llull, P.G.
Program Manager

cc:
Mr. Ike Tavarez, RMR – ConocoPhillips
Ms. Crisha Morgan – BLM

## LIST OF ATTACHMENTS

**Figures:**

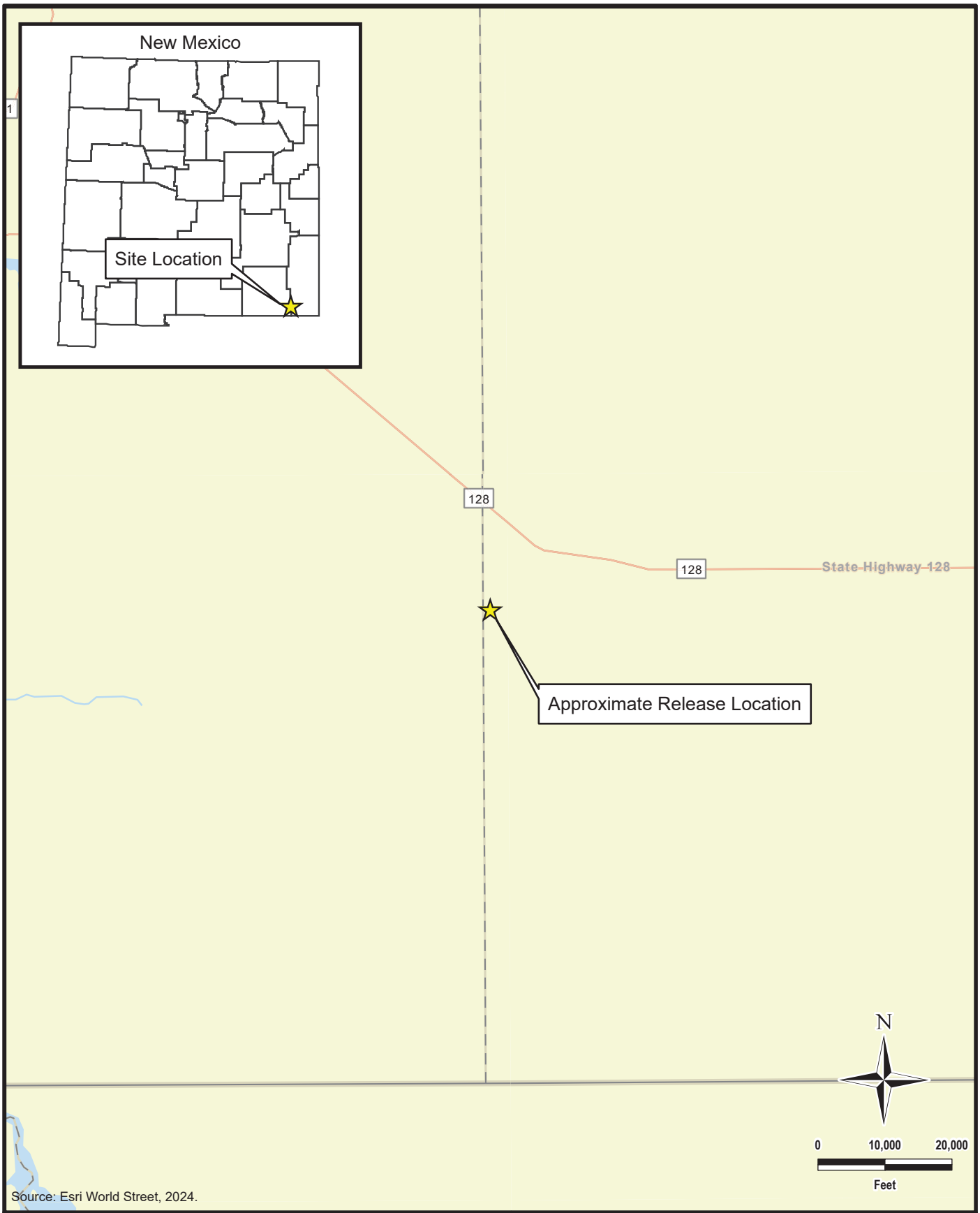


**Tables:**



**Appendices:**

# FIGURES

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

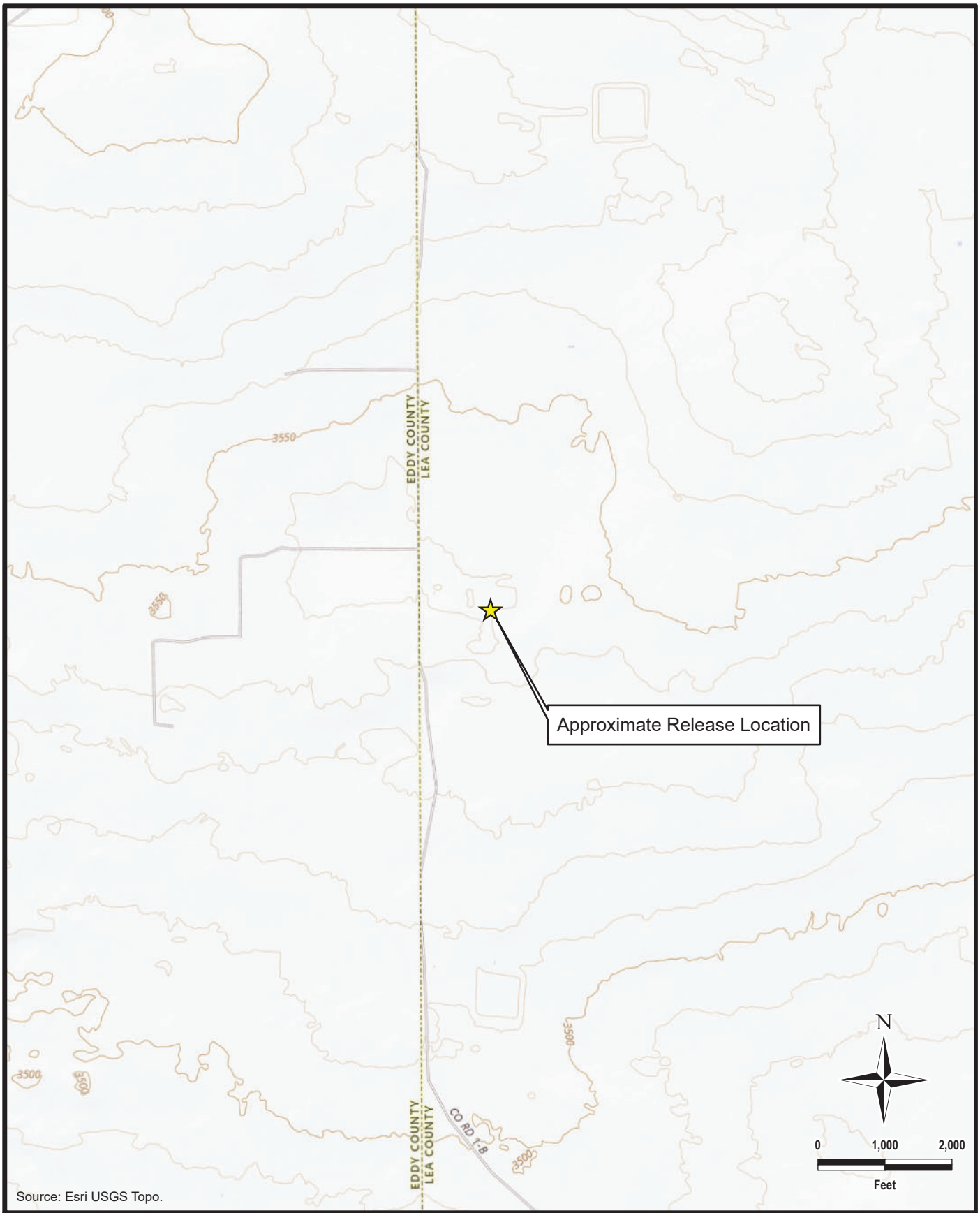
CONOCOPHILLIPS

NAPP2413732369
(32.194511°, -103.719572°)
LEA COUNTY, NEW MEXICO

**WINDWARD FEDERAL #002H FL RELEASE**
**OVERVIEW MAP**

| | |
|---|---|
| PROJECT NO.: | 212C-MD-03441 |
| DATE: | AUGUST 12, 2024 |
| DESIGNED BY: | LMV |

Figure No.
**1**

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

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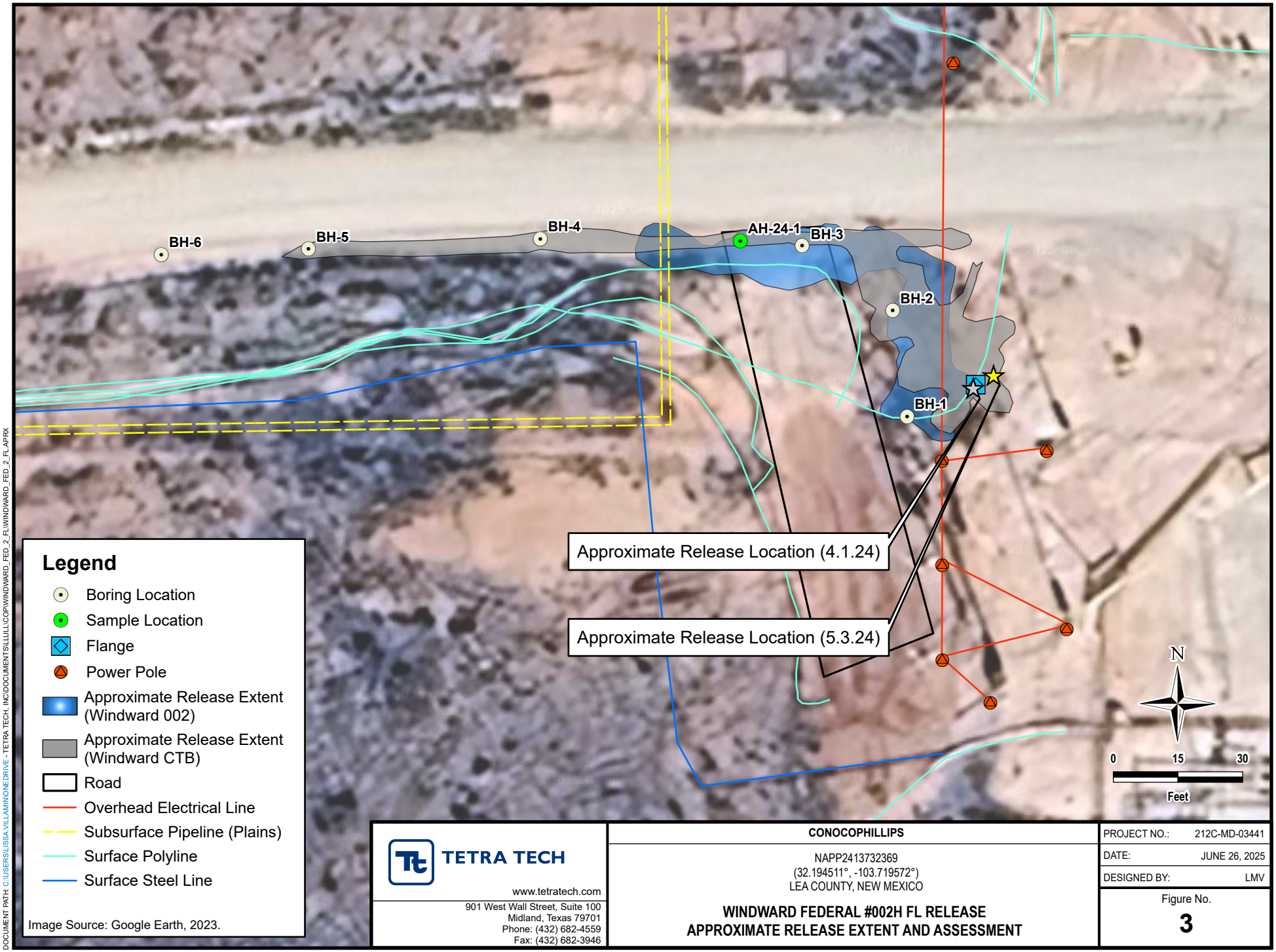
**WINDWARD FEDERAL #002H FL RELEASE**
**TOPOGRAPHIC MAP**

| | |
|---|---|
| PROJECT NO.: | 212C-MD-03441 |
| DATE: | AUGUST 12, 2024 |
| DESIGNED BY: | LMV |

Figure No.
**2**

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

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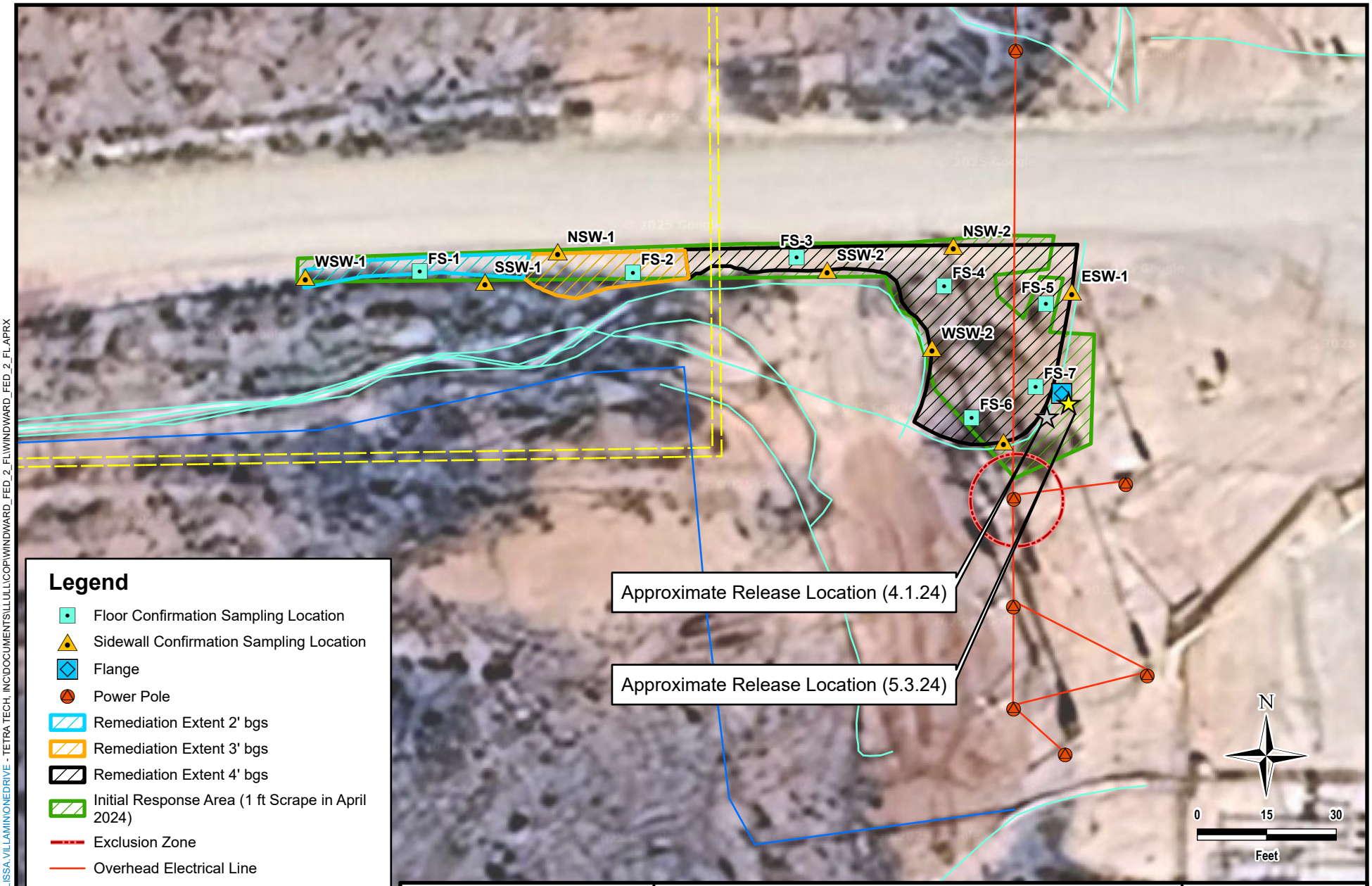
LEA COUNTY, NEW MEXICO

**WINDWARD FEDERAL #002H FL RELEASE**
**APPROXIMATE RELEASE EXTENT AND ASSESSMENT**

| | |
|---|---|
| PROJECT NO.: | 212C-MD-03441 |
| DATE: | JUNE 26, 2025 |
| DESIGNED BY: | LMV |

Figure No.
**3**




## Legend

- Floor Confirmation Sampling Location
- Sidewall Confirmation Sampling Location
- Flange
- Power Pole
- Remediation Extent 2' bgs
- Remediation Extent 3' bgs
- Remediation Extent 4' bgs
- Initial Response Area (1 ft Scrape in April 2024)
- Exclusion Zone
- Overhead Electrical Line
- Subsurface Pipeline (Plains)
- Surface Polyline
- Surface Steel Line

BGS: Below Ground Surface
Image Source: Google Earth, 2023.

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

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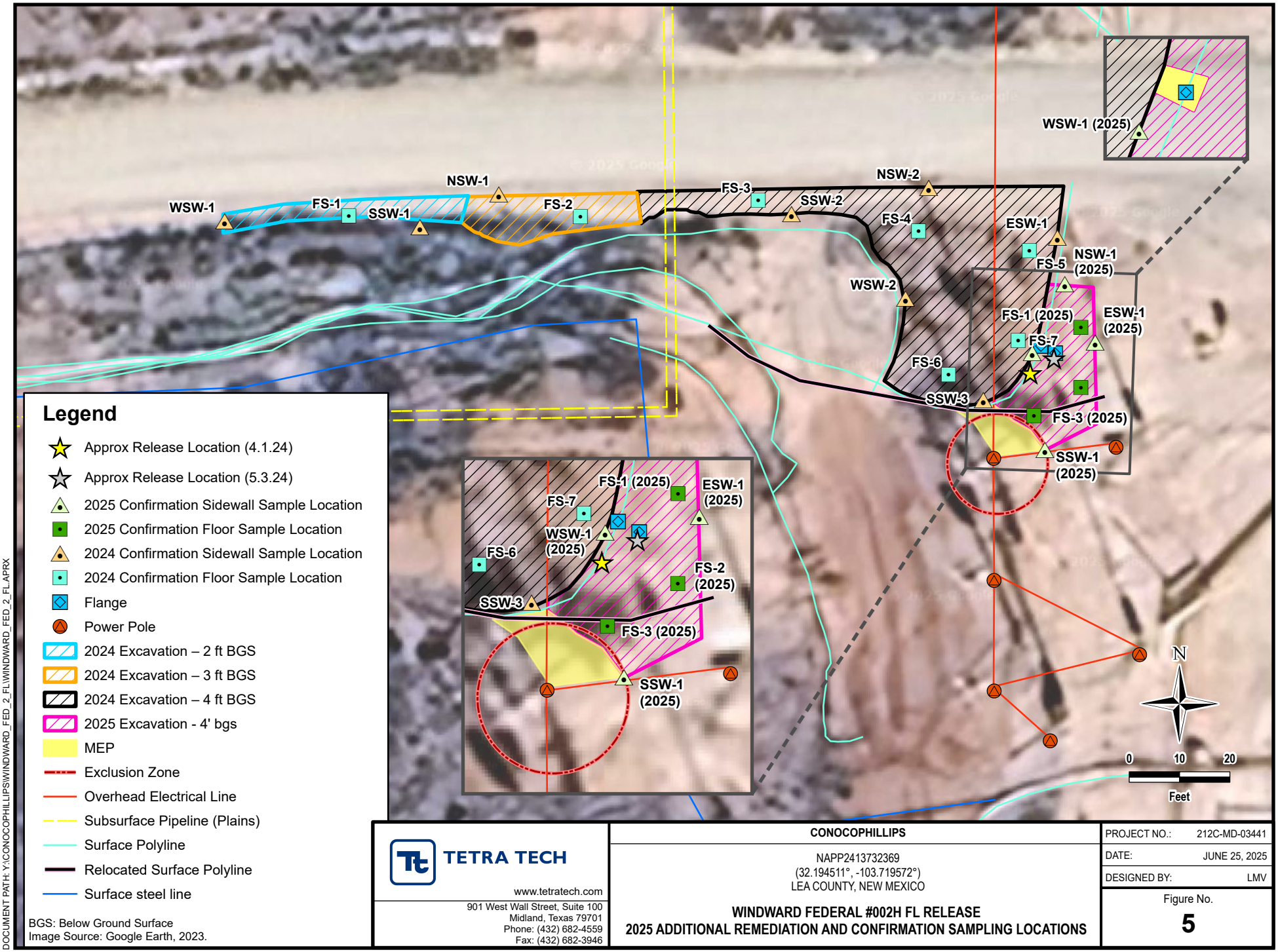
**WINDWARD FEDERAL #002H FL RELEASE**
**REMEDIATION EXTENTS AND CONFIRMATION SAMPLING LOCATIONS**

| | |
|---|---|
| PROJECT NO.: | 212C-MD-03441 |
| DATE: | JUNE 26, 2025 |
| DESIGNED BY: | LMV |

Figure No.
**4**




## Legend

- Approx Release Location (4.1.24)
- Approx Release Location (5.3.24)
- 2025 Confirmation Sidewall Sample Location
- 2025 Confirmation Floor Sample Location
- 2024 Confirmation Sidewall Sample Location
- 2024 Confirmation Floor Sample Location
- Flange
- Power Pole
- 2024 Excavation – 2 ft BGS
- 2024 Excavation – 3 ft BGS
- 2024 Excavation – 4 ft BGS
- 2025 Excavation - 4' bgs
- MEP
- Exclusion Zone
- Overhead Electrical Line
- Subsurface Pipeline (Plains)
- Surface Polyline
- Relocated Surface Polyline
- Surface steel line

BGS: Below Ground Surface
Image Source: Google Earth, 2023.

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

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LEA COUNTY, NEW MEXICO

**WINDWARD FEDERAL #002H FL RELEASE**
**2025 ADDITIONAL REMEDIATION AND CONFIRMATION SAMPLING LOCATIONS**

| | |
|---|---|
| PROJECT NO.: | 212C-MD-03441 |
| DATE: | JUNE 25, 2025 |
| DESIGNED BY: | LMV |

Figure No.
**5**

# TABLES

# TABLE 1
# SUMMARY OF ANALYTICAL RESULTS
# SOIL ASSESSMENT- NAPP2413732369
# CONOCOPHILLIPS
# WINDWARD FEDERAL #002H FL RELEASE
# LEA COUNTY, NM

| Sample ID | Sample Date | Sample Depth | Field Screening Results | | Chloride | | 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) |
| | | ft. bgs | ppm | | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg |
| **Reclamation Closure Criteria for Soils 0-4 ft bgs:** | | | | | *600 mg/kg* | | *10 mg/kg* | | -- | | -- | | -- | | *50 mg/kg* | | -- | | -- | | -- | | *100 mg/kg* |
| **Closure Criteria for Soils >4 ft bgs (GW >100 ft):** | | | | | *20,000 mg/kg* | | *10 mg/kg* | | -- | | -- | | -- | | *50 mg/kg* | | -- | | -- | | -- | | *2,500 mg/kg* |
| **VERTICAL DELINEATION** | | | | | | | | | | | | | | | | | | | | | | | |
| BH-1 | 7/24/2024 | 0-1 | | | ***5,920*** | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | 181 | | 46.8 | | ***227.8*** |
| | | 2-3 | | | ***7,730*** | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | 10.5 | | <10.5 | | 10.5 |
| | | 4-5 | | | 976 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 6-7 | | | 3,520 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | 51.1 | | 19.0 | | 70.1 |
| | | 9-10 | | | 3,760 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | 35.9 | | 12.0 | | 47.9 |
| | | 14-15 | 3,000 | | 2,600 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 20-23 | 273 | | 80.0 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| BH-2 | 7/24/2024 | 0-1 | | | ***12,800*** | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 2-3 | | | ***5,300*** | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 4-5 | | | 3,840 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 6-7 | | | 3,240 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 9-10 | 3,500 | | 6,800 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | 18.0 | | <10.0 | | 18.0 |
| | | 13 | 2,200 | | 2,000 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 18-20 | 300 | | 160 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| AH-24-1 | 7/24/2024 | 0-1 | 10,000 | | ***9,200*** | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | 11.9 | | <10.0 | | 11.9 |
| BH-3 | 7/24/2024 | 0-1 | 3,500 | | ***7,200*** | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 2-3 | - | | ***848*** | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | 43.2 | | <10.0 | | 43.2 |
| | | 4-5 | 800 | | 2,240 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 6-7 | 530 | | 192 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | < 0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 9-10 | 430 | | 688 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| BH-4 | 7/24/2024 | 0-1 | 10,000 | | ***11,800*** | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 1-2 | - | | ***7,360*** | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | 43.2 | | <10.0 | | - |
| | | 2-3 | - | | ***3,680*** | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 3-4 | 68 | | 320 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | < 0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| BH-5 | 7/24/2024 | 0-1 | 2,500 | | ***2,080*** | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 1-2 | - | | ***4,840*** | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | 43.2 | | <10.0 | | - |
| | | 2-3 | - | | 384 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| | | 3-4 | 543 | | 400 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | < 0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| BH-6 | 7/24/2024 | 0-1 | 73 | | 32.0 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |

# TABLE 1
# SUMMARY OF ANALYTICAL RESULTS
# SOIL ASSESSMENT- NAPP2413732369
# CONOCOPHILLIPS
# WINDWARD FEDERAL #002H FL RELEASE
# LEA COUNTY, NM

| Sample ID | Sample Date | Sample Depth | Field Screening Results | | Chloride | | 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) |
| | | ft. bgs | ppm | | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg |
| **HORIZONTAL DELINEATION** | | | | | | | | | | | | | | | | | | | | | | | |
| H-1 | 7/24/2024 | 0-1 | | | 80.0 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| H-2 | 7/24/2024 | 0-1 | | | 16.0 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| H-3 | 7/24/2024 | 0-1 | | | 96.0 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| H-4 | 7/24/2024 | 0-1 | | | 32.0 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| H-5 | 7/24/2024 | 0-1 | | | 16.0 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

1 Method SM4500Cl-B

2 Method 8021B

3 Method 8015M

***Bold and italicized values indicate exceedance of the applicable RRALs and/or Reclamation Requirements.***

Shaded rows indicate intervals proposed for excavation.

QUALIFIERS:

# TABLE 2
## SUMMARY OF ANALYTICAL RESULTS
## SOIL REMEDIATION - NAPP2409948979 AND NAPP2413732369
## CONOCOPHILLIPS
## WINDERWARD WEST CTB AND WINDWARD FEDERAL #002H FL RELEASE
## LEA COUNTY, NM

| Sample ID | Sample Date | Sample Depth | Chloride[1] | | BTEX[2] | | | | | | | | | | TPH[3] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Benzene | | Toluene | | Ethylbenzene | | Total Xylenes | | Total BTEX | | GRO $C_6$ - $C_{10}$ | | DRO > $C_{10}$ - $C_{28}$ | | EXT DRO > $C_{28}$ - $C_{36}$ | | Total TPH (GRO+DRO+EXT DRO) |
| | | ft. bgs | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg |
| **Reclamation Closure Criteria for Soils 0-4 ft bgs:** | | | *600 mg/kg* | | *10 mg/kg* | | -- | | -- | | -- | | *50 mg/kg* | | -- | | -- | | -- | | *100 mg/kg* |
| **Site RRALs for Subsurface (>4 ft bgs) Soils (GW >100 ft):** | | | *20,000 mg/kg* | | *10 mg/kg* | | -- | | -- | | -- | | *50 mg/kg* | | -- | | -- | | -- | | *2,500 mg/kg* |
| FS-1 | 10/17/2024 | 2 | 160 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| FS-2 | 10/17/2024 | 3 | 128 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| FS-3 | 10/17/2024 | 4 | 288 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| FS-4 | 10/17/2024 | 4 | 176 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| FS-6 | 10/17/2024 | 4 | 864 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| FS-7 | 10/17/2024 | 4 | 4,040 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| NSW-1 | 10/17/2024 | - | 48 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| SSW-1 | 10/17/2024 | - | 32 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| ESW-1 | 10/17/2024 | - | 128 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| WSW-1 | 10/17/2024 | - | 96 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

1 Method SM4500Cl-B

2 Method 8021B

3 Method 8015M

***Bold and italicized values indicate exceedance of proposed Remediation RRALs and Reclamation Requirements.***

Gold highlight represents soil horizons that were removed during deepening of excavation floors.

Green highlight represents soil intervals that were removed during horizontal expansion of excavation sidewalls.

* These iterative samples are located to encompass the original sample location that triggered removal, with further excavation in each area indicated in ().

QUALIFIERS:

# TABLE 3
# SUMMARY OF ANALYTICAL RESULTS
# TWIN WELLS BUCKTHORN PIT - SOIL BACKFILL
# CONOCOPHILLIPS
# 32.152167°, -103.773445°
# LEA COUNTY, NM

| Sample ID | Sample Date | 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) |
| | | 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 |
| BACKFILL - COMPOSITE | 3/26/2024 | 16 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

1 Method SM4500Cl-B

2 Method 8021B

3 Method 8015M

# TABLE 4
# SUMMARY OF ANALYTICAL RESULTS
# 2025 SOIL REMEDIATION - NAPP2409948979 AND NAPP2413732369
# CONOCOPHILLIPS
# WINDERWARD WEST CTB RELEASE AND WINDWARD FEDERAL #002H FL RELEASE
# LEA COUNTY, NM

| Sample ID | Sample Date | Sample Depth | Chloride[1] | | BTEX[2] | | | | | | | | | | TPH[3] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Benzene | | Toluene | | Ethylbenzene | | Total Xylenes | | Total BTEX | | GRO | | DRO | | EXT DRO | | Total TPH |
| | | | | | | | | | | | | | | | $C_6$ - $C_{10}$ | | > $C_{10}$ - $C_{28}$ | | > $C_{28}$ - $C_{36}$ | | (GRO+DRO+EXT DRO) |
| | | ft. bgs | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg |
| **Reclamation Closure Criteria for Soils 0-4 ft bgs:** | | | *600 mg/kg* | | *10 mg/kg* | | -- | | -- | | -- | | *50 mg/kg* | | -- | | -- | | -- | | *100 mg/kg* |
| **Site RRALs for Subsurface (>4 ft bgs) Soils (GW >100 ft):** | | | *20,000 mg/kg* | | *10 mg/kg* | | -- | | -- | | -- | | *50 mg/kg* | | -- | | -- | | -- | | *2,500 mg/kg* |
| FS-1 | 5/21/2025 | 4 | 208 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| FS-2 | 5/21/2025 | 4 | 3,120 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| FS-3 | 5/21/2025 | 4 | 1,660 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| NSW-1 | 5/21/2025 | - | 48.0 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| SSW-1 | 5/21/2025 | - | 256 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| ESW-1 | 5/21/2025 | - | 112 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |
| WSW-1 | 5/21/2025 | - | 32.0 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - |

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

1 Method SM4500Cl-B

2 Method 8021B

3 Method 8015M

# TABLE 5
# SUMMARY OF ANALYTICAL RESULTS
# TWIN WELLS RANCH PIT - SOIL BACKFILL
# CONOCOPHILLIPS
# 32.2095278°, -103.7500000°
# LEA COUNTY, NM

| Sample ID | Sample Date | 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) | |
| | | 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 | |
| BACKFILL - COMPOSITE | 3/26/2024 | 32.0 | | <0.050 | | <0.050 | | <0.050 | | <0.150 | | <0.300 | | <10.0 | | <10.0 | | <10.0 | | - | |

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

1 Method SM4500Cl-B

2 Method 8021B

3 Method 8015M

# APPENDIX A
# C-141 Forms

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

| | |
|---|---|
| Incident ID | nAPP2413732369 |
| District RP | |
| Facility ID | fAPP2132638253 |
| Application ID | |

# Release Notification

## Responsible Party

| | | | |
|---|---|---|---|
| Responsible Party | COG Production, LLC | OGRID | 229137 |
| Contact Name | Jacob Laird | Contact Telephone | (575) 703-5482 |
| Contact email | Jacob.Laird@ConocoPhillips.com | Incident # *(assigned by OCD)* | nAPP2413732369 |
| Contact mailing address | 600 West Illinois Avenue, Midland, Texas 79701 | | |

## Location of Release Source

Latitude 32.1945 Longitude -103.7195
*(NAD 83 in decimal degrees to 5 decimal places)*

| | | | |
|---|---|---|---|
| Site Name | Windward Federal 002H | Site Type | Tank Battery |
| Date Release Discovered | May 3, 2024 | API# *(if applicable)* | |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| D | 30 | 24S | 32E | 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) | Volume Recovered (bbls) |
| ☒ Produced Water | Volume Released (bbls) 4.1217 | Volume Recovered (bbls) 0 |
| | 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

The release was caused by a hole in a water transfer line.
This release was off pad.
Evaluation will be made of the site to determine if we may commence remediation immediately or delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | nAPP2413732369 |
| District RP | |
| Facility ID | fAPP2132638253 |
| Application ID | |

| | |
|---|---|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br><br>☐ 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: Brittany N. Esparza Title: Environmental Technician

Signature: Brittany Esparza Date: 5/16/2024

email: Brittany.Esparza@ConocoPhillips.com Telephone: (432) 221-0398

**OCD Only**

Received by: _____ Date: _____

| Spill Calculation - Subsurface Spill - Rectangle | | | | | | | | | Remediation Recommendation | |
|---|---|---|---|---|---|---|---|---|---|---|
| Convert Irregular shape into a series of rectangles | Length (ft.) | Width (ft.) | Average Depth (in.) | On/Off Pad (dropdown) | Soil Spilled-Fluid Saturation (%.) | Estimated volume of each area (bbl.) | Total Estimated Volume of Spill (bbl.) | | Total Estimated Contaminated Soil, uncompacted, 25% ($yd^3$.) | Current Rule of Thumb - RMR Handover Volume, ($yd^3$.) |
| Rectangle A | 25.0 | 15.0 | 3.0 | Off-Pad | 15.02% | 16.69 | 2.51 | | 4.34 | |
| Rectangle B | 45.0 | 5.0 | 3.0 | Off-Pad | 15.02% | 10.01 | 1.50 | | 2.60 | |
| Rectangle C | 10.0 | 5.0 | 1.0 | Off-Pad | 15.02% | 0.74 | 0.11 | | 0.19 | |
| Rectangle D | | | | | | 0.00 | | | 0.00 | |
| Rectangle E | | | | | | 0.00 | | | 0.00 | |
| Rectangle F | | | | | | 0.00 | | | 0.00 | 750 |
| Rectangle G | | | | | | 0.00 | | | 0.00 | |
| Rectangle H | | | | | | 0.00 | | | 0.00 | |
| Rectangle I | | | | | | 0.00 | | | 0.00 | |
| Rectangle J | | | | | | 0.00 | | | 0.00 | |
| | | | | | Total Subsurface Volume Released: | | 4.1217 | | 7.14 | BU |

**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

QUESTIONS

Action 345017

## QUESTIONS

| | |
|---|---|
| Operator:<br>COG PRODUCTION, LLC<br>600 W. Illinois Ave<br>Midland, TX 79701 | OGRID:<br>217955 |
| | Action Number:<br>345017 |
| | Action Type:<br>[C-141] Initial C-141 (C-141-v-Initial) |

**QUESTIONS**

| **Prerequisites** | |
|---|---|
| Incident ID (n#) | **nAPP2413732369** |
| Incident Name | **NAPP2413732369 WINDWARD FEDERAL 002H @ 0** |
| Incident Type | **Produced Water Release** |
| Incident Status | **Initial C-141 Received** |
| Incident Facility | **[fAPP2132638253] WINDWARD FED 2H - BATTERY** |

| **Location of Release Source** | |
|---|---|
| *Please answer all the questions in this group.* | |
| Site Name | Windward Federal 002H |
| Date Release Discovered | 05/03/2024 |
| Surface Owner | Federal |

| **Incident Details** | |
|---|---|
| *Please answer all the questions in this group.* | |
| Incident Type | Produced Water Release |
| Did this release result in a fire or is the result of a fire | No |
| Did this release result in any injuries | No |
| Has this release reached or does it have a reasonable probability of reaching a watercourse | No |
| Has this release endangered or does it have a reasonable probability of endangering public health | No |
| Has this release substantially damaged or will it substantially damage property or the environment | No |
| Is this release of a volume that is or may with reasonable probability be detrimental to fresh water | No |

| **Nature and Volume of Release** | |
|---|---|
| *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.* | |
| Crude Oil Released (bbls) Details | *Not answered.* |
| Produced Water Released (bbls) Details | Cause: Corrosion \| Flow Line - Injection \| Produced Water \| Released: 4 BBL \| Recovered: 0 BBL \| Lost: 4 BBL. |
| Is the concentration of chloride in the produced water >10,000 mg/l | Yes |
| Condensate Released (bbls) Details | *Not answered.* |
| Natural Gas Vented (Mcf) Details | *Not answered.* |
| Natural Gas Flared (Mcf) Details | *Not answered.* |
| Other Released Details | *Not answered.* |
| Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts) | *Not answered.* |

**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



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>COG PRODUCTION, LLC<br>600 W. Illinois Ave<br>Midland, TX 79701 | OGRID:<br>217955 |
| | Action Number:<br>345017 |
| | Action Type:<br>[C-141] Initial C-141 (C-141-v-Initial) |

**QUESTIONS**

| **Nature and Volume of Release (continued)** | |
|---|---|
| Is this a gas only submission (i.e. only significant Mcf values reported) | **More info needed to determine if this will be treated as a "gas only" report.** |
| Was this a major release as defined by Subsection A of 19.15.29.7 NMAC | *Unavailable.* |
| Reasons why this would be considered a submission for a notification of a major release | *Unavailable.* |
| *With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.* | |

| **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 | True |
| The impacted area has been secured to protect human health and the environment | True |
| Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices | True |
| All free liquids and recoverable materials have been removed and managed appropriately | True |
| If all the actions described above have not been undertaken, explain why | *Not answered.* |
| *Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.* | |

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.

| | |
|---|---|
| I hereby agree and sign off to the above statement | Name: Brittany Esparza<br>Title: Environmental Technician<br>Email: brittany.Esparza@ConocoPhillips.com<br>Date: 05/16/2024 |

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



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>COG PRODUCTION, LLC<br>600 W. Illinois Ave<br>Midland, TX 79701 | OGRID:<br>217955 |
| | Action Number:<br>345017 |
| | Action Type:<br>[C-141] Initial C-141 (C-141-v-Initial) |

**QUESTIONS**

| **Site Characterization** | |
|---|---|
| *Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs) | *Not answered.* |
| What method was used to determine the depth to ground water | *Not answered.* |
| Did this release impact groundwater or surface water | *Not answered.* |
| **What is the minimum distance, between the closest lateral extents of the release and the following surface areas:** | |
| A continuously flowing watercourse or any other significant watercourse | *Not answered.* |
| Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) | *Not answered.* |
| An occupied permanent residence, school, hospital, institution, or church | *Not answered.* |
| A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes | *Not answered.* |
| Any other fresh water well or spring | *Not answered.* |
| Incorporated municipal boundaries or a defined municipal fresh water well field | *Not answered.* |
| A wetland | *Not answered.* |
| A subsurface mine | *Not answered.* |
| An (non-karst) unstable area | *Not answered.* |
| Categorize the risk of this well / site being in a karst geology | *Not answered.* |
| A 100-year floodplain | *Not answered.* |
| Did the release impact areas not on an exploration, development, production, or storage site | *Not answered.* |

| **Remediation Plan** | |
|---|---|
| *Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | |
| Requesting a remediation plan approval with this submission | No |
| *The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.* | |

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

CONDITIONS

Action 345017

## CONDITIONS

| | |
|---|---|
| Operator:<br>COG PRODUCTION, LLC<br>600 W. Illinois Ave<br>Midland, TX 79701 | OGRID:<br>217955 |
| | Action Number:<br>345017 |
| | Action Type:<br>[C-141] Initial C-141 (C-141-v-Initial) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| nvelez | None | 5/16/2024 |

| | |
|---|---|
| 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: _____

| | |
|---|---|
| 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: _____

| | |
|---|---|
| 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: _____

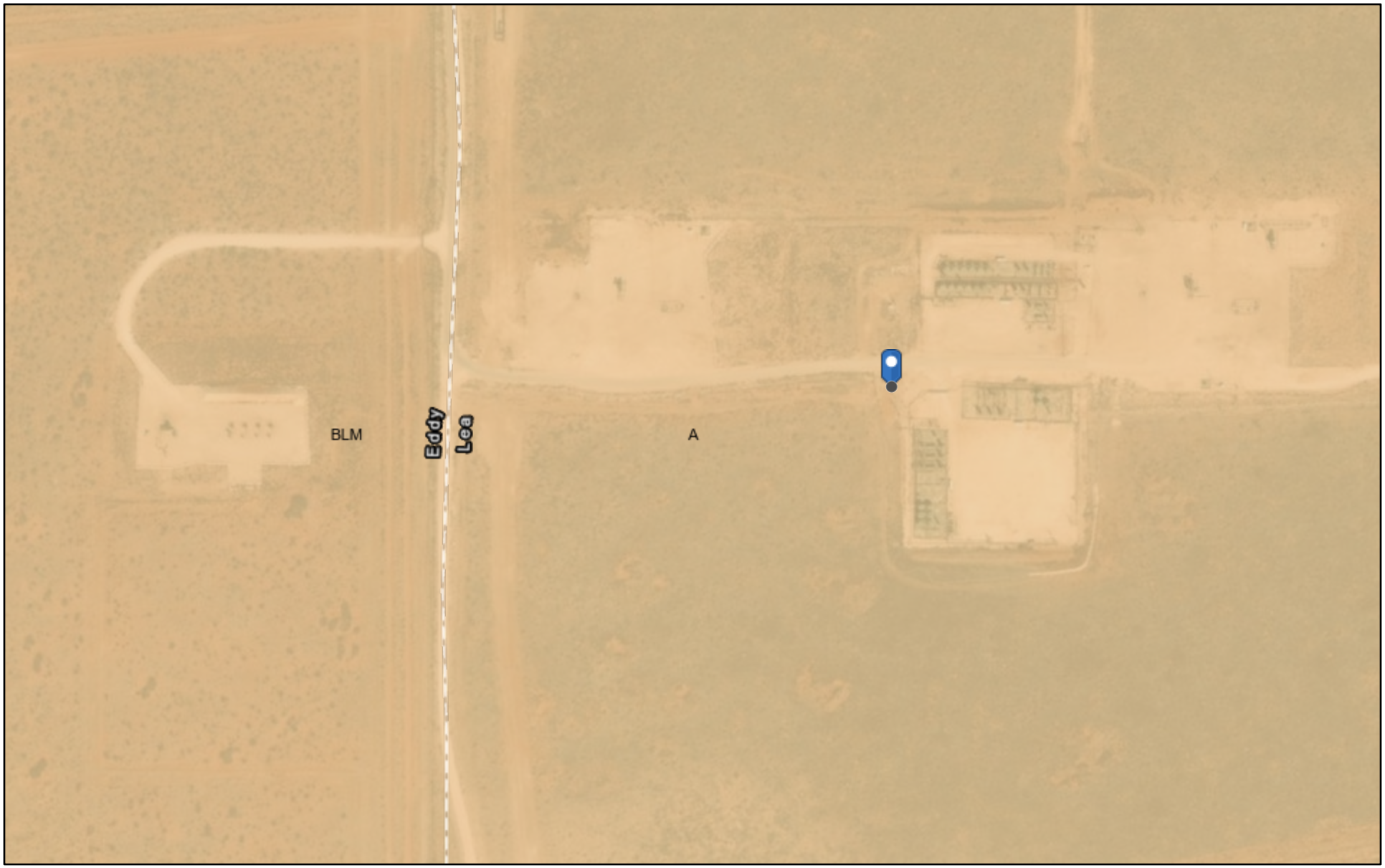
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

# APPENDIX B
# Site Characterization Data

# OCD Land ownership




7/16/2024, 9:58:44 AM

1:4,514

0 0.03 0.07 0.13 mi

0 0.05 0.1 0.2 km

U.S. BLM, Esri, HERE, Garmin, iPC, Maxar

Mineral Ownership

A-All minerals are owned by U.S.

Land Ownership

BLM

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

# 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 04665 | CUB | LE | 1 | 1 | 2 | 30 | 24S | 32E | 621350 | 3562798 | 663 | 120 | | |
| C 04654 POD1 | CUB | ED | 3 | 3 | 4 | 25 | 24S | 31E | 619764 | 3561226 | 1753 | 55 | | |
| C 04636 POD1 | CUB | ED | 3 | 4 | 3 | 25 | 24S | 31E | 619200 | 3561279 | 2070 | | | |
| C 04643 POD1 | C | ED | 4 | 2 | 2 | 05 | 23S | 27E | 619200 | 3561279 | 2070 | 305 | 135 | 170 |

Average Depth to Water: **135 feet**

Minimum Depth: **135 feet**

Maximum Depth: **135 feet**

**Record Count:** 4

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

**Easting (X):** 620691.62 **Northing (Y):** 3562714.68 **Radius:** 3000

# National Flood Hazard Layer FIRMette

FEMA

103°43'29"W 32°11'55"N


0 250 500 1,000 1,500 2,000 Feet

1:6,000

103°42'52"W 32°11'25"N

Basemap Imagery Source: USGS National Map 2023

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

**SPECIAL FLOOD HAZARD AREAS**
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

**OTHER AREAS**
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

**GENERAL STRUCTURES**
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

**OTHER FEATURES**
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

**MAP PANELS**
- Digital Data Available
- No Digital Data Available
- Unmapped

N

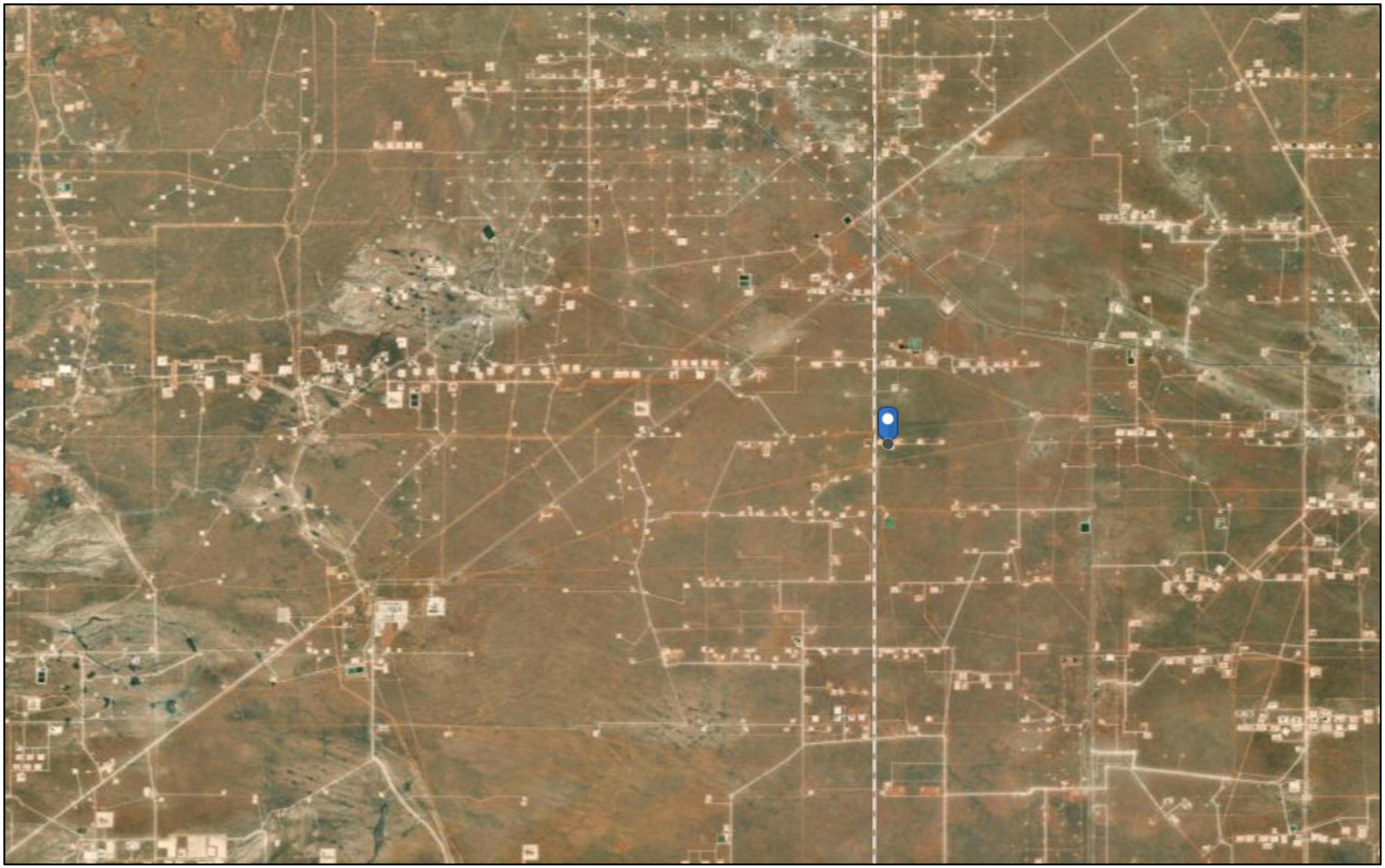
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/16/2024 at 11:02 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

# OCD Water Bodys



7/16/2024, 10:00:32 AM

1:144,448

0 1 2 4 mi

0 1.5 3 6 km

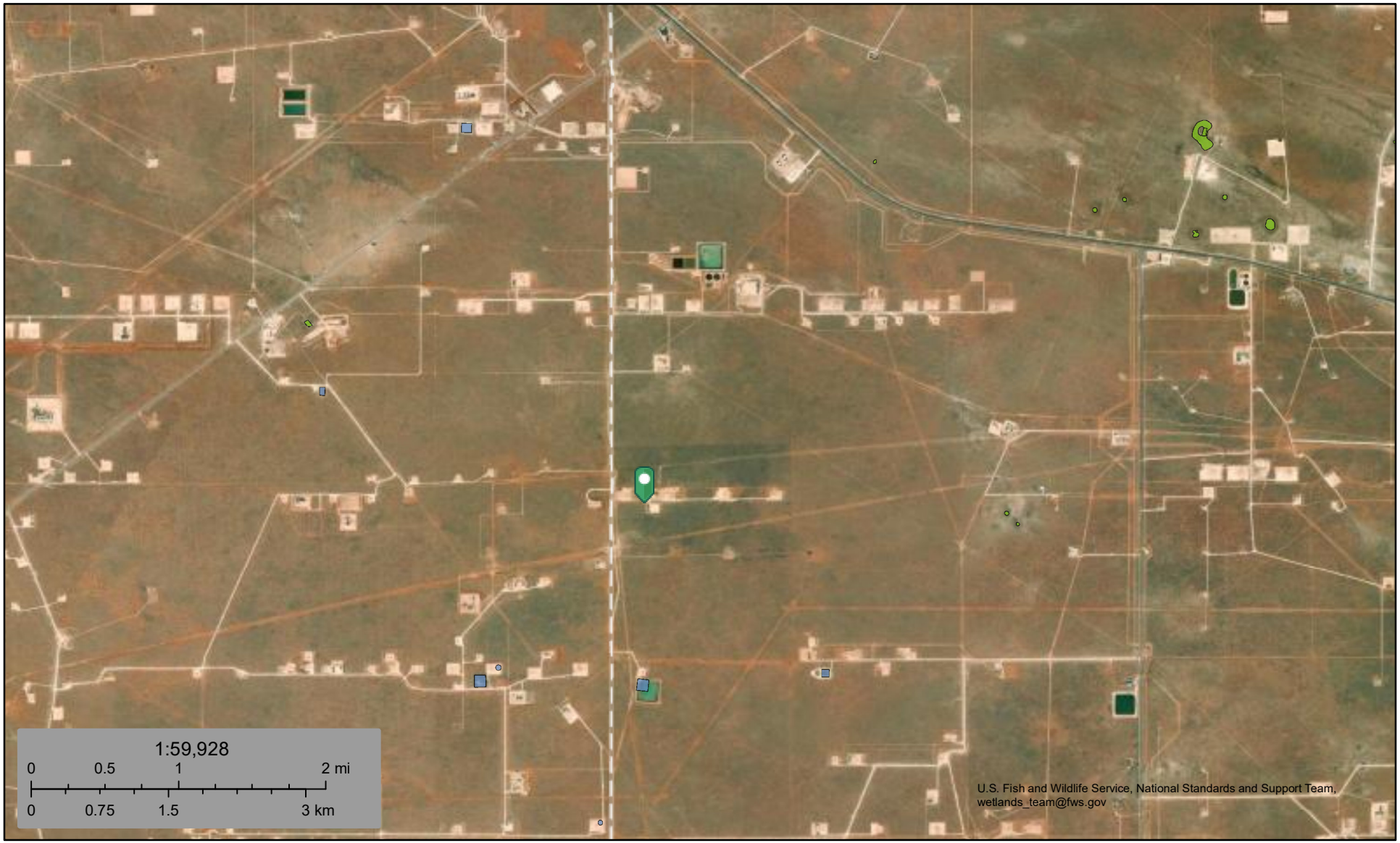
Esri, HERE, Garmin, Earthstar Geographics

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

U.S. Fish and Wildlife Service
National Wetlands Inventory

# National Wetlands Inventory




July 16, 2024

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

# OCD Karst Areas

7/16/2024, 10:03:30 AM

Karst Occurrence Potential

Low

1:18,056

0 0.13 0.25 0.5 mi

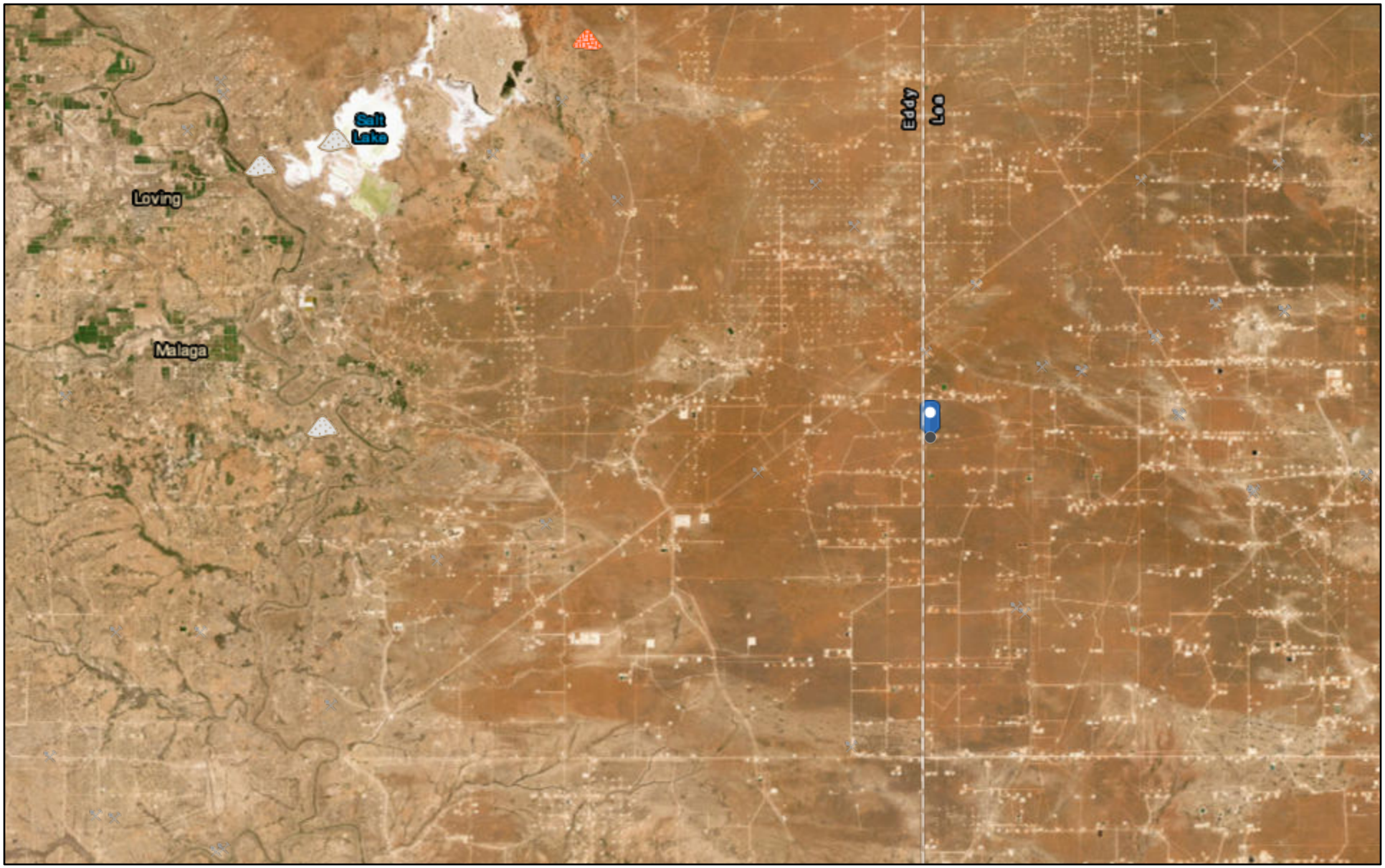
0 0.2 0.4 0.8 km

BLM, OCD, New Mexico Tech, Esri, HERE, Garmin, iPC, 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

# EMNRD Active Mines




7/16/2024, 10:51:13 AM

1:288,895

0 2 4 8 mi

0 3.25 6.5 13 km

Esri, HERE, Garmin, Earthstar Geographics

Registered Mines

Aggregate, Stone etc.

Aggregate, Stone etc.

Aggregate, Stone etc.

Aggregate, Stone etc.

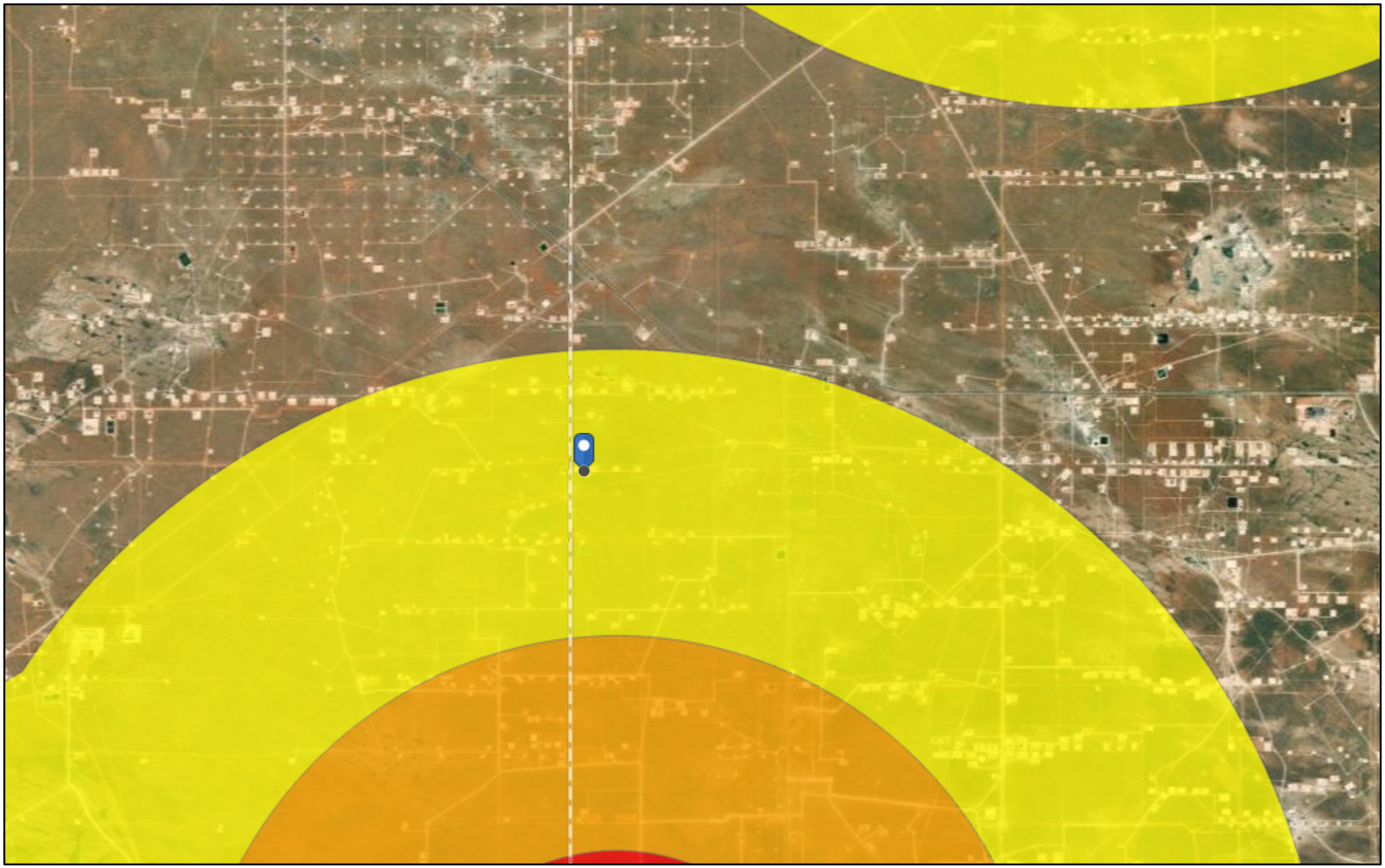
Potash

Salt

EMNRD MMD GIS Coordinator

NM Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)

# OCD Induced Seismicity Area



7/16/2024, 10:08:42 AM

Seismic Response 3.0 to 3.4

3 mi.

6 mi.

10 mi.

1:144,448

0 1 2 4 mi

0 1.5 3 6 km

Oil Conservation Division (OCD), Energy, Minerals and Natural Resources Department (EMNRD), Esri, HERE, Garmin, Earthstar Geographics

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 C
# Regulatory Correspondence

**From:** OCDOnline@state.nm.us
**To:** Llull, Christian
**Subject:** The Oil Conservation Division (OCD) has approved the application, Application ID: 383265
**Date:** Tuesday, September 17, 2024 5:12:39 PM



To whom it may concern (c/o Christian LLuLL for COG PRODUCTION, LLC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2413732369, with the following conditions:

- **Remediation plan approved with conditions. Confirmation samples are to be collected at a frequency of every 200 square feet from the base and walls of the excavation. Submit remediation closure report to the OCD by 12/16/2024.**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Shelly Wells
Environmental Specialist-A
505-469-7520
Shelly.Wells@emnrd.nm.gov

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

**From:** Llull, Christian
**To:** Abbott, Sam
**Subject:** FW: [EXTERNAL] Fwd: (Work Plans) Windward CTB (NAPP2409948979, 4-1-2024 and NAPP2413732369, 5/3/2024)
**Date:** Friday, October 11, 2024 9:34:47 AM
**Attachments:** image001.png
image002.png
image003.png
image004.png
image005.png
Outlook-2sqcd5sr.png
Outlook-ziailmfa.png

BLM approval for the Windward CTB remediation

Christian

**From:** Morgan, Crisha A <camorgan@blm.gov>
**Sent:** Friday, October 11, 2024 9:30 AM
**To:** Llull, Christian <Christian.Llull@tetratech.com>
**Subject:** Re: [EXTERNAL] Fwd: (Work Plans) Windward CTB (NAPP2409948979, 4-1-2024 and NAPP2413732369, 5/3/2024)



The remediation report for both Windward CTB releases has been approved from the BLM as of 10/11/2024. More extensive work may be required during future major well pad construction/alteration or final plugging and abandonment.

The **BLM acceptance/approval does not** relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not re-vegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws/regulations.

If you have any questions or concerns, please let me know. Have a great day!

**Crisha A. Morgan** |Certified - Environmental Protection Specialist | Program Officer|COR| Spills Coordinator| Orphaned & Idled Well POC Lead
Bureau of Land Management | Carlsbad Field Office
620 E. Greene Street Carlsbad, NM 88220
Cell 575-200-8648 | Office 575-234-5987 |camorgan@blm.gov



**From:** Llull, Christian <Christian.Llull@tetratech.com>

**Sent:** Thursday, October 10, 2024 1:00 PM
**To:** Morgan, Crisha A <camorgan@blm.gov>
**Subject:** [EXTERNAL] Fwd: (Work Plans) Windward CTB (NAPP2409948979, 4-1-2024 and NAPP2413732369, 5/3/2024)



Bumping

Christian

Get Outlook for iOS

---

**From:** Abbott, Sam <Sam.Abbott@tetratech.com>
**Sent:** Wednesday, September 25, 2024 5:47:10 PM
**To:** camorgan@blm.gov <camorgan@blm.gov>
**Cc:** Llull, Christian <Christian.Llull@tetratech.com>
**Subject:** RE: (Work Plans) Windward CTB (NAPP2409948979, 4-1-2024 and NAPP2413732369, 5/3/2024)

Crisha,

Attached is the Remediation Work Plan for the second incident. The files were too large for a single email.

Thank you,
Sam

**Samantha Abbott, PG** | Project Manager
Direct Mobile **+1 (512) 739-7874** | Business **+1 (512) 338-1667** | Sam.Abbott@tetratech.com

**Tetra Tech, Inc.** | *Leading with Science*® | OGA
8911 N Capital of Texas Hwy #2310 | Austin, TX 78759 | tetratech.com



---

**From:** Abbott, Sam
**Sent:** Wednesday, September 25, 2024 5:45 PM
**To:** camorgan@blm.gov
**Cc:** Llull, Christian <Christian.Llull@tetratech.com>
**Subject:** (Work Plans) Windward CTB (NAPP2409948979, 4-1-2024 and NAPP2413732369, 5/3/2024)

Crisha:

Attached for your review are the Remediation Work Plans for the Windward CTB Combined Release Site.
Two coincident release footprints are addressed with a single proposed remediation action, in separate work plans (one per incident).

- *Theses WPs have been approved by NMOCD.*

Please provide an Environmental Impact Review for the remedial action proposed in the Remediation Work Plans.

**Windward CTB**

**Multiple Coincident Release Footprints**
***Windward West CTB Release (1)***
***Windward Federal #002H FL Release (2)***
**ConocoPhillips (Heritage COG Operating, LLC)**
**Lea County, New Mexico**
**DOR: 4/1/2024 (1)**
**DOR: 5/3/2024 (2)**
**INCIDENT ID: NAPP2409948979 (1)**
**INCIDENT ID: NAPP2413732369 (2)**
**Approximate Release Point: 32.194533°, -103.719506°**
**Approximate Release Point: 32.1945°, -103.7195°**
**Landowner: BLM**

**PROJECT BACKGROUND**

- **Windward West CTB Release (NAPP2409948979)**
  - The release was caused by a SWD transfer line rupture on April 1, 2024.
  - Approximately 13 bbls of produced water were release, of which 10 bbls of produced water were recovered.
  - The NMOCD approved the initial C-141 and subsequently assigned the release the Incident ID **NAPP2409948979**.
  - The spill calculator included with the C-141 indicates a surface area impact of approximately 800 square feet. The in-field measurements indicate a slightly larger extent.
  - Tetra Tech was onsite when the release occurred at a nearby RMR remediation job.
    - While onsite, Tetra Tech personnel conducted a site visit and collected photographs to discern the release footprint.
    - Tetra Tech personnel observed the fresh release extent, pooled liquid was observed at the surface, stressed vegetation and the release running to the west adjacent to the road.
    - The release point was confirmed.
    - Surface steel lines, surface polylines, and subsurface lines were observed running through and around the release area.
  - Tetra Tech conducted initial assessment sampling activities for the Windward West CTB Release on April 24, 2024.
    - A total of three soil test trenches (T-1 through T-3) were installed to depths ranging from 4 to 8 feet below surface to assess the vertical extent of the release.
    - A total of five hand auger borings were installed along the perimeter of the release to assess the horizontal extent.
    - Horizontal delineation was achieved as a result of the initial assessment activities, but vertical delineation was not achieved at a depth of 8 feet below surface.
- **Windward Federal #002H Release (NAPP2413732369)**
  - The second release was discovered on May 3, 2024.
  - The release was caused by a hold in a water transfer line, resulting in the release of approximately 4.1217 bbls of produced water.
  - The release occurred off-pad and on top of the existing Windward West CTB Release extent.
  - The NMOCD approved the initial C-141 and subsequently assigned the release the Incident ID **NAPP2413732369**.
  - The spill calculator included with the C-141 indicates a surface area impact of approximately 650 square feet.
  - Tetra Tech conducted additional assessment sampling in July 2024 and successfully delineated the combined release extent.
- A Remediation Work Plan for each incident dated September 12, 2024 was prepared by Tetra Tech on behalf of COPC, and submitted to the NMOCD.
- The NMOCD approved the Remediation Work Plans in emails dated September 17, 2024, with the following comments;
  - *"Remediation plan approved with conditions. Confirmation samples are to be collected at a frequency of every 200 square feet from the base and walls of the excavation. Submit remediation closure report to the OCD by 12/16/2024."*
- Tetra Tech proposes to excavate to a maximum depth of 4 ft BGS in the approximate release extent presented in

Figure 5.

- Following excavation activities confirmed with analytical sampling, the backfilled areas will be backfilled with clean material and seeded with BLM Seed Mix #2.

Let me know what you think,
Sam

**Samantha Abbott, PG** | Project Manager
Direct Mobile **+1 (512) 739-7874** | Business **+1 (512) 338-1667** | Sam.Abbott@tetratech.com

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**From:** OCDOnline@state.nm.us
**To:** Llull, Christian
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 391826
**Date:** Friday, October 11, 2024 8:39:01 AM



To whom it may concern (c/o Christian Llull for COG PRODUCTION, LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2413732369.

The sampling event is expected to take place:

**When:** 10/16/2024 @ 10:00
**Where:** D-30-24S-32E 0 FNL 0 FEL (32.194501,-103.719501)

**Additional Information:** Confirmation sampling expected to take place 10/16 and 10/17. Please contact Samantha Abbott at (512) 739-7874

**Additional Instructions:** GPS: 32.194533°, -103.719506°

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

**From:** OCDOnline@state.nm.us
**To:** Llull, Christian
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 393620
**Date:** Thursday, October 17, 2024 5:19:39 PM



To whom it may concern (c/o Christian LLuLL for COG PRODUCTION, LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2413732369.

The sampling event is expected to take place:

**When:** 10/21/2024 @ 10:00
**Where:** D-30-24S-32E 0 FNL 0 FEL (32.194501,-103.719501)

**Additional Information:** Confirmation sampling expected to continue. Please contact Samantha Abbott at (512) 739-787

**Additional Instructions:** GPS: 32.194533°, -103.719506°

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

## Chavira, Lisbeth

**From:** OCDOnline@state.nm.us
**Sent:** Tuesday, December 10, 2024 4:57 PM
**To:** Llull, Christian
**Subject:** The Oil Conservation Division (OCD) has rejected the application, Application ID: 408446



To whom it may concern (c/o Christian LLuLL for COG PRODUCTION, LLC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2409948979,
for the following reasons:

- **Remediation closure and reclamation denied for the following:**
- **1)According to the remediation plan approved on 9/17/24 samples were to be analyzed for all constituents but on pg. 4 of report you state: "The soils samples were not analyzed for BTEX, in accordance with the 2024 Remediation Work Plan conditions of approval." Remove conflicting information.**
- **2)To the question "What is the estimated surface area (in square feet) that will be remediated" you answered 2383 which means at least 12 floor samples should have been collected from the excavation. In remediation plan approval on 9/17/24, you had requested to sample every 400 square feet and had proposed to collect 10 floor samples and 10 sidewall samples. The conditions of approval stated you were to sample every 200 square feet which should have resulted in more samples being collected than the requested 20.**
- **3)In approved remediation plan, The Proposed Remediation Map, Figure 5 showed the excavation extending south past the point of release but Figure 5 in submitted closure report shows the excavation did not extend through this area. Confirmation samples will need to be collected around points of release to ensure all contaminants are removed and entire release area meets reclamation standards.**
- **Resubmit remediation closure report to the OCD by 3/10/25.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 408446.
Please review and make the required correction(s) prior to resubmitting.
If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Shelly Wells
Environmental Specialist-A
505-469-7520
Shelly.Wells@emnrd.nm.gov

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

## Chavira, Lisbeth

**From:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
**Sent:** Tuesday, March 4, 2025 3:33 PM
**To:** Abbott, Sam
**Cc:** Llull, Christian; Bratcher, Michael, EMNRD
**Subject:** RE: [EXTERNAL] Extension Request - COP Windward CTB (NAPP2409948979 and NAPP2413732369)



Good afternoon Sam,

The extension requests for NAPP2409948979 and NAPP2413732369 is approved. The new due date to submit your updated remediation plan or closure report to the OCD is June 2, 2025. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Kind regards,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Environmental Bureau
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520 Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

**From:** Abbott, Sam <Sam.Abbott@tetratech.com>
**Sent:** Tuesday, March 4, 2025 1:46 PM
**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
**Cc:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Llull, Christian <Christian.Llull@tetratech.com>
**Subject:** [EXTERNAL] Extension Request - COP Windward CTB (NAPP2409948979 and NAPP2413732369)



Good afternoon,

Tetra Tech, on behalf of ConocoPhillips, would like to request an extension to complete the additional sampling activities and report revisions to address NMOCD comments to the previously submitted closure reports for the overlapping Windward CTB incidents (NAPP2409948979 and NAPP2413732369). The reason for the extension request is due to a scheduling delay following the holidays and other project commitments, but which is now resolved. We currently have the additional sampling activities scheduled for next week. A C-141N will be submitted for this sampling event.

I appreciate your attention to this matter.

Thank you,
Sam

**Samantha Abbott, PG** | Project Manager
Direct Mobile **+1 (512) 739-7874** | Business **+1 (512) 338-1667** | Sam.Abbott@tetratech.com

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8911 N Capital of Texas Hwy #2310 | Austin, TX 78759 | tetratech.com

## Chavira, Lisbeth

**From:** OCDOnline@state.nm.us
**Sent:** Thursday, May 15, 2025 1:56 PM
**To:** Llull, Christian
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 463783



To whom it may concern (c/o Christian Llull for COG PRODUCTION, LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2413732369.

The sampling event is expected to take place:

**When:** 05/20/2025 @ 10:00
**Where:** D-30-24S-32E 0 FNL 0 FEL (32.194501,-103.719501)

**Additional Information:** Colton Bickerstaff | Geologist | Senior Site Supervisor
Phone: 432.250.9943 | Fax: 432.682.3946
Colton.Bickerstaff@tetratech.com

**Additional Instructions:** Windward West CTB Release (1)
Windward Federal #002H FL Release (2)
ConocoPhillips (Heritage COG Operating, LLC)
Lea County, New Mexico
DOR: 4/1/2024 (1)
DOR: 5/3/2024 (2)
INCIDENT ID: NAPP2409948979 (1)
INCIDENT ID: NAPP2413732369 (2)
Approximate Release Point: 32.194533°, -103.719506°
Approximate Release Point: 32.1945°, -103.7195°

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

## Chavira, Lisbeth

**From:** OCDOnline@state.nm.us
**Sent:** Thursday, May 15, 2025 1:57 PM
**To:** Llull, Christian
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 463785



To whom it may concern (c/o Christian Llull for COG PRODUCTION, LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2413732369.

The sampling event is expected to take place:

**When:** 05/21/2025 @ 10:00
**Where:** D-30-24S-32E 0 FNL 0 FEL (32.194501,-103.719501)

**Additional Information:** Colton Bickerstaff | Geologist | Senior Site Supervisor
Phone: 432.250.9943 | Fax: 432.682.3946
Colton.Bickerstaff@tetratech.com

**Additional Instructions:** Multiple Coincident Release Footprints
Windward West CTB Release (1)
Windward Federal #002H FL Release (2)
ConocoPhillips (Heritage COG Operating, LLC)
Lea County, New Mexico
DOR: 4/1/2024 (1)
DOR: 5/3/2024 (2)
INCIDENT ID: NAPP2409948979 (1)
INCIDENT ID: NAPP2413732369 (2)
Approximate Release Point: 32.194533°, -103.719506°
Approximate Release Point: 32.1945°, -103.7195°

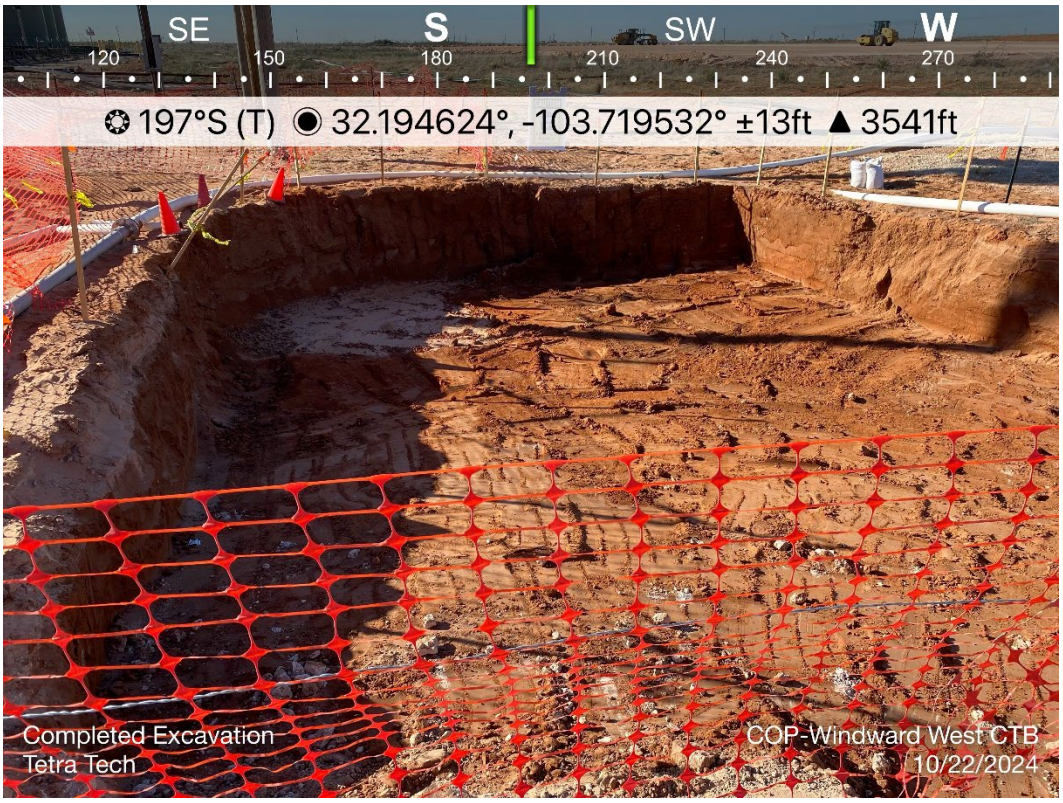
An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

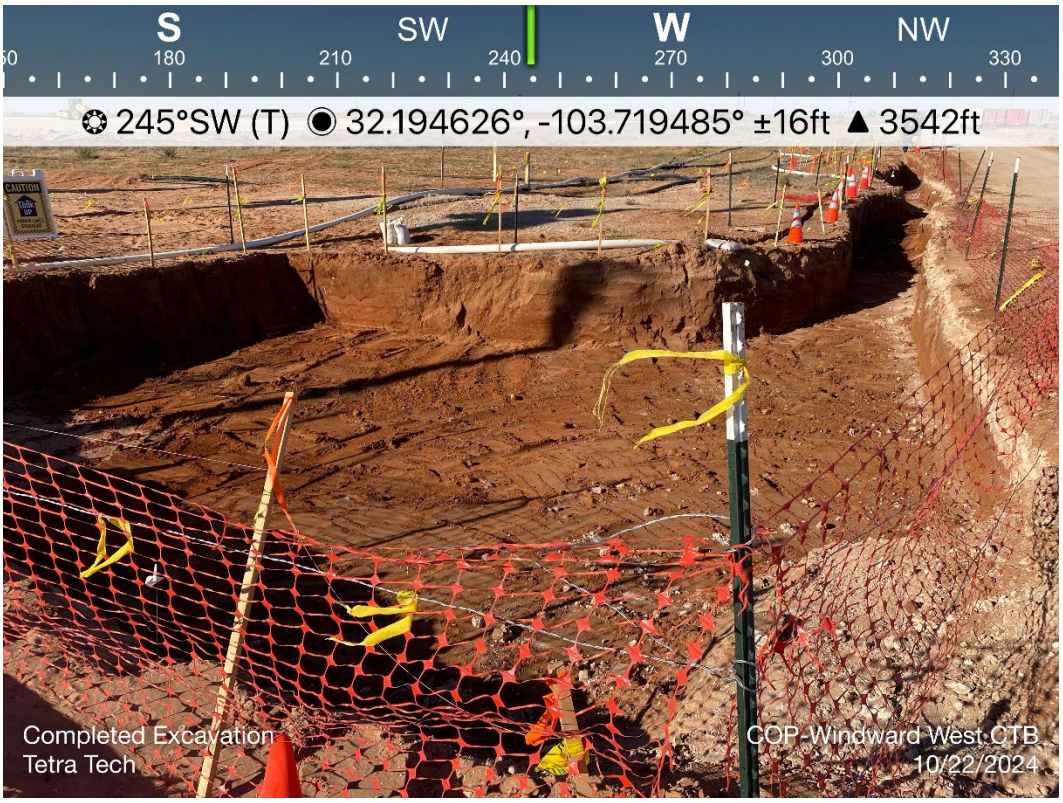
**New Mexico Energy, Minerals and Natural Resources Department**
1220 South St. Francis Drive
Santa Fe, NM 87505

# APPENDIX D
# Photographic Documentation



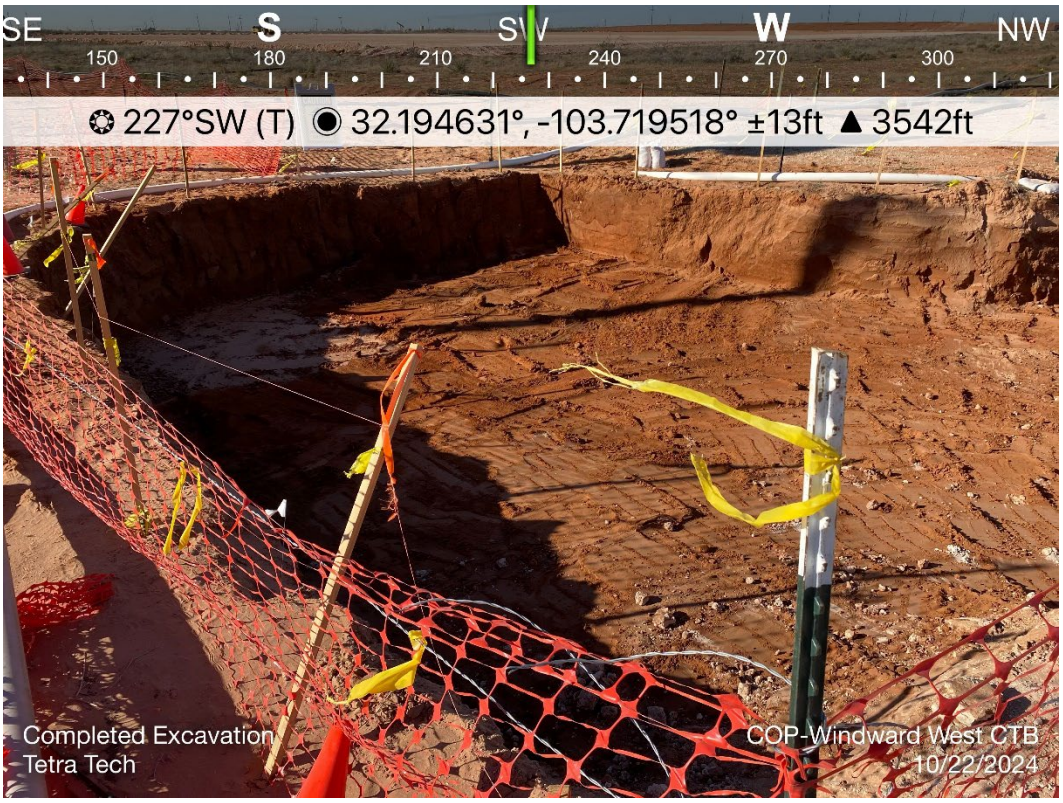

| | | | |
|---|---|---|---|
| TETRA TECH, INC.<br>PROJECT NO.<br>212C-MD-03441A | DESCRIPTION | 2024. View south-southwest of completed excavation. | 1 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979)<br>Windward Federal #002H FL Release (NAPP2413732369) | 10/22/2024 |


| | | | |
|---|---|---|---|
| TETRA TECH, INC.<br>PROJECT NO.<br>212C-MD-03441A | DESCRIPTION | 2024. View southwest of completed excavation. | 2 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979)<br>Windward Federal #002H FL Release (NAPP2413732369) | 10/23/2024 |

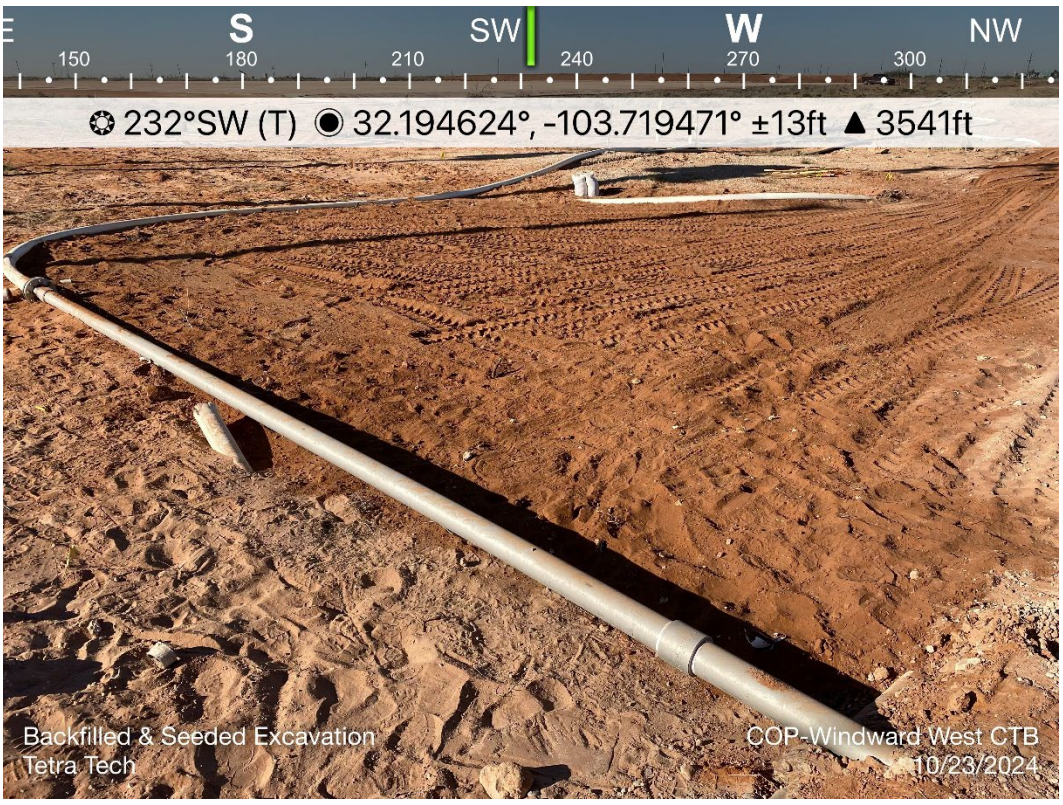



| | | | |
|---|---|---|---|
| TETRA TECH, INC.<br>PROJECT NO.<br>212C-MD-03441A | DESCRIPTION | 2024. View west-southwest of completed excavation. | 3 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979)<br>Windward Federal #002H FL Release (NAPP2413732369) | 10/22/2024 |


| | | | |
|---|---|---|---|
| TETRA TECH, INC.<br>PROJECT NO.<br>212C-MD-03441A | DESCRIPTION | 2024. View west of completed excavation. | 4 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979)<br>Windward Federal #002H FL Release (NAPP2413732369) | 10/23/2024 |



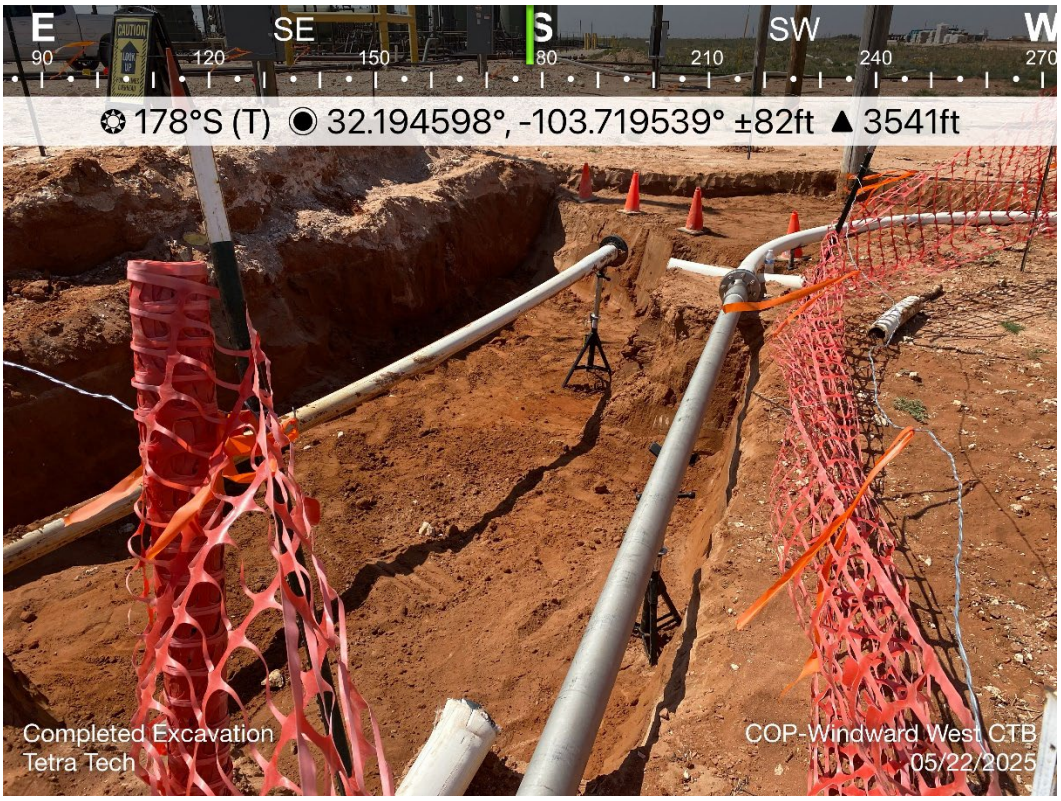

| | | | |
|---|---|---|---|
| TETRA TECH, INC.<br>PROJECT NO.<br>212C-MD-03441A | DESCRIPTION | 2024. View southwest of completed excavation. | 5 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979)<br>Windward Federal #002H FL Release (NAPP2413732369) | 10/22/2024 |




| | | | |
|---|---|---|---|
| TETRA TECH, INC.<br>PROJECT NO.<br>212C-MD-03441A | DESCRIPTION | 2024. View southwest of backfilled excavation. | 6 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979)<br>Windward Federal #002H FL Release (NAPP2413732369) | 10/22/2024 |

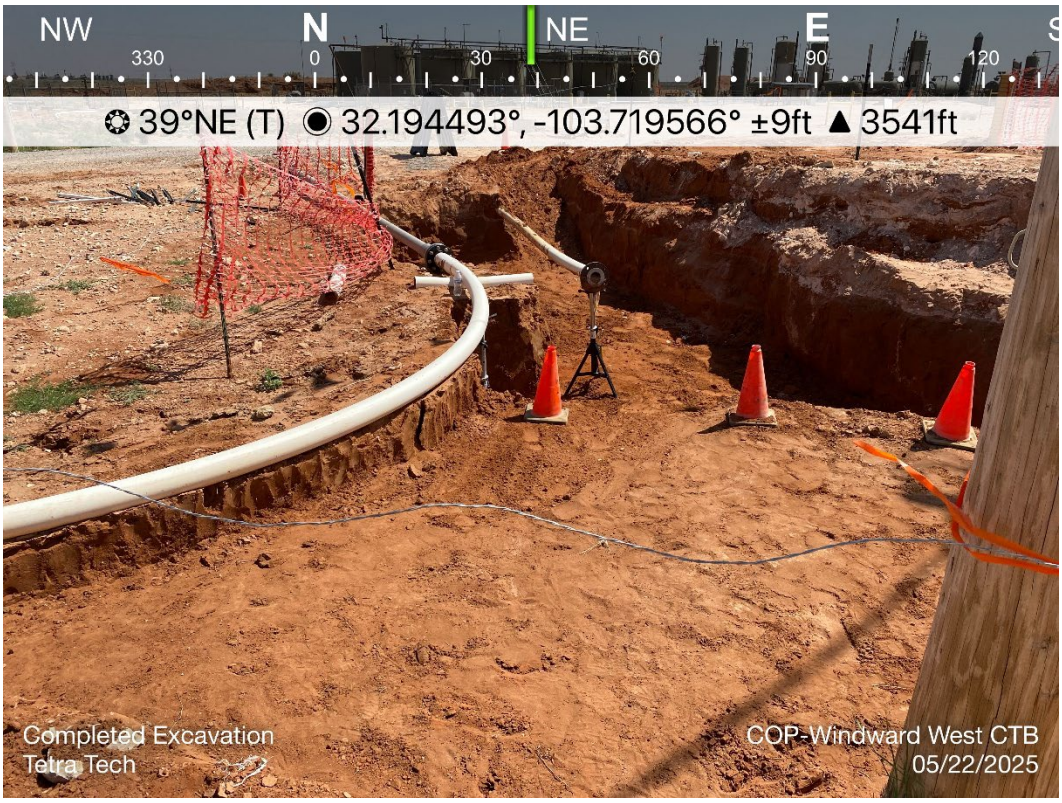

| | | | |
|---|---|---|---|
| TETRA TECH, INC. PROJECT NO. 212C-MD-03441A | DESCRIPTION | 2024. View southeast of completed excavation. | 7 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979) Windward Federal #002H FL Release (NAPP2413732369) | 10/22/2024 |


| | | | |
|---|---|---|---|
| TETRA TECH, INC. PROJECT NO. 212C-MD-03441A | DESCRIPTION | 2024. View southeast of backfilled excavation. | 8 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979) Windward Federal #002H FL Release (NAPP2413732369) | 10/23/2024 |



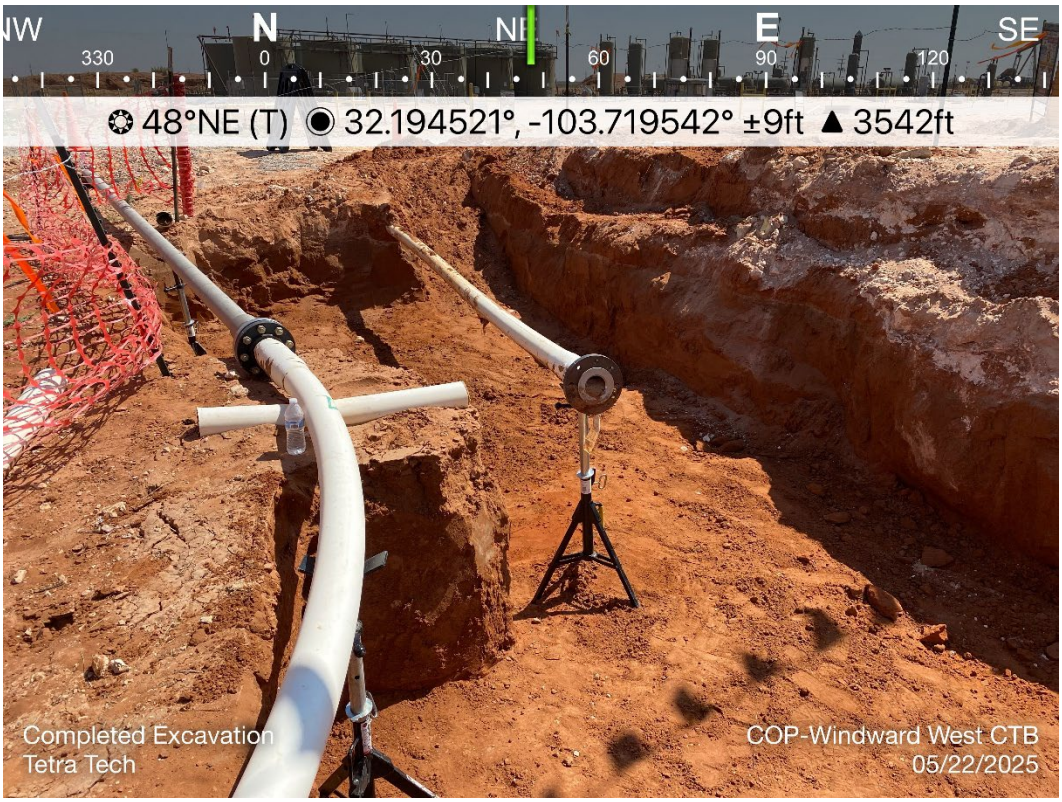

| | | | |
|---|---|---|---|
| TETRA TECH, INC.<br>PROJECT NO.<br>212C-MD-03441A | DESCRIPTION | 2025. View south of additional excavation area. Steel line visible, abandoned line visible. | 9 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979)<br>Windward Federal #002H FL Release (NAPP2413732369) | 05/22/2025 |


| | | | |
|---|---|---|---|
| TETRA TECH, INC.<br>PROJECT NO.<br>212C-MD-03441A | DESCRIPTION | View north. View of the MEP area at pole and 4 ft excavation. View of surface line and abandoned line. | 10 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979)<br>Windward Federal #002H FL Release (NAPP2413732369) | 05/22/2025 |



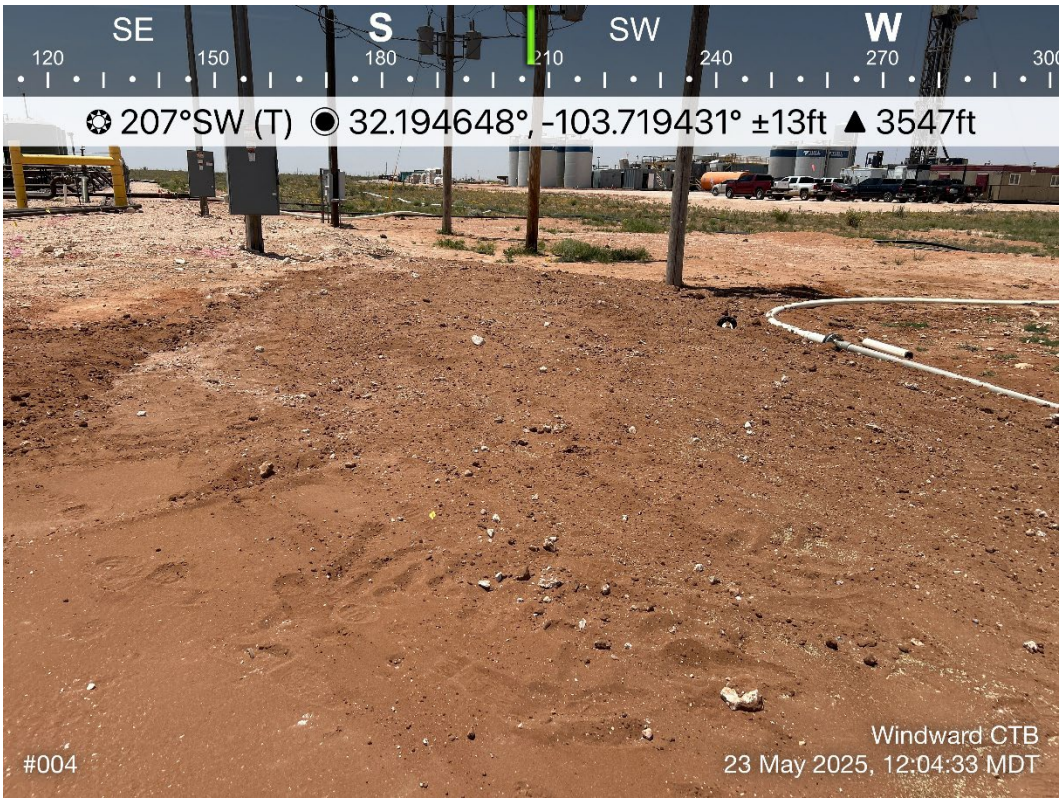

| | | | |
|---|---|---|---|
| TETRA TECH, INC.<br>PROJECT NO.<br>212C-MD-03441A | DESCRIPTION | View northeast. View of the MEP area at pole and 4 ft excavation. View of surface line and abandoned line. | 11 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979)<br>Windward Federal #002H FL Release (NAPP2413732369) | 05/22/2025 |


| | | | |
|---|---|---|---|
| TETRA TECH, INC.<br>PROJECT NO.<br>212C-MD-03441A | DESCRIPTION | View northwest. View of the exclusion zone at pole, 4 ft excavation. View of surface line and abandoned line. | 12 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979)<br>Windward Federal #002H FL Release (NAPP2413732369) | 05/22/2025 |

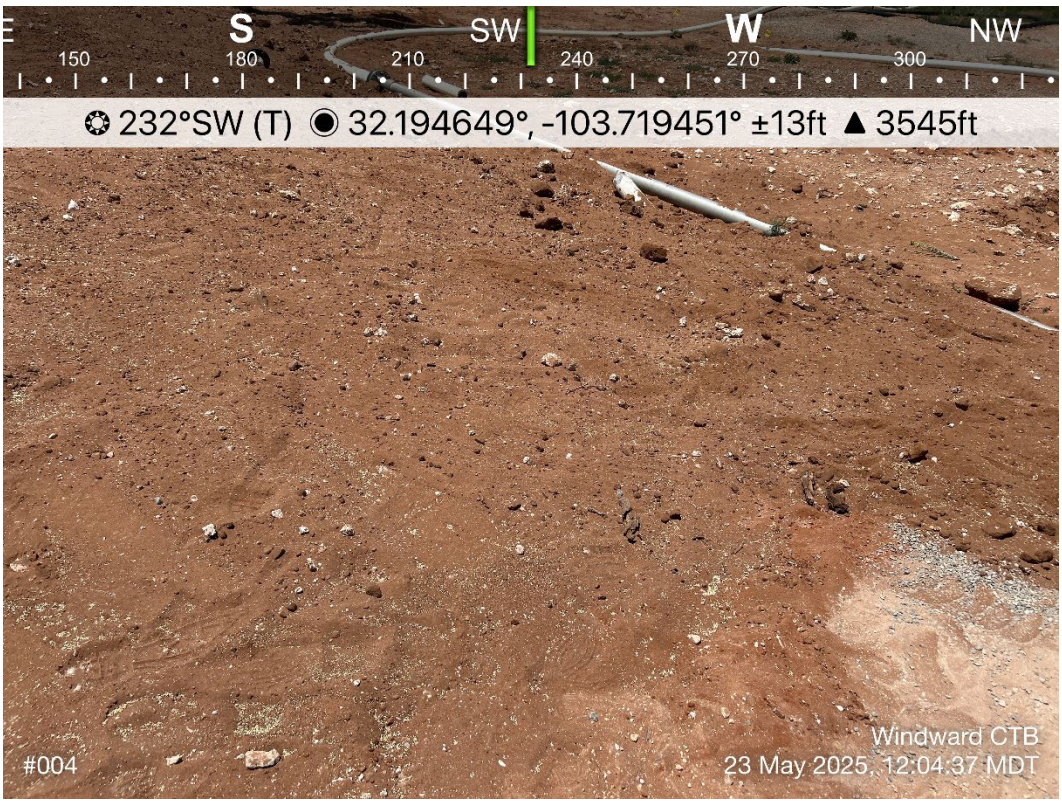



| | | | |
|---|---|---|---|
| TETRA TECH, INC. PROJECT NO. 212C-MD-03441A | DESCRIPTION | View northeast. View of the 4ft excavation. View of surface polyline and abandoned line. | 13 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979) Windward Federal #002H FL Release (NAPP2413732369) | 05/22/2025 |


| | | | |
|---|---|---|---|
| TETRA TECH, INC. PROJECT NO. 212C-MD-03441A | DESCRIPTION | View south. View of backfilled and seeded excavation area. | 14 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979) Windward Federal #002H FL Release (NAPP2413732369) | 05/23/2025 |




| | | | |
|---|---|---|---|
| TETRA TECH, INC.<br>PROJECT NO.<br>212C-MD-03441A | DESCRIPTION | View south. View of backfilled and seeded excavation area. | 15 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979)<br>Windward Federal #002H FL Release (NAPP2413732369) | 05/23/2025 |




| | | | |
|---|---|---|---|
| TETRA TECH, INC.<br>PROJECT NO.<br>212C-MD-03441A | DESCRIPTION | View southwest. View of backfilled and seeded excavation area. | 16 |
| | SITE NAME | Windward West CTB Release (NAPP2409948979)<br>Windward Federal #002H FL Release (NAPP2413732369) | 05/23/2025 |

# APPENDIX E
# Laboratory Analytical Data

CARDINAL Laboratories

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

May 22, 2025

LISBETH CHAVIRA

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: WINDWARD WEST CTB FLOWLINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 05/21/25 15:03.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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

Lab Director/Quality Manager

CARDINAL Laboratories

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

## Analytical Results For:

TETRA TECH
LISBETH CHAVIRA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

| | | | |
|---|---|---|---|
| Received: | 05/21/2025 | Sampling Date: | 05/21/2025 |
| Reported: | 05/22/2025 | Sampling Type: | Soil |
| Project Name: | WINDWARD WEST CTB FLOWLINE RELE | Sampling Condition: | Cool & Intact |
| Project Number: | 212C - MD - 03441A | Sample Received By: | Tamara Oldaker |
| Project Location: | COP - LEA CO NM | | |

### Sample ID: FS - 1 (H253049-01)

**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 | 05/21/2025 | ND | 1.93 | 96.4 | 2.00 | 2.09 | |
| Toluene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.11 | 105 | 2.00 | 1.72 | |
| Ethylbenzene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.01 | 100 | 2.00 | 2.67 | |
| Total Xylenes* | <0.150 | 0.150 | 05/21/2025 | ND | 6.02 | 100 | 6.00 | 2.81 | |
| Total BTEX | <0.300 | 0.300 | 05/21/2025 | ND | | | | | |

*Surrogate: 4-Bromofluorobenzene (PID* *102 %* *71.5-134*

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

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **208** | 16.0 | 05/22/2025 | 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 | 05/21/2025 | ND | 208 | 104 | 200 | 0.902 | |
| DRO >C10-C28* | <10.0 | 10.0 | 05/21/2025 | ND | 205 | 102 | 200 | 0.843 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 05/21/2025 | ND | | | | | |

*Surrogate: 1-Chlorooctane* *91.4 %* *44.4-145*

*Surrogate: 1-Chlorooctadecane* *83.6 %* *40.6-153*

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
LISBETH CHAVIRA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

| | | | |
|---|---|---|---|
| Received: | 05/21/2025 | Sampling Date: | 05/21/2025 |
| Reported: | 05/22/2025 | Sampling Type: | Soil |
| Project Name: | WINDWARD WEST CTB FLOWLINE RELE | Sampling Condition: | Cool & Intact |
| Project Number: | 212C - MD - 03441A | Sample Received By: | Tamara Oldaker |
| Project Location: | COP - LEA CO NM | | |

### Sample ID: FS - 2 (H253049-02)

**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 | 05/21/2025 | ND | 1.93 | 96.4 | 2.00 | 2.09 | |
| Toluene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.11 | 105 | 2.00 | 1.72 | |
| Ethylbenzene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.01 | 100 | 2.00 | 2.67 | |
| Total Xylenes* | <0.150 | 0.150 | 05/21/2025 | ND | 6.02 | 100 | 6.00 | 2.81 | |
| Total BTEX | <0.300 | 0.300 | 05/21/2025 | ND | | | | | |

*Surrogate: 4-Bromofluorobenzene (PID* *103 %* *71.5-134*

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

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **3120** | 16.0 | 05/22/2025 | 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 | 05/21/2025 | ND | 208 | 104 | 200 | 0.902 | |
| DRO >C10-C28* | <10.0 | 10.0 | 05/21/2025 | ND | 205 | 102 | 200 | 0.843 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 05/21/2025 | ND | | | | | |

*Surrogate: 1-Chlorooctane* *91.8 %* *44.4-145*

*Surrogate: 1-Chlorooctadecane* *83.8 %* *40.6-153*

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
LISBETH CHAVIRA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

| | | | |
|---|---|---|---|
| Received: | 05/21/2025 | Sampling Date: | 05/21/2025 |
| Reported: | 05/22/2025 | Sampling Type: | Soil |
| Project Name: | WINDWARD WEST CTB FLOWLINE RELE | Sampling Condition: | Cool & Intact |
| Project Number: | 212C - MD - 03441A | Sample Received By: | Tamara Oldaker |
| Project Location: | COP - LEA CO NM | | |

### Sample ID: FS - 3 (H253049-03)

**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 | 05/21/2025 | ND | 1.93 | 96.4 | 2.00 | 2.09 | |
| Toluene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.11 | 105 | 2.00 | 1.72 | |
| Ethylbenzene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.01 | 100 | 2.00 | 2.67 | |
| Total Xylenes* | <0.150 | 0.150 | 05/21/2025 | ND | 6.02 | 100 | 6.00 | 2.81 | |
| Total BTEX | <0.300 | 0.300 | 05/21/2025 | ND | | | | | |

*Surrogate: 4-Bromofluorobenzene (PID* *103 %* *71.5-134*

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

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **1660** | 16.0 | 05/22/2025 | 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 | 05/21/2025 | ND | 208 | 104 | 200 | 0.902 | |
| DRO >C10-C28* | <10.0 | 10.0 | 05/21/2025 | ND | 205 | 102 | 200 | 0.843 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 05/21/2025 | ND | | | | | |

*Surrogate: 1-Chlorooctane* *94.2 %* *44.4-145*

*Surrogate: 1-Chlorooctadecane* *87.1 %* *40.6-153*

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
LISBETH CHAVIRA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

| | | | |
|---|---|---|---|
| Received: | 05/21/2025 | Sampling Date: | 05/21/2025 |
| Reported: | 05/22/2025 | Sampling Type: | Soil |
| Project Name: | WINDWARD WEST CTB FLOWLINE RELE | Sampling Condition: | Cool & Intact |
| Project Number: | 212C - MD - 03441A | Sample Received By: | Tamara Oldaker |
| Project Location: | COP - LEA CO NM | | |

### Sample ID: NSW - 1 (H253049-04)

**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 | 05/21/2025 | ND | 1.93 | 96.4 | 2.00 | 2.09 | |
| Toluene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.11 | 105 | 2.00 | 1.72 | |
| Ethylbenzene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.01 | 100 | 2.00 | 2.67 | |
| Total Xylenes* | <0.150 | 0.150 | 05/21/2025 | ND | 6.02 | 100 | 6.00 | 2.81 | |
| Total BTEX | <0.300 | 0.300 | 05/21/2025 | ND | | | | | |

*Surrogate: 4-Bromofluorobenzene (PID* *104 %* *71.5-134*

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

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **48.0** | 16.0 | 05/22/2025 | 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 | 05/21/2025 | ND | 208 | 104 | 200 | 0.902 | |
| DRO >C10-C28* | <10.0 | 10.0 | 05/21/2025 | ND | 205 | 102 | 200 | 0.843 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 05/21/2025 | ND | | | | | |

*Surrogate: 1-Chlorooctane* *91.8 %* *44.4-145*

*Surrogate: 1-Chlorooctadecane* *82.1 %* *40.6-153*

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
LISBETH CHAVIRA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

| | | | |
|---|---|---|---|
| Received: | 05/21/2025 | Sampling Date: | 05/21/2025 |
| Reported: | 05/22/2025 | Sampling Type: | Soil |
| Project Name: | WINDWARD WEST CTB FLOWLINE RELE | Sampling Condition: | Cool & Intact |
| Project Number: | 212C - MD - 03441A | Sample Received By: | Tamara Oldaker |
| Project Location: | COP - LEA CO NM | | |

### Sample ID: SSW - 1 (H253049-05)

**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 | 05/21/2025 | ND | 1.93 | 96.4 | 2.00 | 2.09 | |
| Toluene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.11 | 105 | 2.00 | 1.72 | |
| Ethylbenzene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.01 | 100 | 2.00 | 2.67 | |
| Total Xylenes* | <0.150 | 0.150 | 05/21/2025 | ND | 6.02 | 100 | 6.00 | 2.81 | |
| Total BTEX | <0.300 | 0.300 | 05/21/2025 | ND | | | | | |

*Surrogate: 4-Bromofluorobenzene (PID* *103 %* *71.5-134*

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

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **256** | 16.0 | 05/22/2025 | 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 | 05/21/2025 | ND | 208 | 104 | 200 | 0.902 | |
| DRO >C10-C28* | <10.0 | 10.0 | 05/21/2025 | ND | 205 | 102 | 200 | 0.843 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 05/21/2025 | ND | | | | | |

*Surrogate: 1-Chlorooctane* *99.5 %* *44.4-145*

*Surrogate: 1-Chlorooctadecane* *90.5 %* *40.6-153*

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
LISBETH CHAVIRA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

| | | | |
|---|---|---|---|
| Received: | 05/21/2025 | Sampling Date: | 05/21/2025 |
| Reported: | 05/22/2025 | Sampling Type: | Soil |
| Project Name: | WINDWARD WEST CTB FLOWLINE RELE | Sampling Condition: | Cool & Intact |
| Project Number: | 212C - MD - 03441A | Sample Received By: | Tamara Oldaker |
| Project Location: | COP - LEA CO NM | | |

### Sample ID: ESW - 1 (H253049-06)

**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 | 05/21/2025 | ND | 1.93 | 96.4 | 2.00 | 2.09 | |
| Toluene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.11 | 105 | 2.00 | 1.72 | |
| Ethylbenzene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.01 | 100 | 2.00 | 2.67 | |
| Total Xylenes* | <0.150 | 0.150 | 05/21/2025 | ND | 6.02 | 100 | 6.00 | 2.81 | |
| Total BTEX | <0.300 | 0.300 | 05/21/2025 | ND | | | | | |

*Surrogate: 4-Bromofluorobenzene (PID* *102 %* *71.5-134*

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

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **112** | 16.0 | 05/22/2025 | 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 | 05/21/2025 | ND | 208 | 104 | 200 | 0.902 | |
| DRO >C10-C28* | <10.0 | 10.0 | 05/21/2025 | ND | 205 | 102 | 200 | 0.843 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 05/21/2025 | ND | | | | | |

*Surrogate: 1-Chlorooctane* *94.2 %* *44.4-145*

*Surrogate: 1-Chlorooctadecane* *87.1 %* *40.6-153*

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
LISBETH CHAVIRA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

| | | | |
|---|---|---|---|
| Received: | 05/21/2025 | Sampling Date: | 05/21/2025 |
| Reported: | 05/22/2025 | Sampling Type: | Soil |
| Project Name: | WINDWARD WEST CTB FLOWLINE RELE | Sampling Condition: | Cool & Intact |
| Project Number: | 212C - MD - 03441A | Sample Received By: | Tamara Oldaker |
| Project Location: | COP - LEA CO NM | | |

### Sample ID: WSW - 1 (H253049-07)

**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 | 05/21/2025 | ND | 1.93 | 96.4 | 2.00 | 2.09 | |
| Toluene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.11 | 105 | 2.00 | 1.72 | |
| Ethylbenzene* | <0.050 | 0.050 | 05/21/2025 | ND | 2.01 | 100 | 2.00 | 2.67 | |
| Total Xylenes* | <0.150 | 0.150 | 05/21/2025 | ND | 6.02 | 100 | 6.00 | 2.81 | |
| Total BTEX | <0.300 | 0.300 | 05/21/2025 | ND | | | | | |

*Surrogate: 4-Bromofluorobenzene (PID* *102 %* *71.5-134*

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

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **32.0** | 16.0 | 05/22/2025 | 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 | 05/21/2025 | ND | 208 | 104 | 200 | 0.902 | |
| DRO >C10-C28* | <10.0 | 10.0 | 05/21/2025 | ND | 205 | 102 | 200 | 0.843 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 05/21/2025 | ND | | | | | |

*Surrogate: 1-Chlorooctane* *97.9 %* *44.4-145*

*Surrogate: 1-Chlorooctadecane* *90.6 %* *40.6-153*

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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

| | |
|---|---|
| Company Name: Tetra Tech | **BILL TO** |
| Project Manager: Lisbeth Chavira | P.O. #: |
| Address: 8911 Capital o Texas Hwy, Suite 2310 | Company: Tetra Tech |
| City: Austin State: TX Zip: | Attn: Lisbeth Chavira |
| Phone #: (512)565-0190 Fax #: | Address: EMAIL |
| Project #: 212C-MD-03441A Project Owner: ConocoPhillips | City: |
| Project Name: Windward West CTB Releases | State: Zip: |
| Project Location: Lea County, New Mexico | Phone #: |
| Sampler Name: Colton Bickerstaff | 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: TPH 8015M | BTEX 8021B | Chloride SM4500CI-B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H253049-1 | FS-1 | C | 1 | | | X | | | | | X | | 5/21/2025 | | X | X | X |
| -2 | FS-2 | C | 1 | | | X | | | | | X | | 5/21/2025 | | X | X | X |
| -3 | FS-3 | C | 1 | | | X | | | | | X | | 5/21/2025 | | X | X | X |
| -4 | NSW-1 | C | 1 | | | X | | | | | X | | 5/21/2025 | | X | X | X |
| -5 | SSW-1 | C | 1 | | | X | | | | | X | | 5/21/2025 | | X | X | X |
| -6 | ESW-1 | C | 1 | | | X | | | | | X | | 5/21/2025 | | X | X | X |
| -7 | WSW-1 | C | 1 | | | X | | | | | X | | 5/21/2025 | | 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: Colton Bickerstaff | Date: 5/21/25 Time: 1503 | Received By: Tamara Oldaker | Verbal Result: ☐ Yes ☐ No Add'l Phone #: |
| | | | All Results are emailed. Please provide Email address: Lisbeth.Chavira@tetratech.com |
| Relinquished By: | Date: Time: | Received By: | REMARKS: |
| Delivered By: (Circle One) Sampler - UPS - Bus - Other: | Observed Temp. °C 4.3 Corrected Temp. °C 4.6 | Sample Condition Cool: Yes Intact: Yes / No | CHECKED BY: (Initials) |

Turnaround Time: Standard ☐ Bacteria (only) Sample Condition
Rush: YES, 24hr, TAT ✱ Cool Intact Observed Temp. °C
Thermometer ID #113 #140 +0.3c
Correction Factor -0.5°C
☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

5/21/25

FORM-006 R 3.2 10/07/21

† 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

May 23, 2025

LISBETH CHAVIRA

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: WINDWARD WEST CTB FLOWLINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 05/22/25 15:08.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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
LISBETH CHAVIRA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

| | | | |
|---|---|---|---|
| Received: | 05/22/2025 | Sampling Date: | 05/22/2025 |
| Reported: | 05/23/2025 | Sampling Type: | Soil |
| Project Name: | WINDWARD WEST CTB FLOWLINE RELE | Sampling Condition: | Cool & Intact |
| Project Number: | 212C - MD - 03441A | Sample Received By: | Tamara Oldaker |
| Project Location: | COP - LEA CO NM | | |

### Sample ID: BACKFILL - COMPOSITE (H253078-01)

**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 | 05/22/2025 | ND | 2.21 | 110 | 2.00 | 3.62 | |
| Toluene* | <0.050 | 0.050 | 05/22/2025 | ND | 2.23 | 111 | 2.00 | 3.73 | |
| Ethylbenzene* | <0.050 | 0.050 | 05/22/2025 | ND | 2.17 | 108 | 2.00 | 3.45 | |
| Total Xylenes* | <0.150 | 0.150 | 05/22/2025 | ND | 6.38 | 106 | 6.00 | 3.65 | |
| Total BTEX | <0.300 | 0.300 | 05/22/2025 | ND | | | | | |

*Surrogate: 4-Bromofluorobenzene (PID* *97.6 %* *71.5-134*

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

| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **32.0** | 16.0 | 05/23/2025 | 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 | 05/22/2025 | ND | 185 | 92.6 | 200 | 0.540 | |
| DRO >C10-C28* | <10.0 | 10.0 | 05/22/2025 | ND | 182 | 90.9 | 200 | 5.18 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 05/22/2025 | ND | | | | | |

*Surrogate: 1-Chlorooctane* *101 %* *44.4-145*

*Surrogate: 1-Chlorooctadecane* *104 %* *40.6-153*

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

| | | | |
|---|---|---|---|
| Company Name: Tetra Tech | | BILL TO | |
| Project Manager: Lisbeth Chavira | | P.O. #: | |
| Address: 8911 Capital o Texas Hwy, Suite 2310 | | Company: Tetra Tech | |
| City: Austin | State: TX Zip: | Attn: Lisbeth Chavira | |
| Phone #: (512)565-0190 | Fax #: | Address: EMAIL | |
| Project #: 212C-MD-03441A | Project Owner: ConocoPhillips | City: | |
| Project Name: Windward West CTB Releases | | State: Zip: | |
| Project Location: Lea County, New Mexico | | Phone #: | |
| Sampler Name: Colton Bickerstaff | | 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: TPH 8015M | BTEX 8021B | Chloride SM4500Cl-B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H253078 | | | | | | | | | | | | | | | | | |
| 1 | Backfill-Composite | C | 1 | | | X | | | | | X | | 5/22/2025 | | 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 Bickerstaff | Date: 5/22/25 Time: 1508 | Received By: | Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address: Lisbeth.Chavira@tetratech.com |
| Relinquished By: | Date: Time: | Received By: | REMARKS: Backfill-Composite sample collected at Twin Wells Ranch Pit located at (32.2095278, -103.7500000) |
| Delivered By: (Circle One) Sampler - UPS - Bus - Other: | Observed Temp. °C 5.3 Corrected Temp. °C 5.6 | Sample Condition Cool Yes ☑ Intact Yes ☐ No ☐ No | CHECKED BY: (Initials) |

Turnaround Time: Standard ☐ Bacteria (only) Sample Condition
Rush: YES, 24hr. TAT ✱ Cool Intact Observed Temp. °C
Thermometer ID #113 #140 +0.3°C
Correction Factor -0.5°C 5/22/25
☐ 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

# APPENDIX F
# Waste Manifests

Customer Copy

Northern Delaware Basin LandFill
2029 West NM Hwy 128
Jal NM 88252

---WASTE TICKET---
Ticket # 327091
Start:05/21/2025 09:50 AM
End:05/21/2025 09:57 AM
By:owl.lisanda

| GROSS | TARE | NET | PRICE | AMOUNT |
|---|---|---|---|---|
| Contaminated Soil | | | | |
| 18 | 0 | 18 | $0.01 | $0.18 |

Hauler: McNabb
Driver: Albara Tercero
Lease: Windward West CTB
Well: N/A
AFE #: WA0000/38600RM
County, State: LEA (NM)
API #: N/A
Manifest #: 1
Client Company Man: Ike Tavarez
Rig Name & Number: N/A
Trucking Co Ticket #: N/A
Truck Type: Dump Truck
UOM: CuYd
UOM Count: 18
PF Test Result: Pass
H2S Test: Pass

| | | | | |
|---|---|---|---|---|
| H2S Testing PASS | | | | |
| 1 | 0 | 1 | $0.00 | $0.00 |
| Paint Filter PASS | | | | |
| 1 | 0 | 1 | $0.00 | $0.00 |
| NORM PASS | | | | |
| 1 | 0 | 1 | $0.00 | $0.00 |
| Additional Photos | | | | |
| 1 | 0 | 1 | $0.00 | $0.00 |
| 22 | | 0.0 lbs | $0.01 | $0.18 |

| | |
|---|---|
| SUBTOTAL | $0.18 |
| TAX | $0.01 |
| ROUNDING | $0.00 |
| TOTAL | $0.19 |

| Date | Type | Amount |
|---|---|---|
| | CASH | $0.19 |

Customer: ConocoPhillips Company
Driver: Karen Work

Customer Copy

Northern Delaware Basin Landfill
2029 West NM Hwy 128
Jal NM 88252

---WASTE TICKET---
Ticket # 327115
Start:05/21/2025 11:15 AM
End:05/21/2025 11:22 AM
By:owl.jazmine

| | GROSS | TARE | NET | PRICE | AMOUNT |
|---|---|---|---|---|---|
| Contaminated Soil | 18 | 0 | 18 | $0.01 | $0.18 |

Hauler: McNabb
Driver: Albaro Tercero
Lease: Windward West CTB Release
Well: N/A
AFE #: WAU000/30600RM
County, State: LEA (NM)
API #: N/A
Manifest #: 2
Client Company Man: Ike Tavarez
Rig Name & Number: N/A
Trucking Co ticket #: N/A
Truck Type: Dump Truck
UOM: CuYd
UOM Count: 18
PF Test Result: Fail
H2S Test: Pass

| | | | | |
|---|---|---|---|---|
| H2S Testing - PASS | 1 | 0 | 1 | $0.00 | $0.00 |
| Paint Filter - FAIL | 1 | 0 | 1 | $0.00 | $0.00 |
| NORM - PASS | 1 | 0 | 1 | $0.00 | $0.00 |
| Additional Photos | 1 | 0 | 1 | $0.00 | $0.00 |
| | 22 | | 0.0 lbs | $0.01 | $0.18 |

| | |
|---|---|
| SUBTOTAL | $0.18 |
| TAX | $0.01 |
| ROUNDING | $0.00 |
| TOTAL | $0.19 |

| Date | Type | Amount |
|---|---|---|
| | CASH | $0.19 |

Customer: ConocoPhillips Company
Driver: Karen Mork

Customer Copy

Northern Delaware Basin Landfill
2029 West NM Hwy 128
Jal NM 88252

---WASTE TICKET---
Ticket # 327129
Start:05/21/2025 12:39 PM
End:05/21/2025 12:44 PM
By:owl.lisanda

| GROSS | TARE | NET | PRICE | AMOUNT |
|---|---|---|---|---|
| Contaminated Soil | | | | |
| 18 | 0 | 18 | $0.01 | $0.18 |

Hauler: McNabb Partners
Driver: Albaro Tercero
Lease: Windward West CTB
Well: N/A
AFE #: WA0600/38600NM
County, State: LEA (NM)
API #: N/A
Manifest #: 3
Client Company Man: Ike Tavarez
Rig Name & Number: N/A
Trucking Co Ticket #: N/A
Truck Type: Dump Truck
UOM: CuYd
UOM Count: 18
PF Test Result: Pass
H2S Test: Pass

| | | | | |
|---|---|---|---|---|
| H2S Testing PASS | | | | |
| 1 | 0 | 1 | $0.00 | $0.00 |
| Paint Filter PASS | | | | |
| 1 | 0 | 1 | $0.00 | $0.00 |
| NORM PASS | | | | |
| 1 | 0 | 1 | $0.00 | $0.00 |
| Additional Photos | | | | |
| 1 | 0 | 1 | $0.00 | $0.00 |
| 22 | 0.0 lbs | | $0.01 | $0.18 |

| | |
|---|---|
| SUBTOTAL | $0.18 |
| TAX | $0.01 |
| ROUNDING | $0.00 |
| TOTAL | $0.19 |

| Date | Type | Amount |
|---|---|---|
| | CASH | $0.19 |

Customer: ConocoPhillips Company
Driver: Karen Wark

Customer Copy

Northern Delaware Basin Landfill
2029 West NM Hwy 128
Jal NM 88252

WASTE TICKET
Ticket # 327152
Start:05/21/2025 02:44 PM
End:05/21/2025 02:55 PM
By:owl.lisanda

| | GROSS | TARE | NET | PRICE | AMOUNT |
|---|---|---|---|---|---|
| Contaminated Soil | 18 | 0 | 18 | $0.01 | $0.18 |

Hauler: McNabb Partners
Driver: Albaro Tercero
Lease: Windward West CTB Release
Well: N/A
AFE #: WA0600/38600RM
County, State: LEA (NM)
API #: N/A
Manifest #: 4
Client Company Man: Ike Tavarez
Rig Name & Number: N/A
Trucking Co Ticket #: N/A
Truck Type: Dump Truck
UOM: CuYd
UOM Count: 18
PF Test Result: Pass
H2S Test: Pass

| | | | | |
|---|---|---|---|---|
| H2S Testing - PASS | 1 | 0 | 1 | $0.00 | $0.00 |
| Paint Filter - PASS | 1 | 0 | 1 | $0.00 | $0.00 |
| NORM - PASS | 1 | 0 | 1 | $0.00 | $0.00 |
| Additional Photos | 1 | 0 | 1 | $0.00 | $0.00 |
| | 22 | 0.0 lbs | | $0.01 | $0.18 |

| | |
|---|---|
| SUBTOTAL | $0.18 |
| TAX | $0.01 |
| ROUNDING | $0.00 |
| TOTAL | $0.19 |

| Date | Type | Amount |
|---|---|---|
| | CASH | $0.19 |

Customer: ConocoPhillips Company
Driver: Karen Work

Customer Copy

Northern Delaware Basin LandFill
2029 West NM Hwy 128
Jal NM 88252

----WASTE TICKET----
Ticket # 327233
Start:05/22/2025 10:35 AM
End:05/22/2025 10:46 AM
By:OWL.Ivan

| GROSS | TARE | NET | PRICE | AMOUNT |
|---|---|---|---|---|
| Contaminated Soil | | | | |
| 16 | 0 | 16 | $0.01 | $0.16 |

Hauler: McNabb Partners
Driver: Albaro Tercero
Lease: Windward West CTB Release
Well: N/A
AFE #: N/A
County, State: LEA (NM)
API #: N/A
Manifest #: 5
Client Company Man: Ike Tavarez
Rig Name & Number: N/A
Trucking Co Ticket #: N/A
Truck Type: Dump Truck
UOM: CuYd
UOM Count: 16
PF Test Result: Pass
H2S Test: Pass

| | | | | |
|---|---|---|---|---|
| H2S Testing - PASS | | | | |
| 1 | 0 | 1 | $0.00 | $0.00 |
| Paint Filter - PASS | | | | |
| 1 | 0 | 1 | $0.00 | $0.00 |
| NORM - PASS | | | | |
| 1 | 0 | 1 | $0.00 | $0.00 |
| Additional Photos | | | | |
| 1 | 0 | 1 | $0.00 | $0.00 |
| 20 | 0.0 lbs | | $0.01 | $0.16 |

| | |
|---|---|
| SUBTOTAL ---> | $0.16 |
| TAX ---> | $0.01 |
| ROUNDING ---> | $0.00 |
| TOTAL ---> | $0.17 |

| Date | Type | Amount |
|---|---|---|
| | CASH | $0.17 |

Customer: ConocoPhillips Company
Driver: Karen Work

Customer Copy

Northern Delaware Basin Landfill
2029 West NM Hwy 128
Jal NM 88252

----WASTE TICKET----
Ticket # 327285
Start:05/22/2025 03:47 PM
End:05/22/2025 03:58 PM
By:DWL.Ivan

| | GROSS | TARE | NET | PRICE | AMOUNT |
|---|---|---|---|---|---|
| Contaminated Soil | | | | | |
| | 16 | 0 | 16 | $0.01 | $0.16 |

Hauler: McNabb Partners
Driver: Albaro Tercero
Lease: Windward West CIB Release
Well: N/A
AFE #: WBS WAD0073860ORM
County, State: LEA (NM)
API #: N/A
Manifest #: 6
Client Company Man: Ike Tavarez
Rig Name & Number: N/A
Trucking Co Ticket #: N/A
Truck Type: Dump Truck
UOM: CuYd
UOM Count: 16
PF Test Result: Pass
H2S Test: Pass

| | | | | |
|---|---|---|---|---|
| H2S Testing - PASS | | | | |
| | 1 | 0 | 1 | $0.00 | $0.00 |
| Paint Filter - PASS | | | | |
| | 1 | 0 | 1 | $0.00 | $0.00 |
| NORM - PASS | | | | |
| | 1 | 0 | 1 | $0.00 | $0.00 |
| Additional Photos | | | | |
| | 1 | 0 | 1 | $0.00 | $0.00 |
| | 20 | | 0.0 lbs | $0.01 | $0.16 |

| | |
|---|---|
| SUBTOTAL | $0.16 |
| TAX | $0.01 |
| ROUNDING | $0.00 |
| TOTAL | $0.17 |

| Date | Type | Amount |
|---|---|---|
| | CASH | $0.17 |

Customer: ConocoPhillips Company
Driver: Karen Work

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Action 479471

## QUESTIONS

| | |
|---|---|
| Operator:<br>COG PRODUCTION, LLC<br>600 W. Illinois Ave<br>Midland, TX 79701 | OGRID:<br>217955 |
| | Action Number:<br>479471 |
| | Action Type:<br>[C-141] Reclamation Report C-141 (C-141-v-Reclamation) |

**QUESTIONS**

| **Prerequisites** | |
|---|---|
| Incident ID (n#) | **nAPP2413732369** |
| Incident Name | **NAPP2413732369 WINDWARD FEDERAL 002H @ 0** |
| Incident Type | **Produced Water Release** |
| Incident Status | **Reclamation Report Received** |
| Incident Facility | **[fAPP2132638253] WINDWARD FED 2H - BATTERY** |

| **Location of Release Source** | |
|---|---|
| *Please answer all the questions in this group.* | |
| Site Name | WINDWARD FEDERAL 002H |
| Date Release Discovered | 05/03/2024 |
| Surface Owner | Federal |

| **Incident Details** | |
|---|---|
| *Please answer all the questions in this group.* | |
| Incident Type | Produced Water Release |
| Did this release result in a fire or is the result of a fire | No |
| Did this release result in any injuries | No |
| Has this release reached or does it have a reasonable probability of reaching a watercourse | No |
| Has this release endangered or does it have a reasonable probability of endangering public health | No |
| Has this release substantially damaged or will it substantially damage property or the environment | No |
| Is this release of a volume that is or may with reasonable probability be detrimental to fresh water | No |

| **Nature and Volume of Release** | |
|---|---|
| *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.* | |
| Crude Oil Released (bbls) Details | *Not answered.* |
| Produced Water Released (bbls) Details | Cause: Corrosion \| Flow Line - Injection \| Produced Water \| Released: 4 BBL \| Recovered: 0 BBL \| Lost: 4 BBL. |
| Is the concentration of chloride in the produced water >10,000 mg/l | Yes |
| Condensate Released (bbls) Details | *Not answered.* |
| Natural Gas Vented (Mcf) Details | *Not answered.* |
| Natural Gas Flared (Mcf) Details | *Not answered.* |
| Other Released Details | *Not answered.* |
| Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts) | *Not answered.* |

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>COG PRODUCTION, LLC<br>600 W. Illinois Ave<br>Midland, TX 79701 | OGRID:<br>217955 |
| | Action Number:<br>479471 |
| | Action Type:<br>[C-141] Reclamation Report C-141 (C-141-v-Reclamation) |

**QUESTIONS**

| **Nature and Volume of Release (continued)** | |
|---|---|
| Is this a gas only submission (i.e. only significant Mcf values reported) | **More info needed to determine if this will be treated as a "gas only" report.** |
| Was this a major release as defined by Subsection A of 19.15.29.7 NMAC | *Unavailable.* |
| Reasons why this would be considered a submission for a notification of a major release | *Unavailable.* |
| *With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.* | |

| **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 | True |
| The impacted area has been secured to protect human health and the environment | True |
| Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices | True |
| All free liquids and recoverable materials have been removed and managed appropriately | True |
| If all the actions described above have not been undertaken, explain why | *Not answered.* |
| *Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.* | |

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.

| | |
|---|---|
| I hereby agree and sign off to the above statement | Name: Christian LLuLL<br>Title: Project Manager<br>Email: christian.llull@tetratech.com<br>Date: 09/12/2024 |

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>COG PRODUCTION, LLC<br>600 W. Illinois Ave<br>Midland, TX 79701 | OGRID:<br>217955 |
| | Action Number:<br>479471 |
| | Action Type:<br>[C-141] Reclamation Report C-141 (C-141-v-Reclamation) |

**QUESTIONS**

| **Site Characterization** | |
|---|---|
| *Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs) | Between 100 and 500 (ft.) |
| What method was used to determine the depth to ground water | NM OSE iWaters Database Search |
| Did this release impact groundwater or surface water | No |
| **What is the minimum distance, between the closest lateral extents of the release and the following surface areas:** | |
| A continuously flowing watercourse or any other significant watercourse | Greater than 5 (mi.) |
| Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) | Between 1 and 5 (mi.) |
| An occupied permanent residence, school, hospital, institution, or church | Greater than 5 (mi.) |
| A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes | Between 1 and 5 (mi.) |
| Any other fresh water well or spring | Greater than 5 (mi.) |
| Incorporated municipal boundaries or a defined municipal fresh water well field | Greater than 5 (mi.) |
| A wetland | Between 1 and 5 (mi.) |
| A subsurface mine | Greater than 5 (mi.) |
| An (non-karst) unstable area | Greater than 5 (mi.) |
| Categorize the risk of this well / site being in a karst geology | Low |
| A 100-year floodplain | Greater than 5 (mi.) |
| Did the release impact areas not on an exploration, development, production, or storage site | No |

| **Remediation Plan** | |
|---|---|
| *Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | |
| Requesting a remediation plan approval with this submission | Yes |
| *Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.* | |
| Have the lateral and vertical extents of contamination been fully delineated | Yes |
| Was this release entirely contained within a lined containment area | No |
| **Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.) | |
| Chloride (EPA 300.0 or SM4500 Cl B) | 12800 |
| TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M) | 227 |
| GRO+DRO (EPA SW-846 Method 8015M) | 181 |
| BTEX (EPA SW-846 Method 8021B or 8260B) | 0 |
| Benzene (EPA SW-846 Method 8021B or 8260B) | 0 |
| | |
| *Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.* | |
| On what estimated date will the remediation commence | 12/09/2024 |
| On what date will (or did) the final sampling or liner inspection occur | 12/11/2024 |
| On what date will (or was) the remediation complete(d) | 12/13/2024 |
| What is the estimated surface area (in square feet) that will be reclaimed | 2383 |
| What is the estimated volume (in cubic yards) that will be reclaimed | 332 |
| What is the estimated surface area (in square feet) that will be remediated | 2383 |
| What is the estimated volume (in cubic yards) that will be remediated | 332 |
| *These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.* | |
| *The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.* | |

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



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>COG PRODUCTION, LLC<br>600 W. Illinois Ave<br>Midland, TX 79701 | OGRID:<br>217955 |
| | Action Number:<br>479471 |
| | Action Type:<br>[C-141] Reclamation Report C-141 (C-141-v-Reclamation) |

**QUESTIONS**

| **Remediation Plan (continued)** | |
|---|---|
| *Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | |
| **This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:** | |
| *(Select all answers below that apply.)* | |
| (Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.) | Yes |
| Which OCD approved facility will be used for **off-site** disposal | HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510] |
| **OR** which OCD approved well (API) will be used for **off-site** disposal | *Not answered.* |
| **OR** is the **off-site** disposal site, to be used, out-of-state | No |
| **OR** is the **off-site** disposal site, to be used, an NMED facility | No |
| (Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms) | No |
| (In Situ) Soil Vapor Extraction | No |
| (In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.) | No |
| (In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.) | No |
| (In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.) | No |
| Ground Water Abatement pursuant to 19.15.30 NMAC | No |
| OTHER (Non-listed remedial process) | No |
| *Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.* | |
| | |
| 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. | |
| I hereby agree and sign off to the above statement | Name: Christian LLuLL<br>Title: Project Manager<br>Email: christian.llull@tetratech.com<br>Date: 09/12/2024 |
| *The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.* | |

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## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>COG PRODUCTION, LLC<br>600 W. Illinois Ave<br>Midland, TX 79701 | OGRID:<br>217955 |
| | Action Number:<br>479471 |
| | Action Type:<br>[C-141] Reclamation Report C-141 (C-141-v-Reclamation) |

**QUESTIONS**

| **Deferral Requests Only**<br>*Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.* | |
|---|---|
| Requesting a deferral of the remediation closure due date with the approval of this submission | No |

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## QUESTIONS (continued)

| | |
|---|---|
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| | Action Number:<br>479471 |
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**QUESTIONS**

| **Sampling Event Information** | |
|---|---|
| Last sampling notification (C-141N) recorded | **463785** |
| Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC | **05/21/2025** |
| What was the (estimated) number of samples that were to be gathered | **7** |
| What was the sampling surface area in square feet | **450** |

| **Remediation Closure Request** | |
|---|---|
| *Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.* | |
| Requesting a remediation closure approval with this submission | Yes |
| Have the lateral and vertical extents of contamination been fully delineated | **Yes** |
| Was this release entirely contained within a lined containment area | **No** |
| All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion | Yes |
| What was the total surface area (in square feet) remediated | 399 |
| What was the total volume (cubic yards) remediated | 104 |
| All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene | Yes |
| What was the total surface area (in square feet) reclaimed | 399 |
| What was the total volume (in cubic yards) reclaimed | 104 |
| Summarize any additional remediation activities not included by answers (above) | Following excavation, confirmation floor and sidewall samples were collected from the excavated area and submitted for laboratory analysis to verify efficacy of remediation activities. Per the NMOCD conditions of approval, confirmation samples were collected such that each sample (sidewall and floor) was representative of no more than 200 square feet of excavated area. The square footage of the additional area remediated was approximately 399 sf. A total of three (3) confirmation floor sample locations and four (4) confirmation sidewall sample locations were used for laboratory analysis during remedial activities. Confirmation sidewall sample locations were categorized with the cardinal direction (N, E, S, W) followed by SW-#. Confirmation floor sample locations were labeled with FS-#. |
| *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 (in .pdf format) 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.* | |

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.

| | |
|---|---|
| I hereby agree and sign off to the above statement | Name: Christian LLuLL<br>Title: Project Manager<br>Email: christian.llull@tetratech.com<br>Date: 06/26/2025 |

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## QUESTIONS (continued)

| | |
|---|---|
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| | Action Number:<br>479471 |
| | Action Type:<br>[C-141] Reclamation Report C-141 (C-141-v-Reclamation) |

**QUESTIONS**

| **Reclamation Report** | |
|---|---|
| *Only answer the questions in this group if all reclamation steps have been completed.* | |
| Requesting a reclamation approval with this submission | Yes |
| What was the total reclamation surface area (in square feet) for this site | 399 |
| What was the total volume of replacement material (in cubic yards) for this site | 104 |
| *Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.* | |
| Is the soil top layer complete and is it suitable material to establish vegetation | Yes |
| On what (estimated) date will (or was) the reseeding commence(d) | 05/23/2025 |
| Summarize any additional reclamation activities not included by answers (above) | material to pre-release grade. In accordance with 19.15.29.12 NMAC, the reclaimed area contained a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by SM4500Cl-B. The soil cover included a top layer consisting of one foot of suitable material to establish vegetation at the site. The backfilled areas in the pasture were seeded following backfilling, to aid in revegetation. Based on the soils of the site, the BLM Seed Mix #2 was used for seeding and was planted in the amount specified in the pounds pure live seed (PLS) per acre. One (1) representative 5-point composite sample was collected from the backfill material used for the reclamation of the project site. |
| *The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeding plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.* | |
| | |
| 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. | |
| I hereby agree and sign off to the above statement | Name: Christian LLuLL<br>Title: Project Manager<br>Email: christian.llull@tetratech.com<br>Date: 06/26/2025 |

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## QUESTIONS (continued)

| | |
|---|---|
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**QUESTIONS**

| **Revegetation Report** | |
|---|---|
| *Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.* | |
| Requesting a restoration complete approval with this submission | No |
| *Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.* | |

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## CONDITIONS

| | |
|---|---|
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**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| scwells | None | 6/27/2025 |