

SITE INFORMATION

Report Type: Addendum Report 1RP5627 NDHR1921448574

General Site Information:

| | | | | | |
|------------------------------------|----------------------|---------|-------|-----------|--|
| Site: | Windward Federal #2H | | | | |
| Company: | COG Operating, LLC | | | | |
| Section, Township and Range | Unit I | Sec. 12 | T 24S | R 31E | |
| Lease Number: | | | | | |
| County: | Lea County | | | | |
| GPS: | 32.23074 | | | -103.7233 | |
| Surface Owner: | Federal | | | | |

Release Data:

| | |
|---------------------------------|----------------|
| Date Released: | 7/10/2019 |
| Type Release: | Produced Water |
| Source of Contamination: | Flowline |
| Fluid Released: | 30 bbl water |
| Fluids Recovered: | 0 bbls water |

Official Communication:

| | | | |
|----------------------|--|--|--|
| Name: | Ike Tavarez | | Clair Gonzales |
| Company: | COG Operating, LLC | | Tetra Tech |
| Address: | One Concho Center | | 901 West Wall Street |
| | 600 W. Illinois Ave. | | Suite 100 |
| City: | Midland Texas, 79701 | | Midland, Texas |
| Phone number: | (432) 686-3023 | | 432-687-8634 |
| Fax: | (432) 684-7137 | | |
| Email: | itavarez@concho.com | | clair.gonzales@tetrattech.com |

Site Characterization

| | |
|------------------------------|--------------------|
| Depth to Groundwater: | 160' Below Surface |
| Karst Potential: | Low |

Recommended Remedial Action Levels (RRALs)

| Benzene | Total BTEX | TPH (GRO+DRO) | TPH (GRO+DRO+MRO) | Chlorides |
|----------|------------|---------------|-------------------|--------------|
| 10 mg/kg | 50 mg/kg | 1000 mg/kg | 2,500 mg/kg | 10,000 mg/kg |



March 23, 2021

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

**Re: Addendum – Closure Report
Windward Federal #2H, 1RP-5627, NDHR1921448574
COG Operating, LLC
Unit I, Section 12, Township 24 South, Range 31 East Lea
County, New Mexico.**

To whom it may concern:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating, LLC (COG) to evaluate a release that occurred at the Windward Federal #2H. The release footprint is located in the Public Land Survey System (PLSS) Unit I, Section 12, Township 24 South, Range 31 East, Lea County, New Mexico (Site). The spill site coordinates are 32.23074°, -103.72330°. The site location is shown on Figures 1 and 2.

BACKGROUND INFORMATION

According to the State of New Mexico C-141 Initial Report, the leak was discovered on July 10, 2019 due to a ruptured flowline. The release consisted of approximately 30 barrels (bbls.) of produced water affecting the pasture area measuring approximately 205' x 100'. No produced water was recovered. The initial C-141 Form is included in Appendix A.

PREVIOUS CLOSURE REPORT

Tetra Tech previously submitted a closure report, dated July 7, 2020. The closure report included the description of the several site assessments that Tetra Tech performed from October 15, 2019 to April 9, 2020. During the site assessments, Tetra Tech advanced, sampled and monitored seven (7) auger holes (AH-1 through AH-7) to depths ranging from 2-2.5' to 6-6.5' below ground surface. During the multiple soil sampling of the release footprint, all analyzed samples showed benzene, total BTEX, and TPH concentrations below the laboratory reporting limits. However, some sample locations exceeded the RRAL concentrations for chloride in the upper four (4) ft.

Based on the area having a heavy rainfall events, Tetra Tech performed monitoring during 2019 and 2020 of the sample locations which exceeded the RRAL for chloride evidencing that the rain significantly helped dilute or help migrate the chloride concentrations during those events. Finally, after the multiple sampling events, one (1) sample location (AH-3) was still showing high concentrations of chloride, therefore Tetra Tech personnel were onsite June 25, 2020, to supervise the remediation activities and remediate the site using a hydro-vac due to all the lines in the area. The area of auger hole (AH-3) was excavated to depths a of 2 ft. bgs. and bottom hole and confirmation samples (sidewall) were collected. All confirmation sample showed benzene, total BTEX, chloride, or TPH concentrations

Tetra Tech

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Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com



below the RRALs. Once the reclamation activities were completed, the excavated areas were backfilled with clean material to surface grade. Approximately 8 cubic yards of material was hauled for proper disposal.

On February 15, 2021, COG received the denial from the OCD of the submitted closure request C-141 incident # nDHR1921448574 for the following reason:

- a) The depth to groundwater has not been determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than 0.5 mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. The responsible party may choose to remediate to the most stringent levels listed in Table 1 in lieu of drilling to determine the depth to groundwater.
- b) Horizontal delineation has not been completed. The values for determination of horizontal impact are derived by either “background” value as determined appropriate to Rule 29, or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less. This is especially important for “on-pad” releases to ensure the release did not extend to the “off-pad”/pasture area. A visual footprint on the surface is not sufficient to assess the horizontal extent of the release. Lab data must be provided as evidence of delineation efforts.
- c) The surface and vertical samples of AH1,AH2,& AH3 exceeded 600 mg/kg chloride, thus requiring additional samples (horizontal delineation samples will need to be tested for all constituents in Table I Closure Criteria) beyond these points and spill must be fully delineated.
- d) AH6 & AH7 were only sampled to a depth of 2.5ft bgm and indicated high levels of contaminant above closure criteria, thus requiring additional samples (vertical and horizontal delineation samples will need to be tested for all constituents in Table I Closure Criteria) beyond these points and spill must be fully delineated.
- e) All areas disturbed by remediation/closure must meet reclamation requirements per 19.15.29.13 NMAC.

SITE CHARACTERIZATION

A Site characterization was performed for the site, and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. Additionally, the site is located in a low karst potential area.

No water wells were listed within Section 12 on the New Mexico Office of the State Engineer’s (NMOSE) database, the Geology and Groundwater Resources of Eddy County (Report 3), or the USGS National Water Information Database. The nearest well is listed in Township 24 South, Range 31 East, Section 2, on the USGS National Water Information Database website, approximately 1.96 miles Northwest of the Site, and has a reported depth to groundwater of 160’ below surface. The groundwater data is shown in Appendix B.

On August 5, 2020, Scarborough Drilling, Inc was onsite to drill a groundwater determination bore to 55’ below ground surface, and within a ½ mile radius of the location. The bore was left open for 72 hours and tagged with a water level meter. No water was detected at 55’ below surface. The



coordinates for the groundwater determination bore are 32.233386 -103.719410. See Appendix B for the driller's log.

REGULATORY

A risk-based evaluation was performed for the site following the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based on the site characterization, the proposed RRAL for TPH is 2,500 mg/kg (GRO + DRO + MRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 10,000 mg/kg.

ADDITIONAL SITE ASSESSMENT

As requested by the NMOCD, Tetra Tech returned to the site on March 12, 2021, to perform further soil investigation and re-sample the areas of auger holes (AH-6 and AH-7) and advanced horizontal samples. The two (2) auger holes were advanced from top to 5 feet (ft.) below ground surface (bgs.), and nine (9) horizontal samples were advanced to a depth from top to 1-foot bgs. In addition, a total of eighteen (18) samples were collected from the two (2) auger holes and the horizontals and submitted to the laboratory for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The sample locations are shown on Figure 3. Photographic documentation is included.

Referring to Table 1, the sample locations (AH-6 and AH-7) showed chloride concentrations above the 600 mg/kg threshold at the upper four (4) ft. In addition, all horizontal samples showed chlorides/TPH/BTEX concentrations below the reclamation standards. Therefore, the release footprint has been successfully delineated.

PROPOSED WORK PLAN

Based on the laboratory results, the chloride concentrations detected, COG proposes to hydroexcavate the areas around the sample locations (AH-6 and AH-7) as shown on Figure 4 and highlighted (green) on Table 1. The area of AH-6 and AH-7 will be excavated to a depth of 4 ft. below ground surface and backfilled with clean material to grade. In addition, while performing the site investigation it appears that there have been some channeling of the release causing limited areas of impact.

Sampling Plan and Backfilling

Five-point composite bottom and sidewall confirmation samples will be collected to ensure proper removal of the impacted areas. Once completed, the excavated areas will then be backfilled with clean material to surface grade. All the excavated material will be transported offsite for proper disposal. COG estimates approximately 34 cubic yards will be excavated and will be implemented within ninety (90) days of the work plan being approved.



Safety Concerns

The release migrated along a pipeline right-of-way impacting the areas along flowlines, DCP line and Mequite water line. The proposed excavation depths may not be reached due to wall cave-ins and safety concerns for onsite personnel. Also, impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safety concerns for onsite personnel. As such, COG will excavate the impacted soils to the maximum extent practicable.

CONCLUSION

Upon completion, a final report detailing the remediation activities will be submitted to the NMOCD. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559.

Respectfully submitted,
TETRA TECH

A handwritten signature in blue ink that reads 'Clair Gonzales'.

Clair Gonzales, P.G.
Senior Project Manager
Tetra Tech, Inc.

Figures



 SITE LOCATION



0 10,416.5 20,833

Approximate Scale in Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



STATE LOCATOR MAP

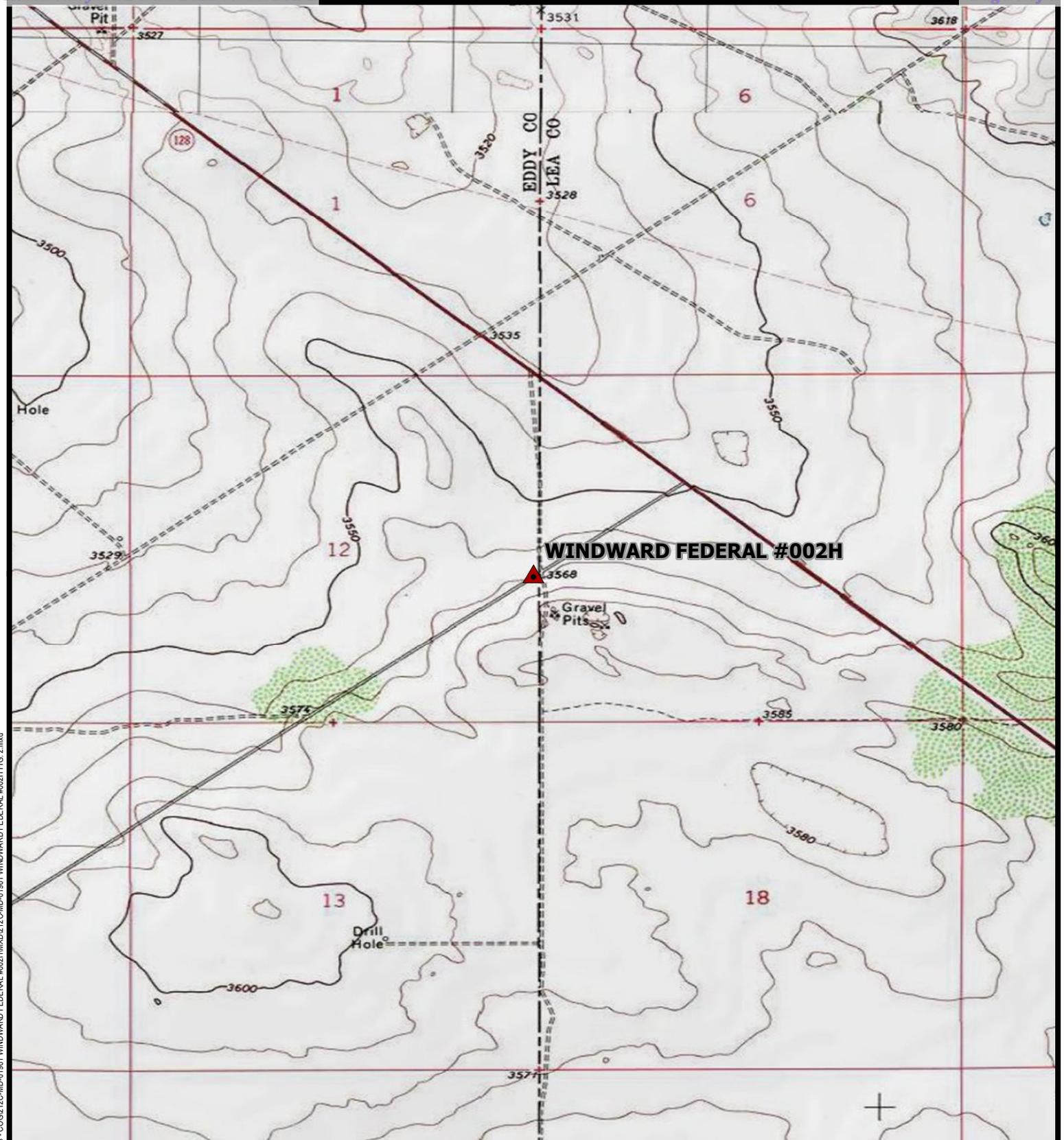
OVERVIEW MAP
 WINDWARD FEDERAL #002H
 Property Located at coordinates 32.23074°,-103.72330°
 LEA COUNTY, NEW MEXICO



Project #:
 212C-MD-01961
 Date: 12-16-2019

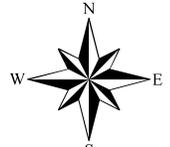
FIGURE
 1

Document Path: H:\GIS\CONCHO RESOURCES - COG\12C-MD-01961 WINDWARD FEDERAL #002H\MD\212C-MD-01961 WINDWARD FEDERAL #002H FIG. 1.mxd



Date: 12/16/2019 Document Path: H:\GIS\CONCHO RESOURCES - COG\212C-MD-01961\WINDWARD FEDERAL #002H\X0212C-MD-01961\WINDWARD FEDERAL #002H FIG. 2.mxd

 SITE LOCATION



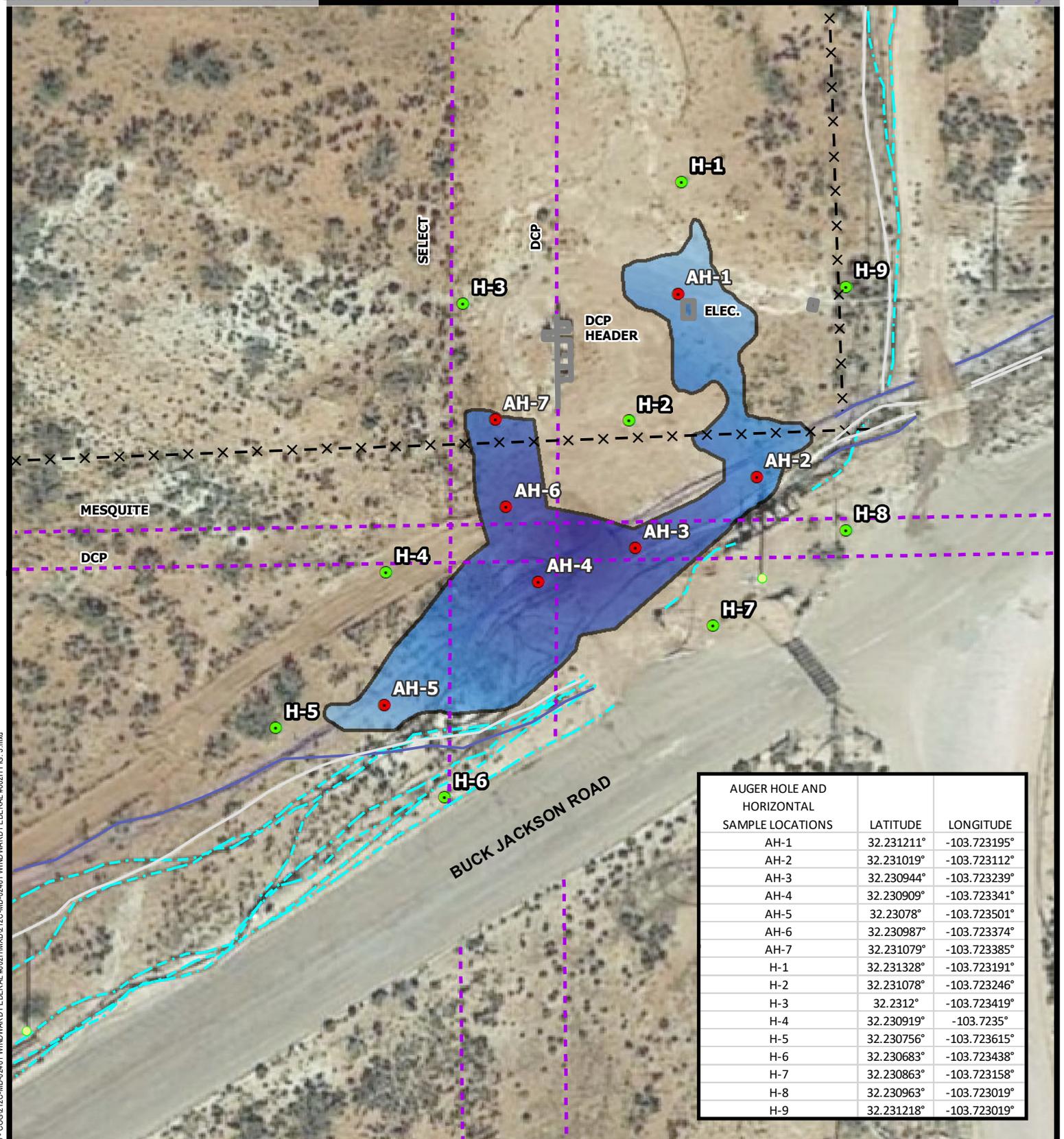
0 1,000 2,000
 Approximate Scale in Feet

TOPOGRAPHIC MAP
 WINDWARD FEDERAL #002H
 Property Located at coordinates 32.23074°,-103.72330°
 LEA COUNTY, NEW MEXICO



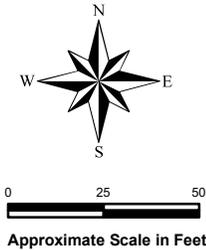
Project #:
 212C-MD-01961
 Date: 12-16-2019

FIGURE
 2



| AUGER HOLE AND HORIZONTAL SAMPLE LOCATIONS | LATITUDE | LONGITUDE |
|--|------------|--------------|
| AH-1 | 32.231211° | -103.723195° |
| AH-2 | 32.231019° | -103.723112° |
| AH-3 | 32.230944° | -103.723239° |
| AH-4 | 32.230909° | -103.723341° |
| AH-5 | 32.23078° | -103.723501° |
| AH-6 | 32.230987° | -103.723374° |
| AH-7 | 32.231079° | -103.723385° |
| H-1 | 32.231328° | -103.723191° |
| H-2 | 32.231078° | -103.723246° |
| H-3 | 32.2312° | -103.723419° |
| H-4 | 32.230919° | -103.7235° |
| H-5 | 32.230756° | -103.723615° |
| H-6 | 32.230683° | -103.723438° |
| H-7 | 32.230863° | -103.723158° |
| H-8 | 32.230963° | -103.723019° |
| H-9 | 32.231218° | -103.723019° |

- AUGERHOLE SAMPLE LOCATIONS
- HORIZONTAL SAMPLE LOCATIONS
- POWERPOLE
- EQUIPMENT
- FENCE
- FLOWLINES
- BURIED PIPELINE
- AFFECTED SPILL AREA

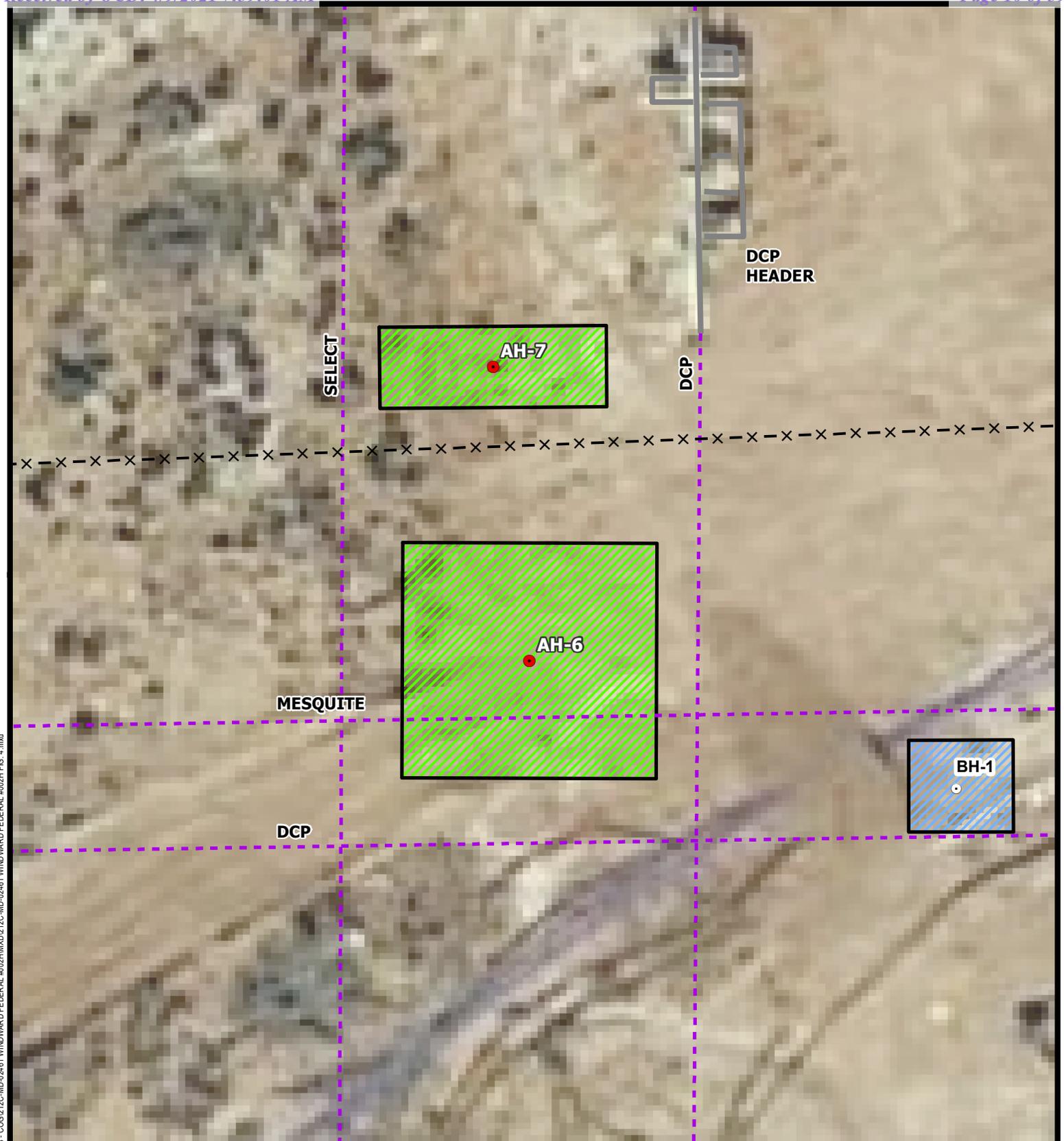


SPILL ASSESSMENT MAP
WINDWARD FEDERAL #002H
 Property Located at coordinates 32.23074°,-103.72330°
 LEA COUNTY, NEW MEXICO



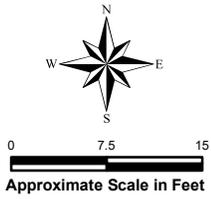
Project #:
212C-MD-02461
Date: 03-22-2021

FIGURE
3



Date: 3/23/2021 Document Path: C:\GIS\CONCHO RESOURCES - COG\212C-MD-02461\WINDWARD FEDERAL #002H\FEDERAL #002H FIG. 4.mxd

- AUGERHOLE SAMPLE LOCATIONS
- BH** BOTTOMHOLE
- BH-1 (10' x10')
- FENCE
- BURIED PIPELINE
- EQUIPMENT
- 2.0' HYDROVAC EXCAVATION DEPTH AREA
- 4.0' HYDROVAC EXCAVATION DEPTH AREA



EXCAVATION AREA & DEPTH MAP
 WINDWARD FEDERAL #002H
 Property Located at coordinates 32.23074°,-103.72330°
 LEA COUNTY, NEW MEXICO

Project #:
212C-MD-02461
Date: 03-22-2021

FIGURE
4

Tables

**Table 1
Concho
Windward Federal 2H Battery
Lea County, New Mexico**

| Sample ID | Sample Date | Sample Depth (ft) | Soil Status | | TPH (mg/kg) | | | | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|-------------|-------------|-------------------|-------------|---------|-------------|-------|-------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
| | | | In-Situ | Removed | GRO | DRO | ORO | Total | | | | | | |
| AH-6 | 3/12/2021 | 0-1 | X | | - | - | - | - | - | - | - | - | - | 2,830 |
| | " | 1-2 | X | | - | - | - | - | - | - | - | - | - | 5,290 |
| | " | 2-3 | X | | - | - | - | - | - | - | - | - | - | 8,740 |
| | " | 3-4 | X | | - | - | - | - | - | - | - | - | - | 5,000 |
| | " | 4-5 | X | | - | - | - | - | - | - | - | - | - | 4,670 |
| AH-7 | 3/12/2021 | 0-1 | X | | - | - | - | - | - | - | - | - | - | 265 |
| | " | 1-2 | X | | - | - | - | - | - | - | - | - | - | 227 |
| | " | 2-3 | X | | - | - | - | - | - | - | - | - | - | 864 |
| | " | 4-5 | X | | - | - | - | - | - | - | - | - | - | 707 |
| H-1 | 3/12/2021 | 0-1 | X | | <49.9 | <49.9 | <49.9 | <49.9 | <0.00200 | <0.00200 | <0.00200 | <0.00200 | <0.00200 | 13.5 |
| H-2 | 3/12/2021 | 0-1 | X | | <49.8 | <49.8 | <49.8 | <49.8 | <0.00200 | <0.00200 | <0.00200 | <0.00200 | <0.00200 | 202 |
| H-3 | 3/12/2021 | 0-1 | X | | <50.0 | <50.0 | <50.0 | <50.0 | <0.00200 | <0.00200 | <0.00200 | <0.00200 | <0.00200 | 7.05 |
| H-4 | 3/12/2021 | 0-1 | X | | <50.0 | <50.0 | <50.0 | <50.0 | <0.00198 | <0.00198 | <0.00198 | <0.00198 | <0.00198 | 79.4 |
| H-5 | 3/12/2021 | 0-1 | X | | <50.1 | <50.1 | <50.1 | <50.1 | <0.00200 | <0.00200 | <0.00200 | <0.00200 | <0.00200 | 11.4 |
| H-6 | 3/12/2021 | 0-1 | X | | <49.9 | <49.9 | <49.9 | <49.9 | <0.00198 | <0.00198 | <0.00198 | <0.00198 | <0.00198 | 15.1 |
| H-7 | 3/12/2021 | 0-1 | X | | <50.0 | <50.0 | <50.0 | <50.0 | <0.00201 | <0.00201 | <0.00201 | <0.00201 | <0.00201 | 316 |
| H-8 | 3/12/2021 | 0-1 | X | | <50.1 | <50.1 | <50.1 | <50.1 | <0.00201 | <0.00201 | <0.00201 | <0.00201 | <0.00201 | 6.11 |
| H-9 | 3/12/2021 | 0-1 | X | | <50.1 | <50.1 | <50.1 | <50.1 | <0.00200 | <0.00200 | <0.00200 | <0.00200 | <0.00200 | 111 |

(-)

Not Analyzed



Exceeding RRALs

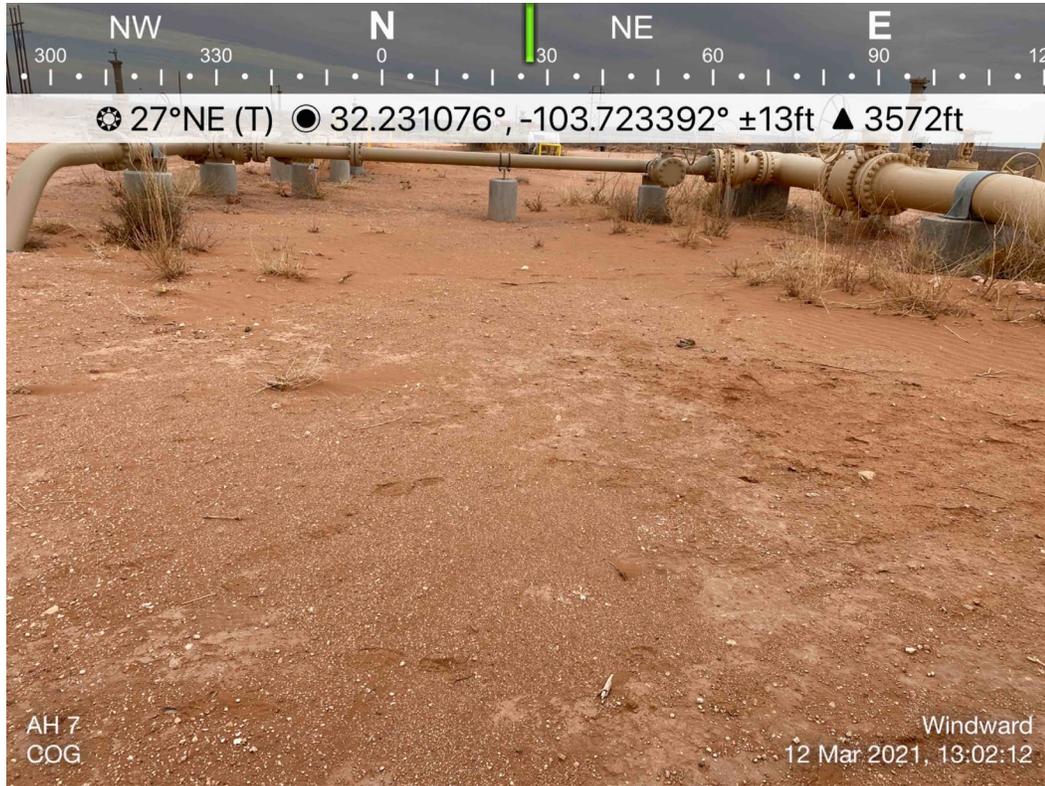
Photos

Concho Windward Federal #002H

Lea County, New Mexico



TETRA TECH



View North of the release area (AH-7)



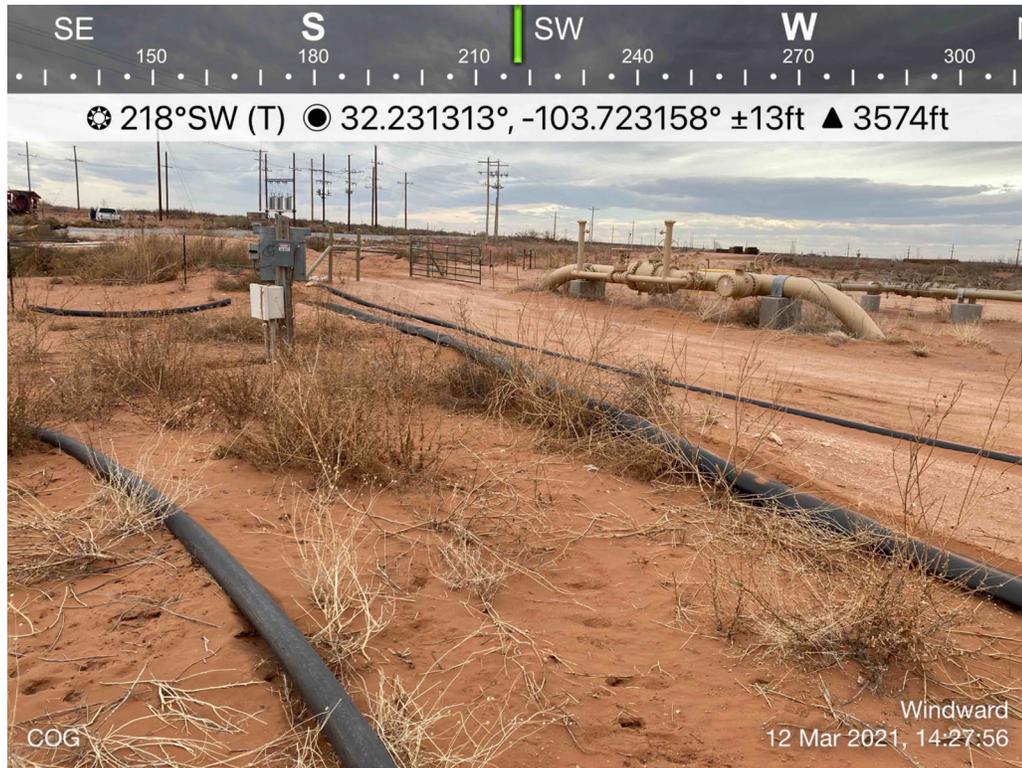
View South of the release area (AH—6)

Concho Windward Federal #002H

Lea County, New Mexico



TETRA TECH



View South-Southwest of the release area



View South of the release area

Concho Windward Federal #002H

Lea County, New Mexico



TETRA TECH



View Northeast of the release area



View North of the release area

Appendix A

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

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

Release Notification

Responsible Party

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

Location of Release Source

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

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

| Unit Letter | Section | Township | Range | County |
|-------------|---------|----------|-------|--------|
| | | | | |

Surface Owner: State Federal Tribal Private (Name: _____)

Nature and Volume of Release

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

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

Cause of Release

State of New Mexico
Oil Conservation Division

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

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

Initial Response

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

| |
|--|
| <input type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately. |
| If all the actions described above have <u>not</u> been undertaken, explain why: |
| Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation. |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. |
| Printed Name: _____ Title: _____ Signature: <u>Delann Opreat</u> Date: _____ email: _____ Telephone: _____ |
| <u>OCD Only</u> Received by: _____ Date: _____ |

***** LIQUID SPILLS - VOLUME CALCULATIONS *****

Location of spill: Windward Federal #002H

Date of Spill: 10-Jul-2019

If the leak/spill is associated with production equipment, i.e. - wellhead, stuffing box, flowline, tank battery, production vessel, transfer pump, or storage tank place an "X" here:

Input Data:

If spill volumes from measurement, i.e. metering, tank volumes, etc. are known enter the volumes here: OIL: 0.0 BBL WATER: 0.0 BBL

If "known" spill volumes are given, input data for the following "Area Calculations" is optional. The above will override the calculated volumes.

| Total Area Calculations | | | | | | Standing Liquid Calculations | | | | | |
|-------------------------|-------|---------|----------------|---------|----------------------|------------------------------|--------|--------------|---------|--|--|
| Total Surface Area | width | length | wet soil depth | oil (%) | Standing Liquid Area | width | length | liquid depth | oil (%) | | |
| Rectangle Area #1 | 34 ft | 95 ft | X 1.25 in | 0% | Rectangle Area #1 | 0 ft | X 0 ft | X 0 in | 0% | | |
| Rectangle Area #2 | 16 ft | X 36 ft | X 1.50 in | 0% | Rectangle Area #2 | 0 ft | X 0 ft | X 0 in | 0% | | |
| Rectangle Area #3 | 32 ft | X 39 ft | X 1.50 in | 0% | Rectangle Area #3 | 0 ft | X 0 ft | X 0 in | 0% | | |
| Rectangle Area #4 | 55 ft | X 90 ft | X 1.50 in | 0% | Rectangle Area #4 | 0 ft | X 0 ft | X 0 in | 0% | | |
| Rectangle Area #5 | 0 ft | X 0 ft | X 0 in | 0% | Rectangle Area #5 | 0 ft | X 0 ft | X 0 in | 0% | | |
| Rectangle Area #6 | 0 ft | X 0 ft | X 0 in | 0% | Rectangle Area #6 | 0 ft | X 0 ft | X 0 in | 0% | | |
| Rectangle Area #7 | 0 ft | X 0 ft | X 0 in | 0% | Rectangle Area #7 | 0 ft | X 0 ft | X 0 in | 0% | | |
| Rectangle Area #8 | 0 ft | X 0 ft | X 0 in | 0% | Rectangle Area #8 | 0 ft | X 0 ft | X 0 in | 0% | | |

okay

production system leak - DAILY PRODUCTION DATA REQUIRED

Average Daily Production: Oil 0 BBL Water 0 BBL 0 Gas (MCFD)

Total Hydrocarbon Content in gas: 0% (percentage)

Did leak occur before the separator?: YES N/A (place an "X")

H2S Content in Produced Gas: 0 PPM

H2S Content in Tank Vapors: 0 PPM

Amount of Free Liquid Recovered: 0 BBL okay

Percentage of Oil in Free Liquid Recovered: 0% (percentage)

Liquid holding factor *: 0.14 gal per gal

Use the following when the spill wets the grains of the soil.

Use the following when the liquid completely fills the pore space of the soil:

- * Sand = 0.08 gallon (gal.) liquid per gal. volume of soil.
- * Gravelly (caliche) loam = 0.14 gal. liquid per gal. volume of soil.
- * Sandy clay loam soil = 0.14 gal liquid per gal. volume of soil.
- * Clay loam = 0.16 gal. liquid per gal. volume of soil.

- Occurs when the spill soaked soil is contained by barriers, natural (or not).
- * Clay loam = 0.20 gal. liquid per gal. volume of soil.
- * Gravelly (caliche) loam = 0.25 gal. liquid per gal. volume of soil.
- * Sandy loam = 0.5 gal. liquid per gal. volume of soil.

Total Solid/Liquid Volume: **10,004 sq. ft.** **1,183 cu. ft.** **cu. ft.** Total Free Liquid Volume: **sq. ft.** **cu. ft.** **cu. ft.**

Estimated Volumes Spilled

Liquid in Soil: **H2O 29.5 BBL OIL 0.0 BBL**
 Free Liquid: **0.0 BBL 0.0 BBL**
 Totals: **29.5 BBL 0.0 BBL**

Estimated Production Volumes Lost

Estimated Production Spilled: **H2O 0.0 BBL OIL 0.0 BBL**

Estimated Surface Damage

Surface Area: **10,004 sq. ft.**
 Surface Area: **.2297 acre**

Recovered Volumes

Estimated oil recovered: **BBL check - okay**
 Estimated water recovered: **BBL check - okay**

Estimated Weights, and Volumes

Saturated Soil = **132,519 lbs 1,183 cu. ft. 44 cu. yds.**
 Total Liquid = **30 BBL 1,239 gallon 10,309 lbs**

Air Emission from flowline leaks:

Volume of oil spill: - BBL
 Separator gas calculated: - MCF
 Separator gas released: - MCF
 Gas released from oil: - lb
 H2S released: - lb
 Total HC gas released: - lb
 Total HC gas released: - MCF

Air Emission of Reporting Requirements:

New Mexico Texas
 HC gas release reportable? **NO NO**
 H2S release reportable? **NO NO**

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

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

| | |
|----------------|--|
| 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: 04/09/2021

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Appendix B

**Water Well Data
Average Depth to Groundwater (ft)
Windward Federal #2H
Lea County, New Mexico**

23 South 30 East

| | | | | | |
|-----|----|----|-----|-----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 110 | | | | 250 | |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | | 440 | | |

23 South 31 East

| | | | | | |
|-----|-----|-----|----|-----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 85 | 354 | 168 | | | |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 140 | | | | | |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | | | 430 | |

23 South 32 East

| | | | | | |
|----|----|-----|----|-----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| | | | | | |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| | | 400 | | | |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | | | 478 | |

24 South 30 East

| | | | | | |
|-----|-----|----|----|-----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| | | | | | |
| 7 | 8 | 9 | 10 | 11 | 12 |
| | 186 | | | | |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 231 | 21 | 22 | 23 | 24 |
| 150 | | | | 400 | |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |

24 South 31 East

| | | | | | |
|----|----|----|----|-----|---------|
| 6 | 5 | 4 | 3 | 2 | 1 |
| | | | | 160 | |
| 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | | 12 Site |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |

24 South 32 East

| | | | | | |
|----|----|----|-----|-----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| | | | 454 | | |
| 7 | 8 | 9 | 10 | 11 | 12 |
| | | | 34 | | |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | | | 290 | |

25 South 30 East

| | | | | | |
|----|-----|-----|----|-----|-----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| | | | | 295 | |
| 7 | 264 | 8 | 9 | 295 | 12 |
| | | | | | 390 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| | | 265 | | | |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | 268 | | | |

25 South 31 East

| | | | | | |
|----|----|-----|----|----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| | | | | | |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| | | 390 | | | |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | 290 | | | |

25 South 32 East

| | | | | | |
|----|----|-----|----|----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| | | | | | |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |
| | | 290 | | | |

- 88** New Mexico State Engineers Well Reports
- 105** USGS Well Reports
- 90** Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
Geology and Groundwater Resources of Eddy County, NM (Report 3)
- 34** NMOCD - Groundwater Data
- 123** Tetra Tech installed temporary wells and field water level
- 143** NMOCD Groundwater map well location

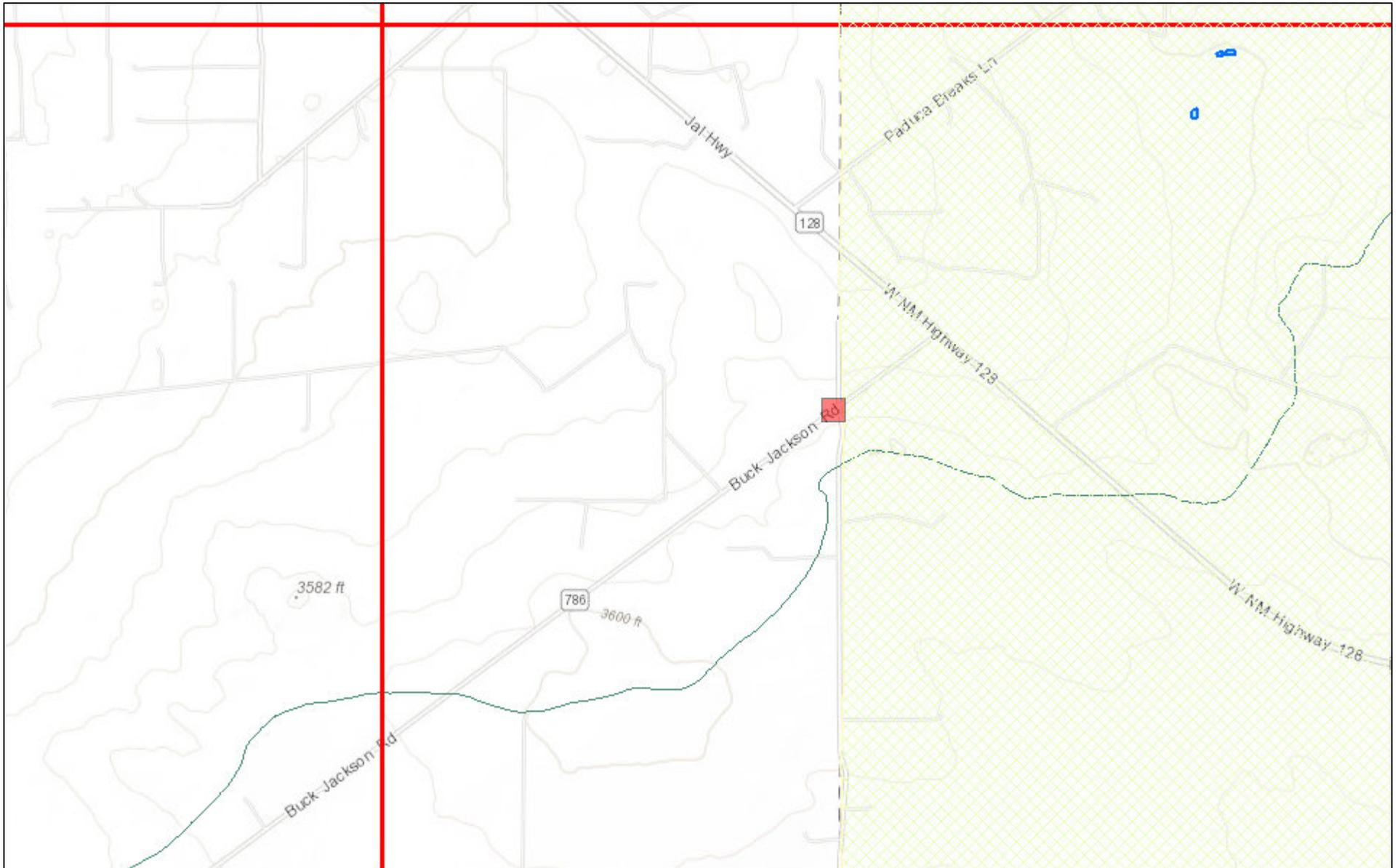


National Water Information System: Mapper



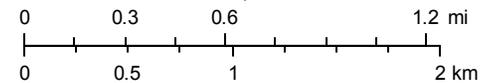
Site Information

New Mexico NFHL Data



July 7, 2020

1:36,112



FEMA
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,

[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

[National Water Information System Web Interface](#)

US S Water Resources

Data Category :

Groundwater eographic rea:
 New Mexico GO

Click to hide News Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#) [RSS icon](#)

Groundwater levels for New Mexico

Click to hide state specific text

Search Results -- 1 sites found

genc code usgs
 site no list
 • 321312103395601

Minimum number of levels 1
[Save file of selected sites](#) to local disk for future upload

US S 21 1210 5601 24S 2 10 44

Lea County, New Mexico
 Latitude 32 13 30.4 , Longitude 103 39 52.7 NAD83
 Land surface elevation 3,589.00 feet above NGVD29
 The depth of the well is 60 feet below land surface.
 This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

| Table of data | | | | | | | | | | | |
|--------------------|-----------|---|-------|---|---|---|---|---|------|---|---|
| Tab-separated data | | | | | | | | | | | |
| Graph of data | | | | | | | | | | | |
| Reselect period | | | | | | | | | | | |
| ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| 1955-06-03 | | D | 31.90 | | | 2 | R | U | | U | A |
| 1981-03-20 | | D | 19.93 | | | 2 | | U | | U | A |
| 1991-05-29 | | D | 39.64 | | | 2 | | U | | U | A |
| 2001-02-27 | | D | 36.58 | | | 2 | | S | | U | A |
| 2010-12-16 | 15:30 MST | m | 33.96 | | | 2 | | S | USGS | S | A |

| | | |
|--------------------------------|---|--|
| Water-level date-time accuracy | m | Date is accurate to the Minute |
| Status | | The reported water-level measurement represents a static level |
| Method of measurement | S | Steel-tape measurement. |
| Measuring agency | | Not determined |
| Source of measurement | S | Measured by personnel of reporting agency. |

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 | Code | POD Sub-basin | County | Q 64 | Q 16 | Q 4 | Sec | Tws | Rng | X | Y | DepthWell | DepthWater | Water Column |
|------------------------------|------|---------------|--------|------|------|-----|-----|-----|--------|---------|--------------------------|--------------------------|------------|--------------|
| C 02258 | | C | ED | 3 | 2 | 26 | 23S | 31E | | 618055 | 3571853* | <input type="checkbox"/> | 662 | |
| C 02348 | | C | ED | 1 | 4 | 3 | 26 | 23S | 31E | 617648 | 3571068 | <input type="checkbox"/> | 700 | 430 270 |
| C 02492 | | CUB | ED | 4 | 4 | 4 | 06 | 23S | 31E | 612056 | 3577320* | <input type="checkbox"/> | 135 | 85 50 |
| C 02492 POD2 | | C | ED | 3 | 2 | 2 | 07 | 23S | 31E | 611767 | 3576996 | <input type="checkbox"/> | 400 | 125 275 |
| C 02664 | | CUB | ED | 3 | 3 | 2 | 05 | 23S | 31E | 613049 | 3578138* | <input type="checkbox"/> | 4291 | 354 3937 |
| C 02725 | | CUB | ED | 1 | 1 | 1 | 05 | 23S | 31E | 612240 | 3578731* | <input type="checkbox"/> | 532 | |
| C 02773 | | CUB | ED | 4 | 1 | 3 | 03 | 23S | 31E | 615668 | 3577762* | <input type="checkbox"/> | 880 | |
| C 02774 | | CUB | ED | 3 | 1 | 3 | 04 | 23S | 31E | 613857 | 3577745* | <input type="checkbox"/> | 1660 | |
| C 02775 | | CUB | ED | 1 | 1 | 1 | 05 | 23S | 31E | 612240 | 3578731* | <input type="checkbox"/> | 529 | |
| C 02776 | | CUB | ED | 2 | 1 | 1 | 05 | 23S | 31E | 612440 | 3578731* | <input type="checkbox"/> | 661 | |
| C 02777 | | CUB | ED | 4 | 4 | 4 | 10 | 23S | 31E | 616974 | 3575662 | <input type="checkbox"/> | 890 | |
| C 02865 | | CUB | ED | 4 | 4 | 4 | 06 | 23S | 31E | 612056 | 3577320* | <input type="checkbox"/> | 174 | |
| C 02954 E PL | | CUB | ED | 3 | 1 | 4 | 20 | 23S | 31E | 613114 | 3572906* | <input type="checkbox"/> | 905 | |
| C 03140 | | CUB | ED | 4 | 2 | 4 | 04 | 23S | 31E | 615266 | 3577758* | <input type="checkbox"/> | 684 | |
| C 03351 | | C | ED | 4 | 1 | 4 | 04 | 23S | 31E | 614917 | 3577861 | <input type="checkbox"/> | 320 | 168 152 |
| C 03520 POD1 | | C | ED | 3 | 1 | 1 | 07 | 23S | 31E | 610733 | 3576905 | <input type="checkbox"/> | 500 | |
| C 03749 POD1 | | CUB | ED | 2 | 2 | 15 | 23S | 31E | 616974 | 3575662 | <input type="checkbox"/> | 865 | 639 226 | |

Average Depth to Water: **00 feet**
 Minimum Depth: **85 feet**
 Maximum Depth: **6 feet**

Record Count: 17

PLSS Search:

Township: 23S Range: 31E

*UTM location was derived from PLSS - see Help

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

10/30/19 :09 AM

WATER COLUMN/ AVERAGE DEPTH
TO WATER

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 | Code | POD Sub-basin | County | Q 6 | Q 4 | Q 1 | Sec | Tws | Rng | X | Y | DepthWell | DepthWater | Water Column |
|------------------------------|------|---------------|--------|-----|-----|-----|-----|-----|-----|--------|----------|--------------------------|------------|--------------|
| C 02405 | | CUB | ED | 4 | 1 | 02 | 24S | 31E | | 617690 | 3568631* | <input type="checkbox"/> | 275 | 160 115 |
| C 02440 | | C | ED | 2 | 3 | 10 | 24S | 31E | | 616103 | 3566599* | <input type="checkbox"/> | 350 | |
| C 02460 | | C | ED | 3 | 02 | 24S | 31E | | | 617496 | 3568022* | <input type="checkbox"/> | 320 | |
| C 02460 POD2 | | C | ED | 3 | 02 | 24S | 31E | | | 617496 | 3568022* | <input type="checkbox"/> | 320 | |
| C 02464 | | C | ED | 3 | 4 | 1 | 02 | 24S | 31E | 617589 | 3568530* | <input type="checkbox"/> | 320 | 205 115 |
| C 02661 | | CUB | ED | 3 | 3 | 1 | 04 | 24S | 31E | 613969 | 3568485* | <input type="checkbox"/> | 708 | |
| C 02783 | | CUB | ED | 3 | 3 | 1 | 04 | 24S | 31E | 613911 | 3568461 | <input type="checkbox"/> | 708 | |
| C 02783 POD2 | | CUB | ED | 3 | 3 | 1 | 04 | 24S | 31E | 613911 | 3568461 | <input type="checkbox"/> | 672 | |
| C 02784 | | C | ED | 4 | 2 | 4 | 04 | 24S | 31E | 613911 | 3568461 | <input type="checkbox"/> | 584 | |
| C 02785 | | CUB | ED | 3 | 3 | 1 | 04 | 24S | 31E | 613969 | 3568485* | <input type="checkbox"/> | 692 | |

Average Depth to Water: **182 feet**

Minimum Depth: **160 feet**

Maximum Depth: **205 feet**

Record Count: 10

PLSS Search:

Township: 24S Range: 31E

*UTM location was derived from PLSS - see Help

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

10/30/19 7:56 AM

WATER COLUMN/ AVERAGE DEPTH
TO WATER

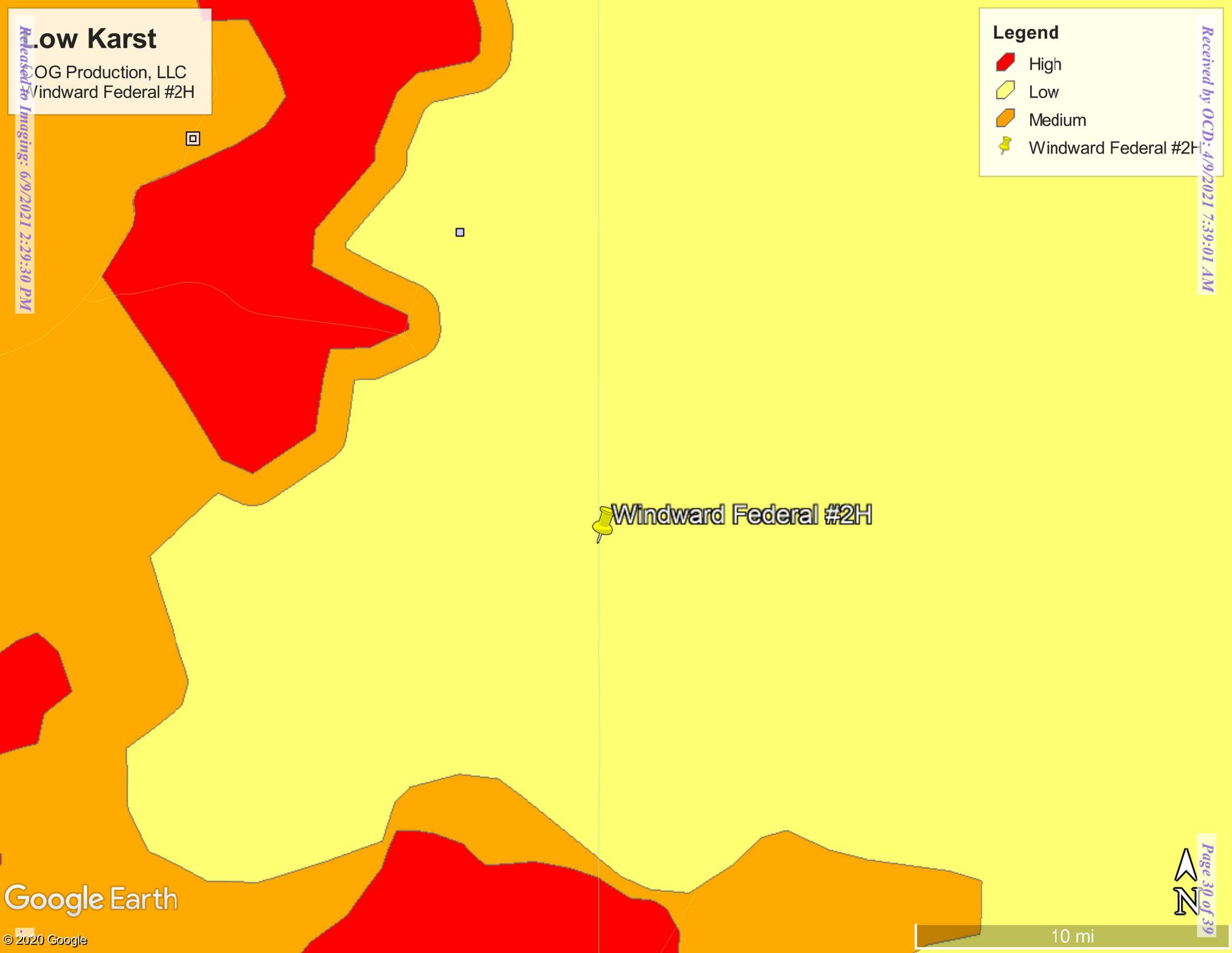
Low Karst
COG Production, LLC
Windward Federal #2H

Released to Imaging: 6/9/2021 2:29:30 PM

Legend

-  High
-  Low
-  Medium
-  Windward Federal #2H

Received by OCD: 4/9/2021 7:39:01 AM



 Windward Federal #2H

SCARBOROUGH DRILLING, INC.

TEST HOLES • WATER WELLS
 P.O. Box 305 - Ph. 806-872-3285 or 872-9349
 LAMESA, TEXAS 79331
 2001 South Hwy. 87

WELL LOG

| From | To | FORMATION |
|------|----|-------------------------------|
| 0 | 4 | Brown Top Soil |
| 4 | 5 | Caliche |
| 5 | 12 | Red Sand |
| 12 | 20 | Red Sand w/ Caliche layers |
| 20 | 30 | Caliche w Red Sand |
| 30 | 55 | Red Shale w/ Caliche |
| | | BH1 |
| | | LOG - Seabiscuit |
| | | Federal Com 2H+4H |
| | | Plugged w/ Hole Plug |
| | | 32.233386 -103.719410 |
| | | |
| | | |
| | | |
| | | |

Date 8-5-20 Driller Luc Seal
GIBBS PRINTING CO., LAMESA, TX

Appendix C



Environment Testing
America

ANALYTICAL REPORT

Job Number: 880-401-1
SDG Number: 212C-MD-02461
Job Description: COG - Windward

For:
Tetra Tech, Inc.
901 W Wall
Ste 100
Midland, TX 79701
Attention: Clair Gonzales

A handwritten signature in black ink that reads "JKRAMER".

Approved for release.
Jessica Kramer
Project Manager
3/19/2021 10:30 AM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
03/19/2021

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins Xenco, Midland
1211 W. Florida Ave, Midland, TX 79701
Tel (432) 704-5440 www.EurofinsUS.com



Client Sample Result Summary

Client: Tetra Tech, Inc.
Project/Site: COG - Windward

Job ID: 880-401-1
SDG: 212C-MD-02461

| | | | | |
|---|------------------|------------------|------------------|------------------|
| Lab Sample ID: 880-401-1 | 880-401-2 | 880-401-3 | 880-401-4 | 880-401-5 |
| Client Sample ID: AH 6 (0'-1') | AH 6 (1'-2') | AH 6 (2'-3') | AH 6 (3'-4') | AH 6 (4'-5') |
| Matrix: Solid | Solid | Solid | Solid | Solid |
| Date Collected: 03/12/2021 13:00 | 03/12/2021 13:30 | 03/12/2021 14:00 | 03/12/2021 14:30 | 03/12/2021 15:00 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| | | | | | | | | | | |
|----------------|-----------------------------------|------|------------------|------|------------------|------|------------------|------|------------------|------|
| | Prepared: | | | | | | | | | |
| | Analyzed: 03/18/2021 14:36 | | 03/18/2021 14:41 | | 03/18/2021 14:56 | | 03/18/2021 15:01 | | 03/18/2021 15:16 | |
| Analyte | Unit/RL: mg/Kg RL | | mg/Kg RL | | mg/Kg RL | | mg/Kg RL | | mg/Kg RL | |
| Chloride | 2830 | 25.1 | 5290 | 49.9 | 8740 | 49.6 | 5000 | 25.2 | 4670 | 25.2 |

Client Sample Result Summary

Client: Tetra Tech, Inc.
 Project/Site: COG - Windward

Job ID: 880-401-1
 SDG: 212C-MD-02461

| | | | | |
|---|------------------|------------------|------------------|------------------|
| Lab Sample ID: 880-401-6 | 880-401-7 | 880-401-8 | 880-401-9 | 880-401-10 |
| Client Sample ID: AH 7 (0'-1') | AH 7 (1'-2') | AH 7 (2'-3') | AH 7 (4'-5') | H1 (0'-1') |
| Matrix: Solid | Solid | Solid | Solid | Solid |
| Date Collected: 03/12/2021 15:30 | 03/12/2021 15:45 | 03/12/2021 16:00 | 03/12/2021 16:15 | 03/12/2021 16:30 |

Method: 8021B - Volatile Organic Compounds (GC)

Prepared: 03/17/2021 15:42
Analyzed: 03/18/2021 04:37

| Analyte | Unit/RL: | RL | RL | RL | RL | mg/Kg | RL |
|---------------------|----------|----|-----|----|-----|------------|---------|
| Benzene | N/A | | N/A | | N/A | <0.00200 U | 0.00200 |
| Ethylbenzene | N/A | | N/A | | N/A | <0.00200 U | 0.00200 |
| Toluene | N/A | | N/A | | N/A | <0.00200 U | 0.00200 |
| Total BTEX | N/A | | N/A | | N/A | <0.00200 U | 0.00200 |
| Xylenes, Total | N/A | | N/A | | N/A | <0.00401 U | 0.00401 |
| m-Xylene & p-Xylene | N/A | | N/A | | N/A | <0.00401 U | 0.00401 |
| o-Xylene | N/A | | N/A | | N/A | <0.00200 U | 0.00200 |

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Prepared: 03/16/2021 14:07
Analyzed: 03/17/2021 23:48

| Analyte | Unit/RL: | RL | RL | RL | RL | mg/Kg | RL |
|--------------------------------------|----------|----|-----|----|-----|---------|------|
| Gasoline Range Organics (GRO)-C6-C10 | N/A | | N/A | | N/A | <49.9 U | 49.9 |
| Diesel Range Organics (Over C10-C28) | N/A | | N/A | | N/A | <49.9 U | 49.9 |
| Oil Range Organics (Over C28-C36) | N/A | | N/A | | N/A | <49.9 U | 49.9 |
| Total TPH | N/A | | N/A | | N/A | <49.9 U | 49.9 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:
Analyzed: 03/18/2021 15:21 03/18/2021 16:03 03/18/2021 16:21 03/18/2021 16:26 03/18/2021 16:48

| Analyte | Unit/RL: | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL |
|----------|----------|------------|------|------------|------|------------|------|---------------|------|-------------|------|
| Chloride | | 265 | 4.99 | 227 | 4.97 | 864 | 4.96 | 707 F1 | 5.04 | 13.5 | 4.98 |

Client Sample Result Summary

Client: Tetra Tech, Inc.
 Project/Site: COG - Windward

Job ID: 880-401-1
 SDG: 212C-MD-02461

| | | | | |
|---|------------------|------------------|------------------|------------------|
| Lab Sample ID: 880-401-11 | 880-401-12 | 880-401-13 | 880-401-14 | 880-401-15 |
| Client Sample ID: H2 (0'-1') | H3 (0'-1') | H4 (0'-1') | H5 (0'-1') | H6 (0'-1') |
| Matrix: Solid | Solid | Solid | Solid | Solid |
| Date Collected: 03/12/2021 16:45 | 03/12/2021 17:15 | 03/12/2021 17:00 | 03/12/2021 17:15 | 03/12/2021 17:30 |

Method: 8021B - Volatile Organic Compounds (GC)

| | | | | |
|-----------------------------------|--------------------------|--------------------|--------------------|--------------------|
| Prepared: 03/16/2021 15:47 | 03/15/2021 13:54 | 03/17/2021 15:42 | 03/15/2021 13:54 | 03/17/2021 15:42 |
| Analyzed: 03/18/2021 18:39 | 03/15/2021 23:41 | 03/18/2021 05:18 | 03/16/2021 00:31 | 03/18/2021 05:38 |
| Analyte | Unit/RL: mg/Kg RL | mg/Kg RL | mg/Kg RL | mg/Kg RL |
| Benzene | <0.00200 U 0.00200 | <0.00200 U 0.00200 | <0.00198 U 0.00198 | <0.00200 U 0.00200 |
| Ethylbenzene | <0.00200 U 0.00200 | <0.00200 U 0.00200 | <0.00198 U 0.00198 | <0.00200 U 0.00200 |
| Toluene | <0.00200 U 0.00200 | <0.00200 U 0.00200 | <0.00198 U 0.00198 | <0.00200 U 0.00200 |
| Total BTEX | <0.00200 U 0.00200 | <0.00200 U 0.00200 | <0.00198 U 0.00198 | <0.00200 U 0.00200 |
| Xylenes, Total | <0.00401 U 0.00401 | <0.00401 U 0.00401 | <0.00396 U 0.00396 | <0.00400 U 0.00400 |
| m-Xylene & p-Xylene | <0.00401 U 0.00401 | <0.00401 U 0.00401 | <0.00396 U 0.00396 | <0.00400 U 0.00400 |
| o-Xylene | <0.00200 U 0.00200 | <0.00200 U 0.00200 | <0.00198 U 0.00198 | <0.00200 U 0.00200 |

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

| | | | | |
|--------------------------------------|--------------------------|------------------|------------------|------------------|
| Prepared: 03/16/2021 14:07 | 03/16/2021 14:07 | 03/16/2021 14:07 | 03/16/2021 14:07 | 03/16/2021 14:07 |
| Analyzed: 03/18/2021 00:09 | 03/18/2021 00:29 | 03/18/2021 00:50 | 03/18/2021 01:11 | 03/18/2021 01:32 |
| Analyte | Unit/RL: mg/Kg RL | mg/Kg RL | mg/Kg RL | mg/Kg RL |
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 U 49.8 | <50.0 U 50.0 | <50.0 U 50.0 | <50.1 U 50.1 |
| Diesel Range Organics (Over C10-C28) | <49.8 U 49.8 | <50.0 U 50.0 | <50.0 U 50.0 | <50.1 U 50.1 |
| Oil Range Organics (Over C28-C36) | <49.8 U 49.8 | <50.0 U 50.0 | <50.0 U 50.0 | <50.1 U 50.1 |
| Total TPH | <49.8 U 49.8 | <50.0 U 50.0 | <50.0 U 50.0 | <50.1 U 50.1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| | | | | |
|-----------------------------------|--------------------------|------------------|------------------|------------------|
| Prepared: | | | | |
| Analyzed: 03/18/2021 16:53 | 03/18/2021 17:13 | 03/18/2021 17:18 | 03/18/2021 17:23 | 03/18/2021 17:29 |
| Analyte | Unit/RL: mg/Kg RL | mg/Kg RL | mg/Kg RL | mg/Kg RL |
| Chloride | 202 4.99 | 7.05 4.99 | 79.4 4.97 | 11.4 5.05 |
| | | | | 15.1 4.95 |

Client: Tetra Tech, Inc.
Project/Site: COG - Windward

Job ID: 880-401-1
SDG: 212C-MD-02461

| | | |
|---|------------------|------------------|
| Lab Sample ID: 880-401-16 | 880-401-17 | 880-401-18 |
| Client Sample ID: H7 (0'-1') | H8 (0'-1') | H9(0'-1') |
| Matrix: Solid | Solid | Solid |
| Date Collected: 03/12/2021 17:45 | 03/12/2021 18:00 | 03/12/2021 18:15 |

Method: 8021B - Volatile Organic Compounds (GC)

| | | |
|-----------------------------------|------------------|------------------|
| Prepared: 03/17/2021 15:42 | 03/15/2021 13:54 | 03/17/2021 15:42 |
| Analyzed: 03/18/2021 06:19 | 03/16/2021 01:47 | 03/18/2021 06:40 |

| Analyte | Unit/RL: | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL |
|---------------------|-----------------|------------|---------|------------|---------|------------|---------|
| Benzene | | <0.00201 U | 0.00201 | <0.00201 U | 0.00201 | <0.00200 U | 0.00200 |
| Ethylbenzene | | <0.00201 U | 0.00201 | <0.00201 U | 0.00201 | <0.00200 U | 0.00200 |
| Toluene | | <0.00201 U | 0.00201 | <0.00201 U | 0.00201 | <0.00200 U | 0.00200 |
| Total BTEX | | <0.00201 U | 0.00201 | <0.00201 U | 0.00201 | <0.00200 U | 0.00200 |
| Xylenes, Total | | <0.00402 U | 0.00402 | <0.00402 U | 0.00402 | <0.00400 U | 0.00400 |
| m-Xylene & p-Xylene | | <0.00402 U | 0.00402 | <0.00402 U | 0.00402 | <0.00400 U | 0.00400 |
| o-Xylene | | <0.00201 U | 0.00201 | <0.00201 U | 0.00201 | <0.00200 U | 0.00200 |

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

| | | |
|-----------------------------------|------------------|------------------|
| Prepared: 03/16/2021 14:07 | 03/16/2021 14:07 | 03/16/2021 14:07 |
| Analyzed: 03/18/2021 01:53 | 03/18/2021 02:14 | 03/17/2021 22:45 |

| Analyte | Unit/RL: | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL |
|--------------------------------------|-----------------|---------|------|---------|------|---------|------|
| Gasoline Range Organics (GRO)-C6-C10 | | <50.0 U | 50.0 | <50.1 U | 50.1 | <50.1 U | 50.1 |
| Diesel Range Organics (Over C10-C28) | | <50.0 U | 50.0 | <50.1 U | 50.1 | <50.1 U | 50.1 |
| Oil Range Organics (Over C28-C36) | | <50.0 U | 50.0 | <50.1 U | 50.1 | <50.1 U | 50.1 |
| Total TPH | | <50.0 U | 50.0 | <50.1 U | 50.1 | <50.1 U | 50.1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| | | | |
|-----------------------------------|------------------|------------------|--|
| Prepared: | | | |
| Analyzed: 03/18/2021 17:34 | 03/18/2021 17:39 | 03/18/2021 17:45 | |

| Analyte | Unit/RL: | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL |
|----------------|-----------------|------------|------|-------------|------|------------|------|
| Chloride | | 316 | 5.02 | 6.11 | 4.95 | 111 | 5.04 |

State of New Mexico
Oil Conservation Division

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

Closure

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

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

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

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

OCD Only

Received by: _____ Date: _____

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

Closure Approved by:  Date: _____

Printed Name: _____ Title: _____

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 23558

CONDITIONS

| | |
|---|---|
| Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701 | OGRID: 229137 |
| | Action Number: 23558 |
| | Action Type: [C-141] Release Corrective Action (C-141) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|-----------|----------------|
| chensley | None | 6/7/2021 |