



January 19, 2022

Bradford Billings
Hydrologist/E.Spec.A
District 2 Artesia
1220 South St. Francis Drive
Oil Conservation Division
Santa Fe, NM 87505

**Re: Release Characterization and Closure Request
ConocoPhillips
Heritage Concho
Pan Head Fee 21H Release
Unit Letter D, Section 11, Township 17 South, Range 32 East
Lea County, New Mexico
Incident ID# NJXK1610631827
1RP-4249**

Mr. Billings,

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a Heritage Concho release and subsequent remedial actions taken at the Pan Head Fee 21H (API No. 30-025-40886). The release footprint is located in Public Land Survey System (PLSS) Unit Letter D, Section 11, Township 17 South, Range 32 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.8554306°, -103.7446976°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Oil Conservation District (NMOCD) C-141 Initial Report, the release was discovered on April 3, 2016. The C-141 reports that the release was caused by a broken chemical line coming from the pumping tee off the wellhead. Approximately 25 barrels (bbls) of crude oil were released, of which approximately 24 bbls of oil were recovered. The lease pad footprint is bounded by a berm at the perimeter. The release stayed within the bermed containment, with no release to pasture. The New Mexico Oil Conservation District (NMOCD) approved the initial C-141 on April 15, 2016, and subsequently assigned the release the Incident ID NJXK1610631827 and the remediation permit (RP) number 1RP-4249. The initial C-141 form is included in Appendix A.

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 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.

There are no water wells listed in the New Mexico Office of the State Engineer (NMOSE) database located within approximately ½ mile (800 meters) of the site. According to data from two (2) water wells listed in the NMOSE database within approximately 0.62 miles (1,000 meters) of the site, the minimum depth to groundwater is 125 feet below ground surface (bgs). The site characterization data are presented in Appendix B.

Tetra Tech

901 West Wall St., Suite 100, Midland, TX 79701

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com

REGULATORY FRAMEWORK

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

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

| Constituent | Site RRALs |
|-------------|--------------|
| Chloride | 20,000 mg/kg |
| TPH | 2,500 mg/kg |
| BTEX | 50 mg/kg |

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

| Constituent | Reclamation Requirements |
|-------------|--------------------------|
| Chloride | 600 mg/kg |
| TPH | 100 mg/kg |
| BTEX | 50 mg/kg |

INITIAL RESPONSE ACTIVITIES AND INITIAL ASSESSMENT

As mentioned, following the release, Concho dispatched vacuum trucks to recover standing fluid and perform initial response activities at the release site. The release extent and approximate release location are presented in Figure 3.

On May 20, 2016, Concho was onsite to install five (5) soil borings (SB-1 through SB-5) within the release extent to total depths of 4 feet bgs to assess the release. A total of twenty (20) soil samples were collected from five (5) borings and sent to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for TPH via EPA Method 8015M and BTEX via EPA Method 8021B. The soil samples were not analyzed for chloride during the May 2016 soil assessment activities. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix C.

Analytical results from the May 2016 assessment activities are summarized in Table 1. All analytical results were below applicable Site RRALs for soils in active oil and gas production areas.

ADDITIONAL SITE ASSESSMENT AND SAMPLING RESULTS

In order to complete the release assessment and delineation per 19.15.29.11 NMAC, Tetra Tech conducted additional soil sampling at the release site on behalf of ConocoPhillips on December 28, 2021. Tetra Tech installed one (1) additional hand auger soil boring (AH-1) within the release extent to 5 feet bgs to clarify vertical extent, and four (4) hand auger borings (AH-2 through AH-5) along the perimeter of the release to depths of 1 foot bgs to complete horizontal delineation of the release. No staining was observed in the reported release extent during the December 2021 site assessment activities. Photographic documentation from the December 2021 additional site assessment is presented in Appendix D.

A total of seven (7) soil samples were collected and sent to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for chloride via EPA Method 4500.0, TPH via EPA Method 8015M and BTEX via EPA Method 8261B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix C.

Release Characterization and Closure Request
January 19, 2022

ConocoPhillips

Analytical results from the 2021 assessment activities are summarized in Table 2. All analytical results were below the applicable Site RRALs for soils in active oil and gas production areas.

SITE RECLAMATION AND RESTORATION PLAN

Based on the site characterization, the impacted surface area of the release on the production lease pad meets the remediation standards of Table I of 19.15.29.12 NMAC. As these areas are needed for production operations, final reclamation of any impact within the lease pad areas shall take place in accordance with 19.15.29.12 and 19.15.29.13 NMAC once the Site is no longer being used for oil and gas operations. Therefore, reclamation of the soils located within the confines of the Pan Head Fee 21H lease pad will be delayed until the abandonment of the Pan Head Fee 21H facility and the full pad reclamation.

CONCLUSION

Based on the results of the site assessment, ConocoPhillips considers the current release footprint to be fully delineated. All analytical results associated with the on-pad site assessment were below applicable Site RRALs following the initial response actions; therefore, no further remediation of the release footprint is necessary. The remaining contamination is on an active, developed oil and gas production pad, fully delineated, and does not cause an imminent risk to human health, the environment, or groundwater. The impacted surface area occurring on the developed pad at the site was remediated to meet the standards of Table I of 19.15.29.12 NMAC during the initial response activities.

Based on the above, ConocoPhillips respectfully requests closure for this release. Final reclamation shall take place in accordance with 19.15.29.13 NMAC once the site is no longer being used for oil and gas operations. The final C-141 forms are enclosed in Appendix A. If you have any questions concerning the soil assessment activities for the Site, please call me at (512) 217-7254.

Sincerely,
Tetra Tech, Inc.



Samantha K. Abbott, P.G.
Project Manager

cc:
Mr. Ike Tavarez, RMR – ConocoPhillips
Mr. Charles Beauvais, BU – ConocoPhillips

LIST OF ATTACHMENTS

Figures:

- Figure 1 – Overview Map
- Figure 2 – Topographic Map
- Figure 3 – Approximate Release Extent and Initial Site Assessment Map
- Figure 4 – Additional Site Assessment Map

Tables:

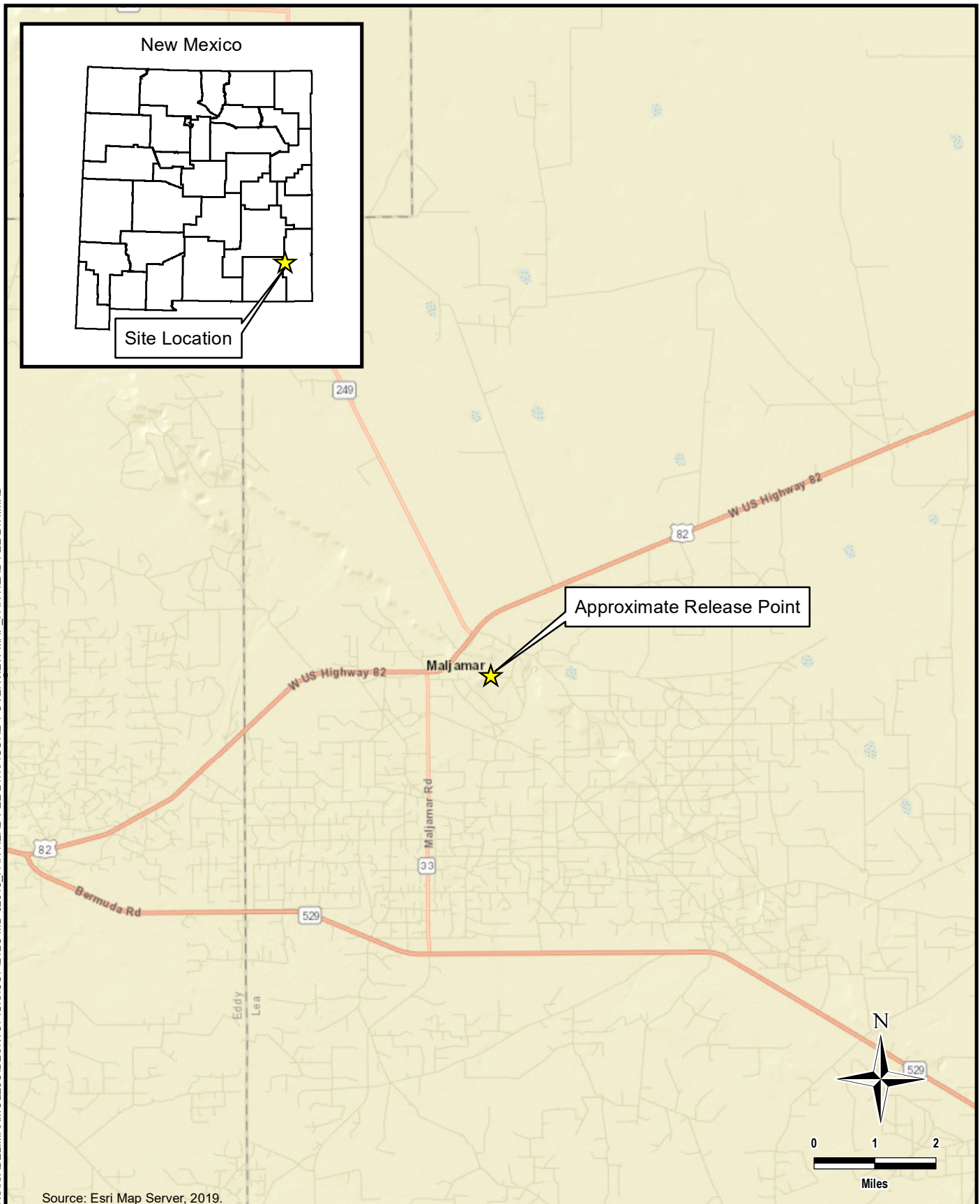
- Table 1 – Summary of Analytical Results – 2016 Initial Soil Assessment
- Table 2 – Summary of Analytical Results – 2021 Additional Soil Assessment

Appendices:

- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – Laboratory Analytical Data
- Appendix D – Photographic Documentation

FIGURES

DOCUMENT PATH: C:\USERS\ISABEL.MARMOLEJO\DESKTOP\GIS\COP\212C-MD-02618 PAN HEAD FEE 21H\FIGURE 1 OVERVIEW MAP PAN HEAD FEE 21H.MXD



Source: Esri Map Server, 2019.

**TETRA TECH**

www.tetrattech.com

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

CONOCOPHILLIPS

NJXK1610631827
(32.855431°, -103.744698°)
LEA COUNTY, NEW MEXICO

**PAN HEAD FEE 21H
OVERVIEW MAP**

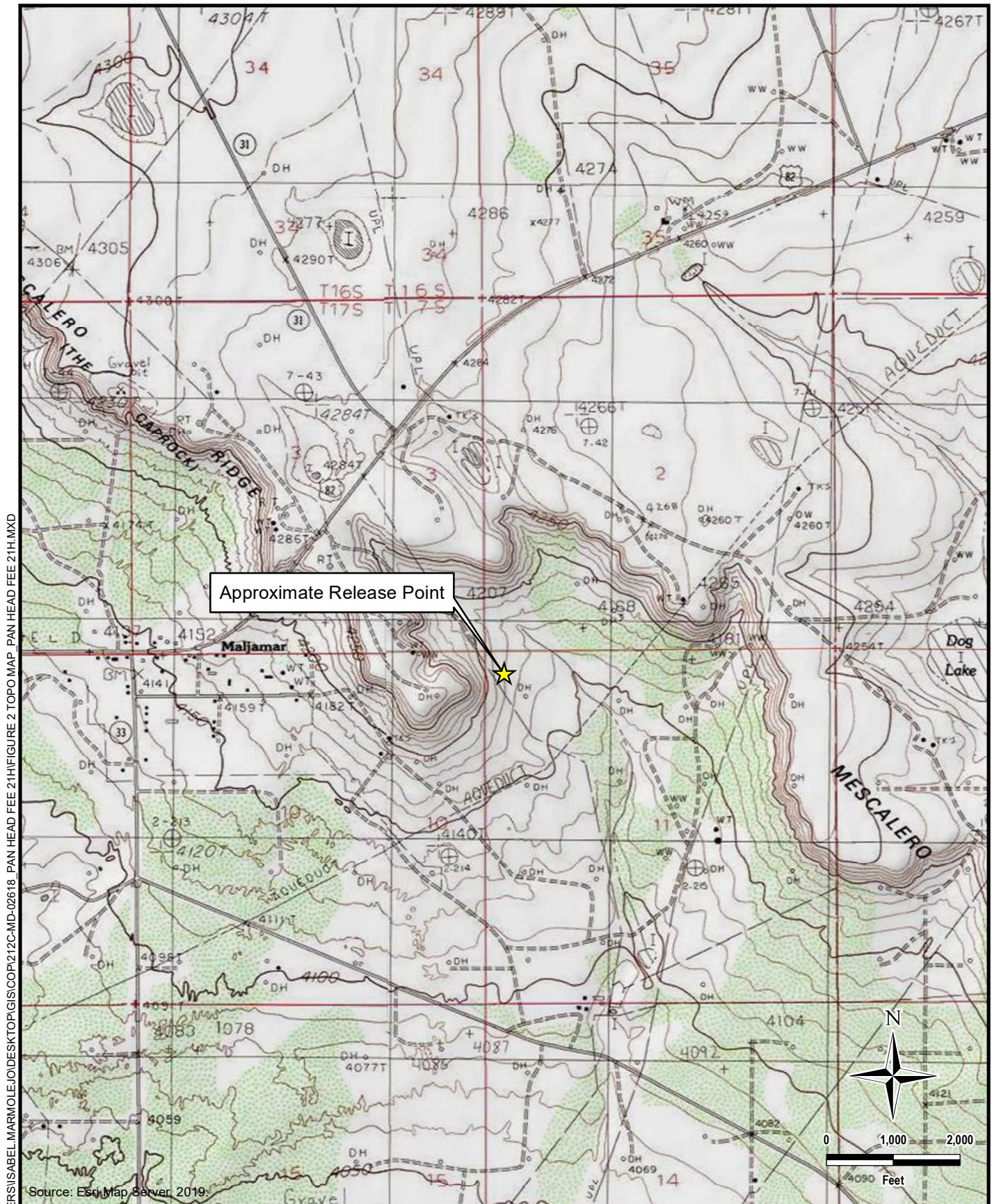
PROJECT NO.: 212C-MD-02618

DATE: JANUARY 03, 2022

DESIGNED BY: IM

Figure No.

1



TETRA TECH

www.tetrattech.com

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

CONOCOPHILLIPS

NJXX1610631827
(32.855431°, -103.744698°)
LEA COUNTY, NEW MEXICO

**PAN HEAD FEE 21H
TOPOGRAPHIC MAP**

PROJECT NO.: 212C-MD-02618

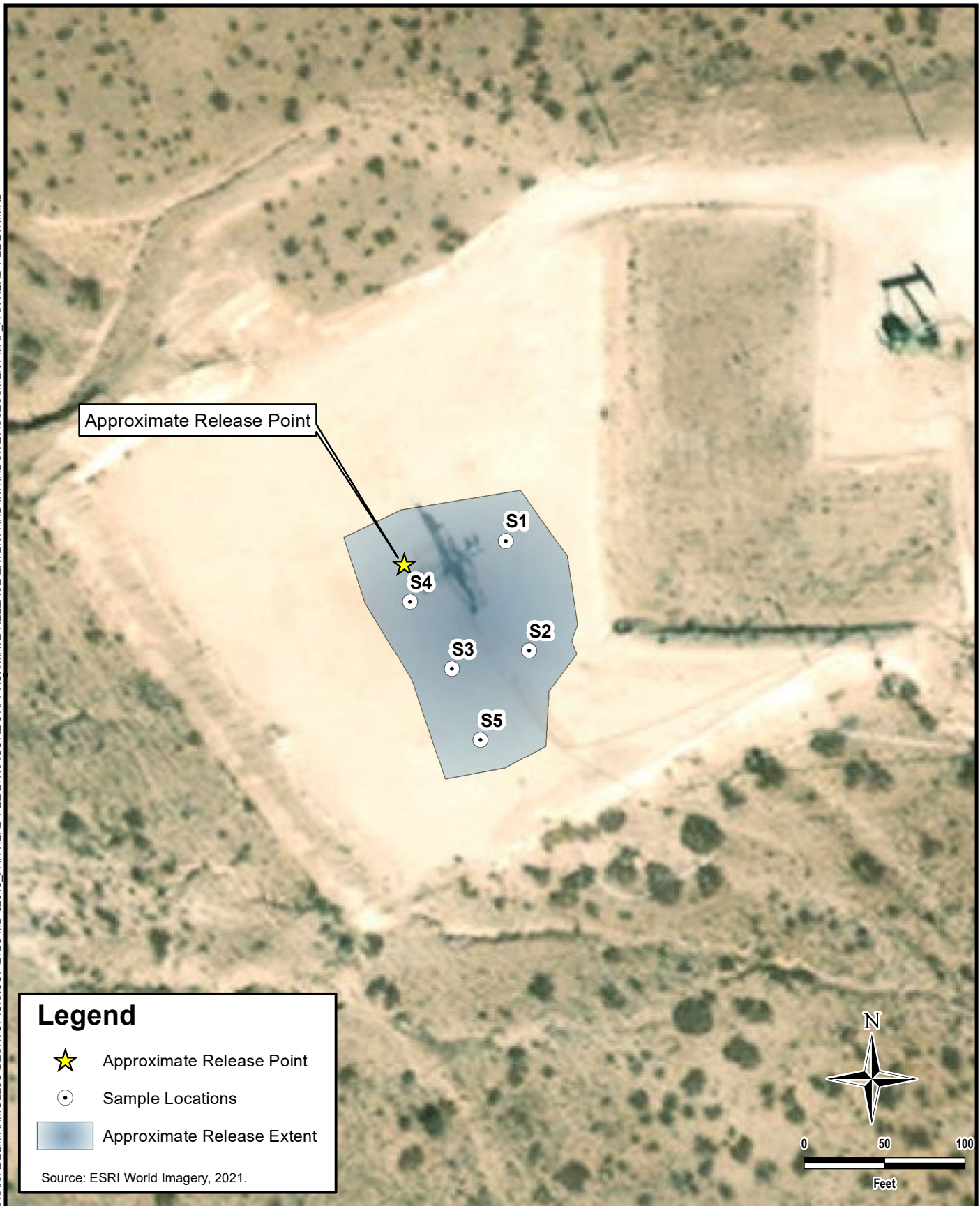
DATE: JANUARY 03, 2022

DESIGNED BY: IM




Figure No.

2

DOCUMENT PATH: C:\USERS\ISABEL.MARMOLEJO\DESKTOP\GIS\COP\212C-MD-02618 PAN HEAD FEE 21H\FIGURE 3 APPROXIMATE RELEASE EXTENT AND INITIAL SITE ASSESSMENT MAP PAN HEAD FEE 21H.MXD



Legend

-  Approximate Release Point
-  Sample Locations
-  Approximate Release Extent

Source: ESRI World Imagery, 2021.

**TETRA TECH**

www.tetrattech.com

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

CONOCOPHILLIPS

NJXK1610631827
(32.855431°, -103.744698°)
LEA COUNTY, NEW MEXICO

PAN HEAD FEE 21H

APPROXIMATE RELEASE EXTENT AND INITIAL SITE ASSESSMENT MAP

PROJECT NO.: 212C-MD-02618

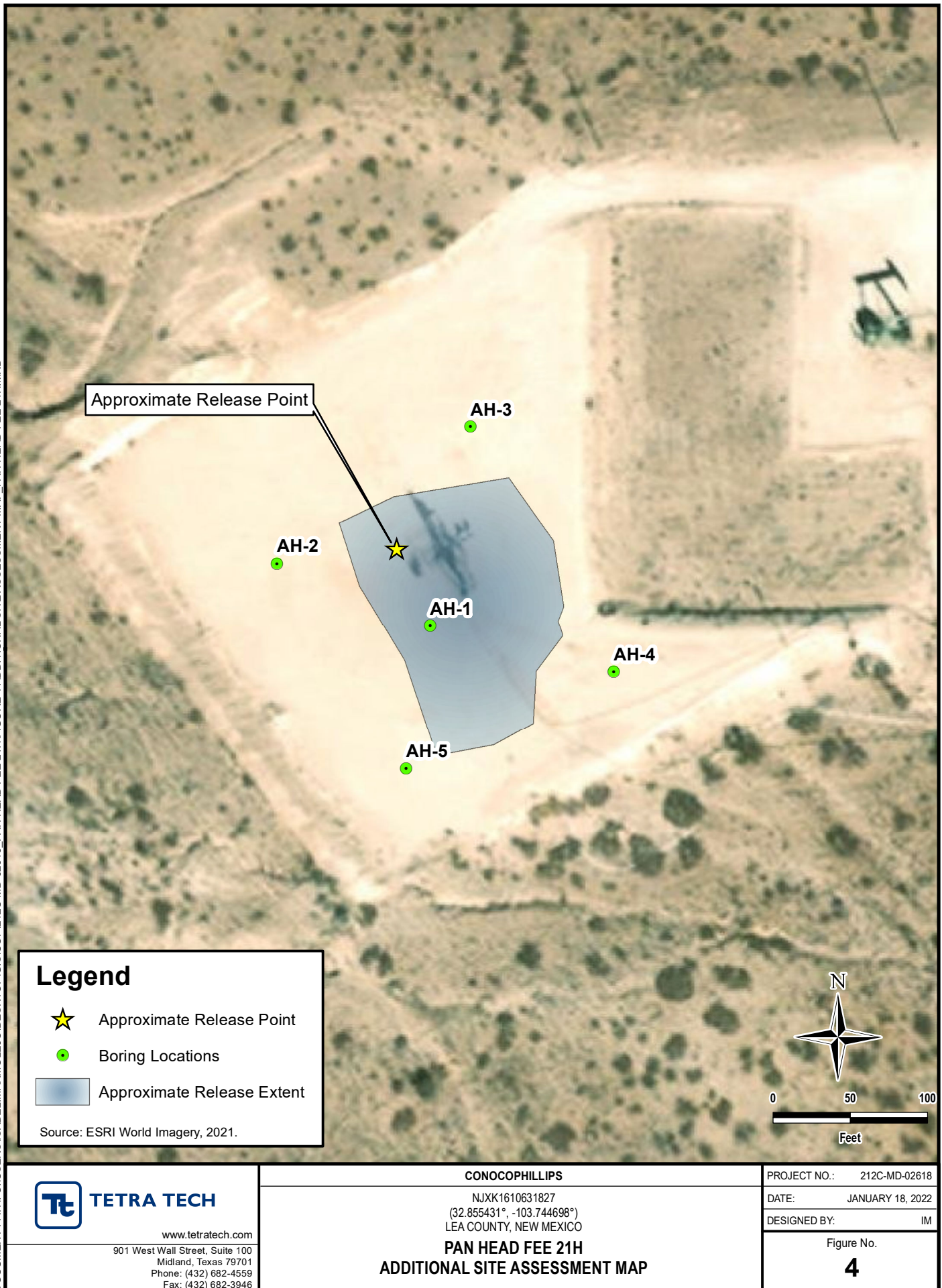
DATE: JANUARY 18, 2022

DESIGNED BY: IM

Figure No.

3

DOCUMENT PATH: C:\USERS\ISABEL.MARMOLEJO\DESKTOP\GIS\COP\212C-MD-02618 PAN HEAD FEE 21H\FIGURE 4 ADDITIONAL SITE ASSESSMENT MAP PAN HEAD FEE 21H.MXD



TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
2016 SOIL ASSESSMENT- NJXK1610631827
HERITAGE CONCHO
PAN HEAD FEE #21H
LEA COUNTY, NM

| Sample ID | Sample Date | Sample Depth | BTEX ¹ | | | | | | | | | | TPH ² | | | | |
|-----------|-------------|--------------|-------------------|---|---------|---|--------------|---|---------------|---|------------|---|----------------------------------|---|-------------------------------------|---|------------------------|
| | | | Benzene | | Toluene | | Ethylbenzene | | Total Xylenes | | Total BTEX | | GRO | | DRO | | Total TPH (GRO+DRO) |
| | | | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | C ₆ - C ₁₀ | Q | > C ₁₀ - C ₂₈ | Q | |
| S1-1' | 5/20/2016 | 1 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S1-2' | 5/20/2016 | 2 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S1-3' | 5/20/2016 | 3 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S1-4' | 5/20/2016 | 4 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S2-1' | 5/20/2016 | 1 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S2-2' | 5/20/2016 | 2 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S2-3' | 5/20/2016 | 3 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S2-4' | 5/20/2016 | 4 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S3-1' | 5/20/2016 | 1 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | 15.6 | | 15.6 |
| S3-2' | 5/20/2016 | 2 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S3-3' | 5/20/2016 | 3 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S3-4' | 5/20/2016 | 4 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S4-1' | 5/20/2016 | 1 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S4-2' | 5/20/2016 | 2 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S4-3' | 5/20/2016 | 3 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S4-4' | 5/20/2016 | 4 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S5-1' | 5/20/2016 | 1 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S5-2' | 5/20/2016 | 2 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S5-3' | 5/20/2016 | 3 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | - |
| S5-4' | 5/20/2016 | 4 | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 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 8021B

2 Method 8015M

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

Shaded rows indicate intervals proposed for excavation.

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
2021 SOIL ASSESSMENT- NJXK1610631827
HERITAGE CONCHO
PAN HEAD FEE #21H
LEA COUNTY, NM

| Sample ID | Sample Date | Sample Depth | Chloride ¹ | | BTEX ² | | | | | | | | | | TPH ³ | | | | | | | |
|-----------|-------------|--------------|-----------------------|---|-------------------|---|---------|---|--------------|---|---------------|---|------------|---|----------------------------------|---|-------------------------------------|---|-------------------------------------|---|--------------------------------|--|
| | | | | | Benzene | | Toluene | | Ethylbenzene | | Total Xylenes | | Total BTEX | | GRO | | DRO | | EXT DRO | | Total TPH (GRO+DRO+EXT DRO) | |
| | | | | | | | | | | | | | | | C ₆ - C ₁₀ | | > C ₁₀ - C ₂₈ | | > C ₂₈ - C ₃₆ | | | |
| | | ft. bgs | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | Q | mg/kg | | | |
| AH-1 | 12/28/2021 | 0-1 | 80.0 | | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | < 10.0 | - | | |
| | | 2-3 | 32.0 | | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | < 10.0 | - | | |
| | | 4-5 | 32.0 | | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | < 10.0 | - | | |
| AH-2 | 12/28/2021 | 0-1 | 16.0 | | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | < 10.0 | - | | |
| AH-3 | 12/28/2021 | 0-1 | 96.0 | | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | < 10.0 | - | | |
| AH-4 | 12/28/2021 | 0-1 | 288 | | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | < 10.0 | - | | |
| AH-5 | 12/28/2021 | 0-1 | 48.0 | | < 0.050 | | < 0.050 | | < 0.050 | | < 0.150 | | < 0.300 | | < 10.0 | | < 10.0 | | < 10.0 | - | | |

NOTES:

ft. Feet
bgs Below ground surface
mg/kg Milligrams per kilogram
TPH Total Petroleum Hydrocarbons
GRO Gasoline range organics
DRO Diesel range organics
1 Method SM4500Cl-B
2 Method 8021B
3 Method 8015M

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

Shaded rows indicate intervals proposed for excavation.

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

RECEIVED

By JKeyes at 8:53 am, Apr 15, 2016

Form C-141
Revised 8/1/2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action**OPERATOR**☒ Initial Report ☐ Final Report

| | |
|---|----------------------------|
| Name of Company: COG Operating LLC | Contact: Robert McNeill |
| Address: 600 West Illinois Avenue, Midland TX 79701 | Telephone No. 432-230-0077 |
| Facility Name: PAN HEAD FEE #021H | Facility Type: Battery |
| Surface Owner: | Mineral Owner: Fee |
| API No. 30-025-40886 | |

LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| D | 11 | 17S | 32E | 330 | North | 330 | West | Lea |

Latitude 32.8554306 Longitude -103.7446976

NATURE OF RELEASE

| | | |
|--|--|---|
| Type of Release: Oil | Volume of Release: 25 bbls | Volume Recovered: 24 bbls |
| Source of Release: Wellhead | Date and Hour of Occurrence: 4/3/2016 9:00 am | Date and Hour of Discovery: 4/3/2016 9:00 am |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? Jaime Keyes - NMOCD | |
| By Whom? Robert Grubbs Jr. | Date and Hour: 4/4/2016 6:55 PM | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | |

If a Watercourse was Impacted, Describe Fully.*



Describe Cause of Problem and Remedial Action Taken.*

This release was caused by a broken chemical line the pumping tee off the wellhead. Vacuum trucks were dispatched to recover standing fluid.

Describe Area Affected and Cleanup Action Taken.*

This release occurred at the wellhead and stayed on location. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

| | | | |
|--|--|---|-----------------------------|
| Signature:  | | OIL CONSERVATION DIVISION | |
| Printed Name: Robert Grubbs Jr. | | Approved by Environmental Specialist:  | |
| Title: Senior Environmental Coordinator | | Approval Date: 04/15/2016 | Expiration Date: 06/15/2016 |
| E-mail Address: rgrubbs@concho.com | | Conditions of Approval: | |
| Date: April 14, 2016 Phone: 432-683-7443 | | Discrete site samples only. Delineate and remediate per NMOCD guidelines. | |
| | | Attached <input type="checkbox"/> 1RP 4249 | |

* Attach Additional Sheets If Necessary

nJXK1610631827
pJXK1610631964

| | |
|----------------|--|
| 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.

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 | |

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: Bradford Billings Date: _____

Printed Name: _____ Title: _____

APPENDIX B

Site Characterization Data



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

| POD Number | POD Sub-Code | basin | County | Q 64 | Q 16 | Q 4 | Sec | Tws | Rng | X | Y | Distance | Depth Well | Depth Water | Water Column |
|-------------------------------|--------------|-------|--------|------|------|-----|-----|-----|-----|--------|----------|----------|------------|-------------|--------------|
| L 04020 | L | LE | | 3 | 3 | 4 | 02 | 17S | 32E | 618268 | 3636166* | 834 | 200 | | |
| RA 11734 POD1 | RA | LE | | 2 | 2 | 1 | 10 | 17S | 32E | 616556 | 3635929 | 904 | 165 | | |
| RA 12436 POD1 | RA | LE | | 2 | 2 | 1 | 10 | 17S | 32E | 616556 | 3635929 | 904 | 160 | 125 | 35 |
| RA 11684 POD4 | RA | LE | | 1 | 3 | 2 | 11 | 17S | 32E | 618334 | 3635521 | 977 | 275 | | |
| RA 11684 POD3 | RA | LE | | 3 | 3 | 1 | 11 | 17S | 32E | 618262 | 3635371 | 994 | 275 | | |
| L 13050 POD1 | L | LE | | 2 | 2 | 1 | 10 | 17S | 32E | 616463 | 3635945* | 997 | 156 | 132 | 24 |
| RA 09505 S | RA | LE | | 2 | 2 | 1 | 10 | 17S | 32E | 616463 | 3635945* | 997 | 144 | | |
| RA 09505 | RA | LE | | 2 | 2 | 1 | 10 | 17S | 32E | 616462 | 3635944 | 998 | 147 | | |

Average Depth to Water: **128 feet**

Minimum Depth: **125 feet**

Maximum Depth: **132 feet**

Record Count: 8

UTM NAD83 Radius Search (in meters):

Easting (X): 617459.94

Northing (Y): 3635958.23

Radius: 1000

*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.

11/30/21 10:23 AM

Page 1 of 1

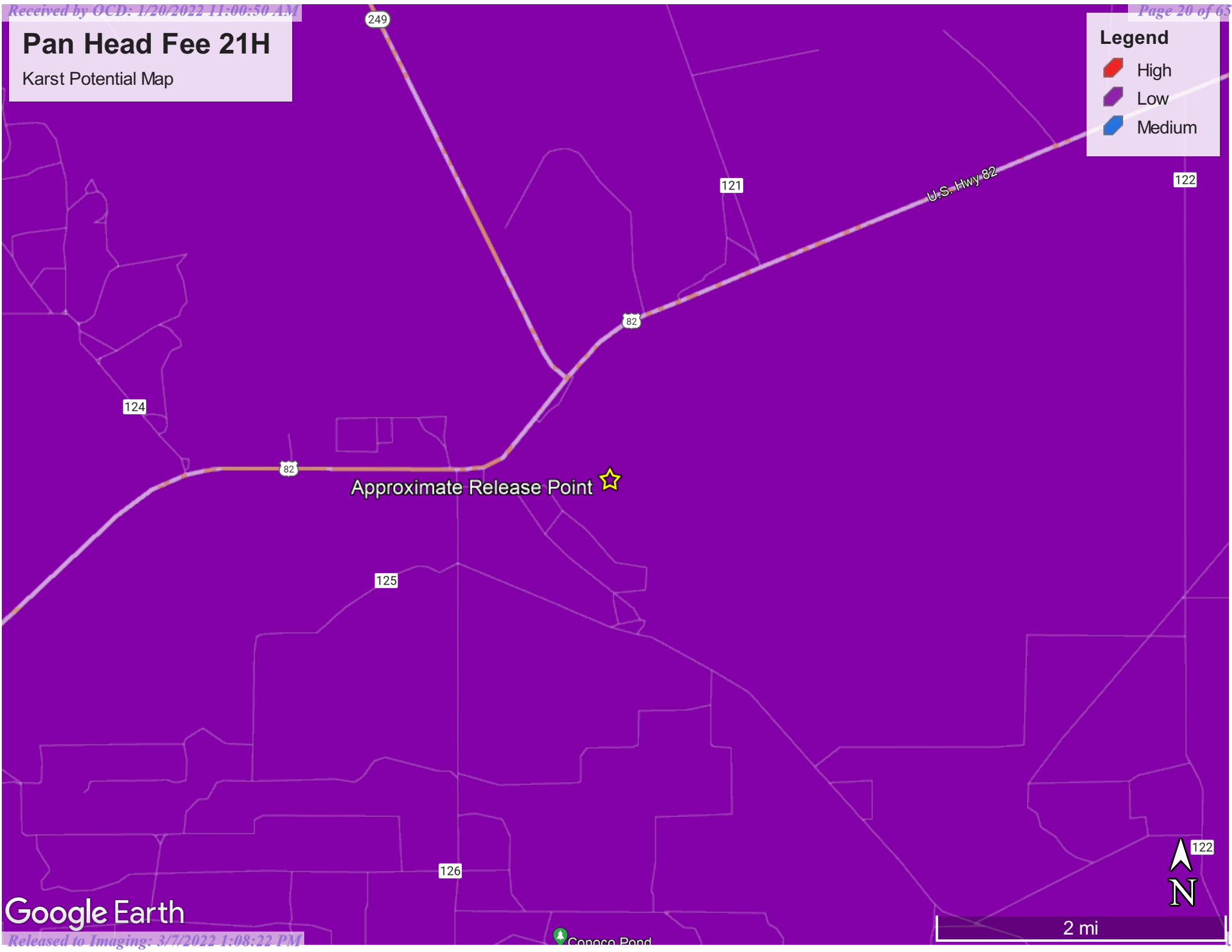
WATER COLUMN/ AVERAGE
DEPTH TO WATER

Pan Head Fee 21H

Karst Potential Map

Legend

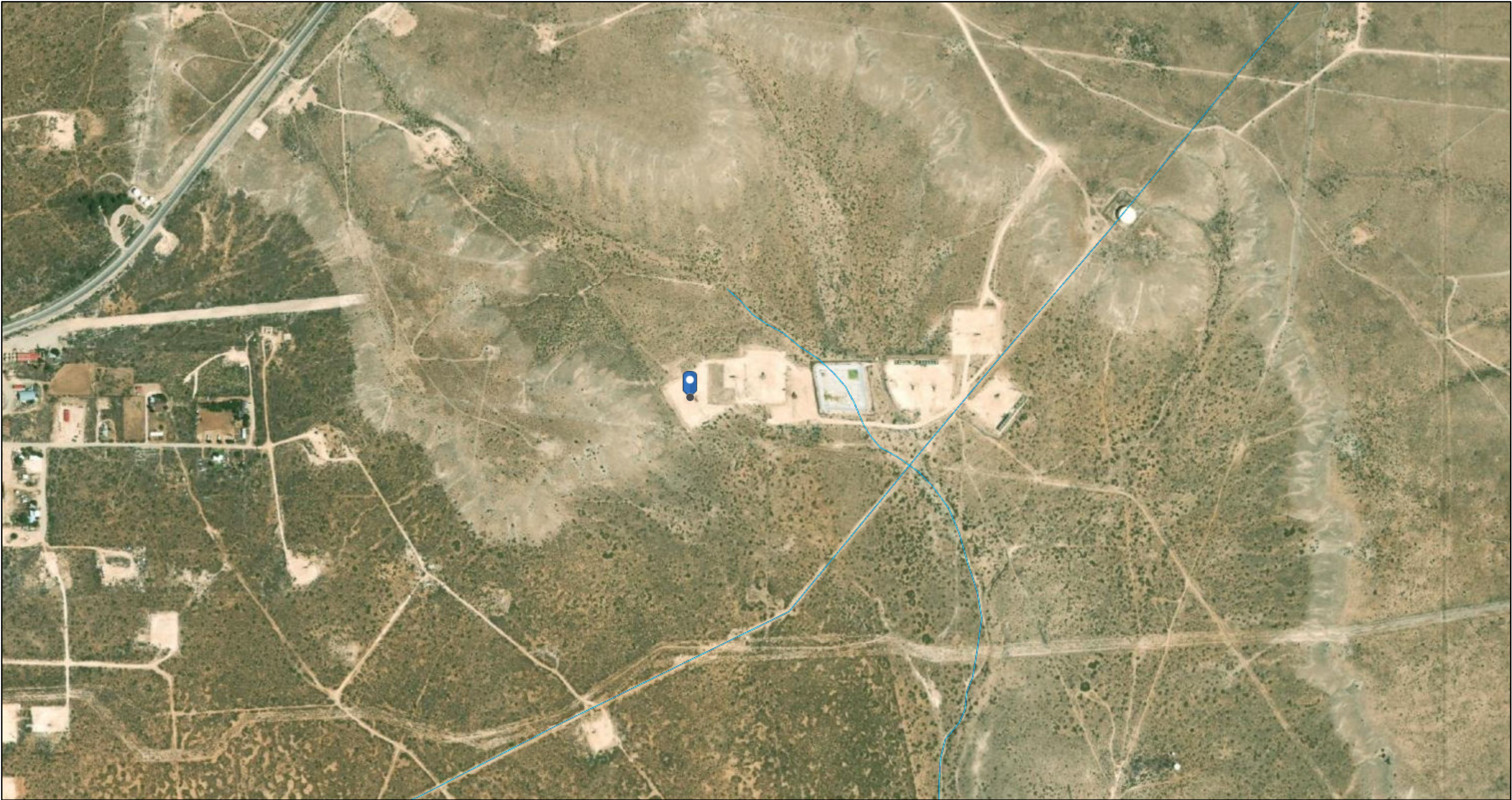
- High
- Low
- Medium



Google Earth

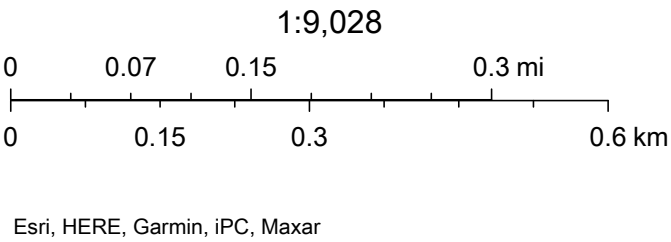
Conoco Pond

OCD Waterbodies



11/30/2021, 11:33:53 AM

- OSE Water-bodies
- PLJV Probable Playas
- OSE Streams



APPENDIX C

Laboratory Analytical Data



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

June 06, 2016

DAKOTA NEEL

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: PANHEAD FEE #21H

Enclosed are the results of analyses for samples received by the laboratory on 06/01/16 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

| | |
|------------------|------------------------------|
| Method EPA 552.2 | Haloacetic Acids (HAA-5) |
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S1 - 1' (H601193-01)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | | |

Surrogate: 1-Chlorooctane 62.4 % 35-147

Surrogate: 1-Chlorooctadecane 82.3 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S1 - 2' (H601193-02)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 62.9 % 35-147

Surrogate: 1-Chlorooctadecane 82.7 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S1 - 3' (H601193-03)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | | |

Surrogate: 1-Chlorooctane 64.1 % 35-147

Surrogate: 1-Chlorooctadecane 81.5 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S1 - 4' (H601193-04)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 57.2 % 35-147

Surrogate: 1-Chlorooctadecane 73.3 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S2 - 1' (H601193-05)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 63.4 % 35-147

Surrogate: 1-Chlorooctadecane 79.7 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S2 - 2' (H601193-06)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 65.7 % 35-147

Surrogate: 1-Chlorooctadecane 85.3 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S2 - 3' (H601193-07)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | | |

Surrogate: 1-Chlorooctane 53.7 % 35-147

Surrogate: 1-Chlorooctadecane 73.4 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S2 - 4' (H601193-08)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 62.4 % 35-147

Surrogate: 1-Chlorooctadecane 76.3 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S3 - 1' (H601193-09)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | 15.6 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 62.8 % 35-147

Surrogate: 1-Chlorooctadecane 82.0 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S3 - 2' (H601193-10)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 58.9 % 35-147

Surrogate: 1-Chlorooctadecane 75.6 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S3 - 3' (H601193-11)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | | |

Surrogate: 1-Chlorooctane 62.3 % 35-147

Surrogate: 1-Chlorooctadecane 84.3 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S3 - 4' (H601193-12)

| BTEX 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | | |

Surrogate: 1-Chlorooctane 60.7 % 35-147

Surrogate: 1-Chlorooctadecane 78.1 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S4 - 1' (H601193-13)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 45.0 % 35-147

Surrogate: 1-Chlorooctadecane 62.0 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S4 - 2' (H601193-14)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/03/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/03/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 64.0 % 35-147

Surrogate: 1-Chlorooctadecane 76.3 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S4 - 3' (H601193-15)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 56.8 % 35-147

Surrogate: 1-Chlorooctadecane 75.1 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S4 - 4' (H601193-16)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 59.8 % 35-147

Surrogate: 1-Chlorooctadecane 81.2 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S5 - 1' (H601193-17)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 61.6 % 35-147

Surrogate: 1-Chlorooctadecane 81.9 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S5 - 2' (H601193-18)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 60.0 % 35-147

Surrogate: 1-Chlorooctadecane 80.6 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S5 - 3' (H601193-19)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 47.4 % 35-147

Surrogate: 1-Chlorooctadecane 63.6 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
 DAKOTA NEEL
 P. O. BOX 1630
 ARTESIA NM, 88210
 Fax To: NONE

Received: 06/01/2016
 Reported: 06/06/2016
 Project Name: PANHEAD FEE #21H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/20/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S5 - 4' (H601193-20)

| BTEx 8021B | | mg/kg | | Analyzed By: CK | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.89 | 94.7 | 2.00 | 0.636 | | |
| Toluene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.92 | 96.1 | 2.00 | 1.13 | | |
| Ethylbenzene* | <0.050 | 0.050 | 06/02/2016 | ND | 1.74 | 87.2 | 2.00 | 2.02 | | |
| Total Xylenes* | <0.150 | 0.150 | 06/02/2016 | ND | 5.53 | 92.2 | 6.00 | 0.809 | | |
| Total BTEX | <0.300 | 0.300 | 06/02/2016 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

| TPH 8015M | | mg/kg | | Analyzed By: CK | | | | | |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 06/02/2016 | ND | 199 | 99.3 | 200 | 0.885 | |
| DRO >C10-C28 | <10.0 | 10.0 | 06/02/2016 | ND | 206 | 103 | 200 | 0.711 | |

Surrogate: 1-Chlorooctane 57.7 % 35-147

Surrogate: 1-Chlorooctadecane 79.0 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

| | |
|-------|---|
| QR-03 | The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values. |
| 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

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

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

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: COG Operating LLC

Project Manager: Dakota Neel

Address: 2208 West Main

City: Artesia

Phone #: (575) 748-6930

Project #:

Project Name: PANHEAD FEE #21h

Project Location:

Sampler Name: Dakota Neel

BILL TO

ANALYSIS REQUEST

P.O. #:

Company: COG Operating LLC

Attn: Robert McNeill

Address: 600 W Illinois

City: Midland

State: TX Zip: 79701

Phone #: (432) 221-0388

Fax #:

FOR LAB USE ONLY

Lab I.D. Sample I.D.

H00193

1
2
3
4

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

BTEX

TPH

Chloride

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:

Date:

Time:

Received By:

Date:

Time:

Received By:

Date:

Time:

Received By:

Date:

Time:

Received By:

Date:

Time:

Received By:

Date:

Time:

Received By:

Date:

Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Received By:

Date:

Time:

Received By:

Date:

Time:

Received By:

Date:

Time:

Received By:

Date:

Time:

Received By:

Date:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition

Cool ☒ Intact ☒

Yes ☒ No ☒

CHECKED BY:

(Initials)

5.20

5. Please fax written changes to 575-393-2476



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: COG Operating LLC

Project Manager: Dakota Neel

Address: 2208 West Main

City: Artesia

Phone #: (575) 748-6930

Project #:

Project Name: PANHEAD FEE #21h

Project Location:

Sampler Name: Dakota Neel

P.O. #:

Company: COG Operating LLC

Attn: Robert McNeill

Address: 600 W Illinois

City: Midland

State: TX Zip: 79701

Phone #: (432) 221-0388

Fax #:

ANALYSIS REQUEST

| Lab I.D. | Sample I.D. | (G)RAB OR (C)OMP. | # CONTAINERS | MATRIX | | | | | PRESERV. | SAMPLING | | | | | | | | | | |
|----------|-------------|-------------------|--------------|-------------|------------|------|-----|--------|----------|----------|---------|---------|------|-----|----------|--|--|--|--|--|
| | | | | GROUNDWATER | WASTEWATER | SOIL | OIL | SLUDGE | | | DATE | TIME | BTEX | TPH | Chloride | | | | | |
| HL621193 | S2-1' | | | | | | | | X | | 5/20/16 | 8:00 AM | X | X | | | | | | |
| | S2-2' | | | | | | | | X | | 5/20/16 | 8:00 AM | X | X | | | | | | |
| | S2-3' | | | | | | | | X | | 5/20/16 | 8:00 AM | X | X | | | | | | |
| | S2-4' | | | | | | | | X | | 5/20/16 | 8:00 AM | 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:

Date: 5/11/16

Time: 11:00

Received By: [Signature]

Relinquished By:

Date:

Time:

Received By:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition

CHECKED BY:

Cool Intact

(Initials)

Yes Yes

No No

FORM-000-R-20

5. Please fax written changes to 575-393-2476



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



CARDINAL
Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: COG Operating LLC

Project Manager: Dakota Neel

Address: 2208 West Main

City: Artesia

Phone #: (575) 748-6930

Project #:

Project Name: PANHEAD FEE #21h

Project Location:

Sampler Name: Dakota Neel

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H60193

13 S4-1'
14 S4-2'
15 S4-3'
16 S4-4'

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

BTEX

TPH

Chloride

BILL TO

ANALYSIS REQUEST

P.O. #:

Company: COG Operating LLC

Attn: Robert McNeill

Address: 600 W Illinois

City: Midland

State: TX Zip: 79701

Phone #: (432) 221-0388

Fax #:

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising from this contract or tort, shall be limited to the amount paid by the client for the analysis. 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:

Received By:

Phone Result: ☐ Yes ☐ No Add'l Phone #:

Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS:

dneel2@concho.com

icarrasco@concho.com

atrujillo@concho.com

Date: 6/1/16
Time: 11:00

Received By: [Signature]

Date:

Time:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition

CHECKED BY: [Signature]

Cool ☒ Intact ☒

Yes ☒ No ☒

Released to Imaging: 3/7/2022 1:08:22 PM



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

December 30, 2021

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: PAN HEAD FEE #21H

Enclosed are the results of analyses for samples received by the laboratory on 12/28/21 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

| | |
|------------------|------------------------------|
| Method EPA 552.2 | Haloacetic Acids (HAA-5) |
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

| | | | |
|-------------------|-------------------|---------------------|----------------|
| Received: | 12/28/2021 | Sampling Date: | 12/28/2021 |
| Reported: | 12/30/2021 | Sampling Type: | Soil |
| Project Name: | PAN HEAD FEE #21H | Sampling Condition: | Cool & Intact |
| Project Number: | 212C-MD-02618 | Sample Received By: | Tamara Oldaker |
| Project Location: | COP - LEA CO NM | | |

Sample ID: AH - 1 (0-1') (H213726-01)

| BTEX 8021B | | mg/kg | | Analyzed By: MS/ | | | | | | |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/28/2021 | ND | 2.00 | 99.8 | 2.00 | 7.90 | | |
| Toluene* | <0.050 | 0.050 | 12/28/2021 | ND | 1.88 | 93.9 | 2.00 | 7.98 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/28/2021 | ND | 1.86 | 92.8 | 2.00 | 8.74 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/28/2021 | ND | 5.74 | 95.7 | 6.00 | 8.98 | | |
| Total BTEX | <0.300 | 0.300 | 12/28/2021 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 93.1 % 69.9-140

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 80.0 | 16.0 | 12/29/2021 | ND | 432 | 108 | 400 | 3.64 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/28/2021 | ND | 200 | 99.9 | 200 | 4.55 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/28/2021 | ND | 220 | 110 | 200 | 6.34 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/28/2021 | ND | | | | | |

Surrogate: 1-Chlorooctane 91.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 97.0 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

| | | | |
|-------------------|-------------------|---------------------|----------------|
| Received: | 12/28/2021 | Sampling Date: | 12/28/2021 |
| Reported: | 12/30/2021 | Sampling Type: | Soil |
| Project Name: | PAN HEAD FEE #21H | Sampling Condition: | Cool & Intact |
| Project Number: | 212C-MD-02618 | Sample Received By: | Tamara Oldaker |
| Project Location: | COP - LEA CO NM | | |

Sample ID: AH - 1 (2'-3') (H213726-02)

| BTEX 8021B | | mg/kg | | Analyzed By: MS/ | | | | | | |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/28/2021 | ND | 2.00 | 99.8 | 2.00 | 7.90 | | |
| Toluene* | <0.050 | 0.050 | 12/28/2021 | ND | 1.88 | 93.9 | 2.00 | 7.98 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/28/2021 | ND | 1.86 | 92.8 | 2.00 | 8.74 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/28/2021 | ND | 5.74 | 95.7 | 6.00 | 8.98 | | |
| Total BTEX | <0.300 | 0.300 | 12/28/2021 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 93.2 % 69.9-140

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 32.0 | 16.0 | 12/29/2021 | ND | 432 | 108 | 400 | 3.64 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/28/2021 | ND | 200 | 99.9 | 200 | 4.55 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/28/2021 | ND | 220 | 110 | 200 | 6.34 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/28/2021 | ND | | | | | |

Surrogate: 1-Chlorooctane 90.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 97.6 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 12/28/2021
 Reported: 12/30/2021
 Project Name: PAN HEAD FEE #21H
 Project Number: 212C-MD-02618
 Project Location: COP - LEA CO NM

Sampling Date: 12/28/2021
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: AH - 1 (4'-5') (H213726-03)

| BTEx 8021B | | mg/kg | | Analyzed By: MS/ | | | | | | |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/29/2021 | ND | 2.05 | 103 | 2.00 | 1.83 | | |
| Toluene* | <0.050 | 0.050 | 12/29/2021 | ND | 1.95 | 97.7 | 2.00 | 1.23 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/29/2021 | ND | 1.93 | 96.5 | 2.00 | 1.10 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/29/2021 | ND | 5.99 | 99.8 | 6.00 | 0.872 | | |
| Total BTEX | <0.300 | 0.300 | 12/29/2021 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 94.3 % 69.9-140

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 32.0 | 16.0 | 12/29/2021 | ND | 432 | 108 | 400 | 3.64 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/28/2021 | ND | 200 | 99.9 | 200 | 4.55 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/28/2021 | ND | 220 | 110 | 200 | 6.34 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/28/2021 | ND | | | | | |

Surrogate: 1-Chlorooctane 96.8 % 66.9-136

Surrogate: 1-Chlorooctadecane 104 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 12/28/2021
 Reported: 12/30/2021
 Project Name: PAN HEAD FEE #21H
 Project Number: 212C-MD-02618
 Project Location: COP - LEA CO NM

Sampling Date: 12/28/2021
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: AH - 2 (0-1') (H213726-04)

| BTEx 8021B | | mg/kg | | Analyzed By: MS/ | | | | | | |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/29/2021 | ND | 2.05 | 103 | 2.00 | 1.83 | | |
| Toluene* | <0.050 | 0.050 | 12/29/2021 | ND | 1.95 | 97.7 | 2.00 | 1.23 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/29/2021 | ND | 1.93 | 96.5 | 2.00 | 1.10 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/29/2021 | ND | 5.99 | 99.8 | 6.00 | 0.872 | | |
| Total BTEx | <0.300 | 0.300 | 12/29/2021 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 94.1 % 69.9-140

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 16.0 | 16.0 | 12/29/2021 | ND | 432 | 108 | 400 | 3.64 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/28/2021 | ND | 200 | 99.9 | 200 | 4.55 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/28/2021 | ND | 220 | 110 | 200 | 6.34 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/28/2021 | ND | | | | | |

Surrogate: 1-Chlorooctane 83.3 % 66.9-136

Surrogate: 1-Chlorooctadecane 90.0 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 12/28/2021
 Reported: 12/30/2021
 Project Name: PAN HEAD FEE #21H
 Project Number: 212C-MD-02618
 Project Location: COP - LEA CO NM

Sampling Date: 12/28/2021
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: AH - 3 (0-1') (H213726-05)

| BTEx 8021B | | mg/kg | | Analyzed By: MS/ | | | | | | |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/29/2021 | ND | 2.05 | 103 | 2.00 | 1.83 | | |
| Toluene* | <0.050 | 0.050 | 12/29/2021 | ND | 1.95 | 97.7 | 2.00 | 1.23 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/29/2021 | ND | 1.93 | 96.5 | 2.00 | 1.10 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/29/2021 | ND | 5.99 | 99.8 | 6.00 | 0.872 | | |
| Total BTEx | <0.300 | 0.300 | 12/29/2021 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 93.8 % 69.9-140

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 96.0 | 16.0 | 12/29/2021 | ND | 432 | 108 | 400 | 3.64 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/28/2021 | ND | 200 | 99.9 | 200 | 4.55 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/28/2021 | ND | 220 | 110 | 200 | 6.34 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/28/2021 | ND | | | | | |

Surrogate: 1-Chlorooctane 85.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 91.6 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 12/28/2021
 Reported: 12/30/2021
 Project Name: PAN HEAD FEE #21H
 Project Number: 212C-MD-02618
 Project Location: COP - LEA CO NM

Sampling Date: 12/28/2021
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: AH - 4 (0-1') (H213726-06)

| BTX 8021B | | mg/kg | | Analyzed By: MS/ | | | | | |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 12/29/2021 | ND | 2.05 | 103 | 2.00 | 1.83 | |
| Toluene* | <0.050 | 0.050 | 12/29/2021 | ND | 1.95 | 97.7 | 2.00 | 1.23 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/29/2021 | ND | 1.93 | 96.5 | 2.00 | 1.10 | |
| Total Xylenes* | <0.150 | 0.150 | 12/29/2021 | ND | 5.99 | 99.8 | 6.00 | 0.872 | |
| Total BTX | <0.300 | 0.300 | 12/29/2021 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 93.6 % 69.9-140

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 288 | 16.0 | 12/29/2021 | ND | 432 | 108 | 400 | 3.64 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/28/2021 | ND | 200 | 99.9 | 200 | 4.55 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/28/2021 | ND | 220 | 110 | 200 | 6.34 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/28/2021 | ND | | | | | |

Surrogate: 1-Chlorooctane 82.8 % 66.9-136

Surrogate: 1-Chlorooctadecane 88.1 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 12/28/2021
 Reported: 12/30/2021
 Project Name: PAN HEAD FEE #21H
 Project Number: 212C-MD-02618
 Project Location: COP - LEA CO NM

Sampling Date: 12/28/2021
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: AH - 5 (0-1') (H213726-07)

| BTEx 8021B | | mg/kg | | Analyzed By: MS/ | | | | | | |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 12/29/2021 | ND | 2.05 | 103 | 2.00 | 1.83 | | |
| Toluene* | <0.050 | 0.050 | 12/29/2021 | ND | 1.95 | 97.7 | 2.00 | 1.23 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/29/2021 | ND | 1.93 | 96.5 | 2.00 | 1.10 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/29/2021 | ND | 5.99 | 99.8 | 6.00 | 0.872 | | |
| Total BTEx | <0.300 | 0.300 | 12/29/2021 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 93.8 % 69.9-140

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 48.0 | 16.0 | 12/29/2021 | ND | 432 | 108 | 400 | 3.64 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10* | <10.0 | 10.0 | 12/28/2021 | ND | 200 | 99.9 | 200 | 4.55 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/28/2021 | ND | 220 | 110 | 200 | 6.34 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/28/2021 | ND | | | | | |

Surrogate: 1-Chlorooctane 83.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 88.7 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

| | |
|-------|---|
| QR-03 | The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values. |
| QM-07 | The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| RPD | Relative Percent Difference |
| ** | Samples not received at proper temperature of 6°C or below. |
| *** | Insufficient time to reach temperature. |
| - | Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report |

Cardinal Laboratories

*=Accredited Analyte

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

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

Celey D. Keene, Lab Director/Quality Manager



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

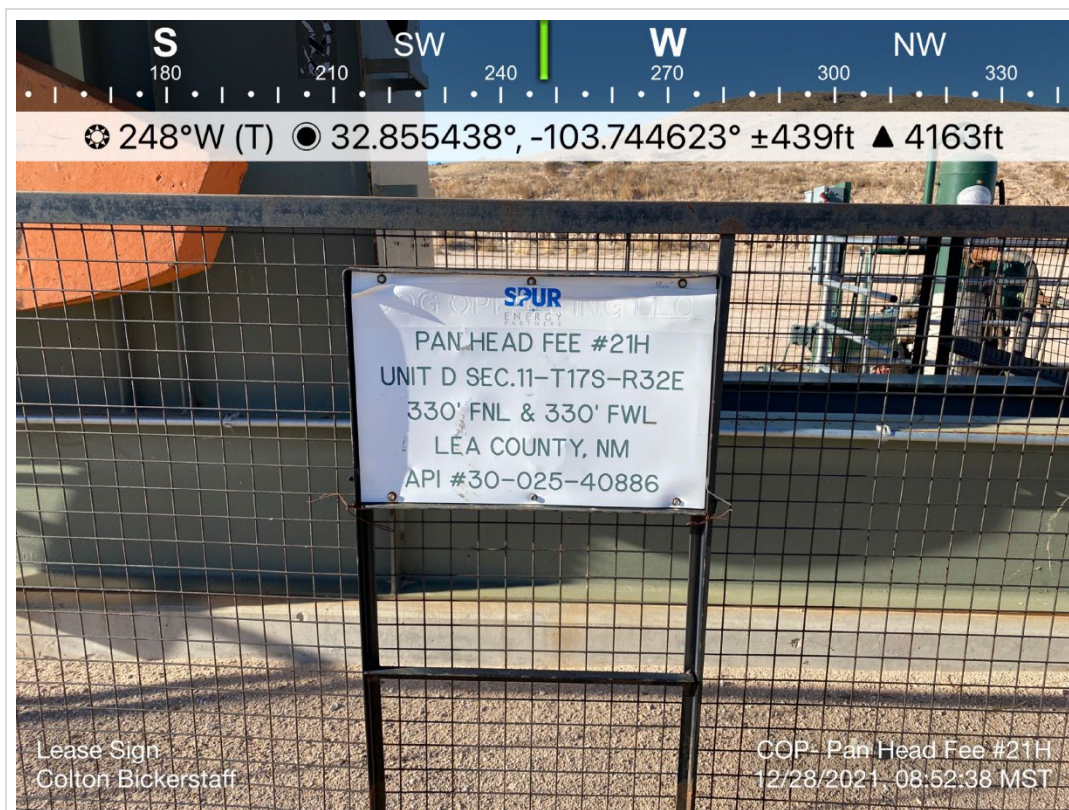
CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------------|--------------------------------------|--|---|--|---|--|---|--|--|--|-------------------------|--|------------|--|------------|--|--|--|--|--|--|--|--|--|
| Company Name: Tetra Tech | | P.O. #: | | BILL TO | | ANALYSIS REQUEST | | | | | | | | | | | | | | | | | | | |
| Project Manager: Sam Abbott | | | | Company: Tetra Tech | | | | | | | | | | | | | | | | | | | | | |
| Address: | | | | Attn: Sam Abbott | | | | | | | | | | | | | | | | | | | | | |
| City: | | State: | | Address: | | | | | | | | | | | | | | | | | | | | | |
| Phone #: | | Fax #: | | City: | | | | | | | | | | | | | | | | | | | | | |
| Project #: 296-MD-02618 | | Project Owner: ConocoPhillips | | State: | | Zip: | | | | | | | | | | | | | | | | | | | |
| Project Name: Pan Head Fee #214 | | | | City: | | | | | | | | | | | | | | | | | | | | | |
| Project Location: Lea County, NM | | | | State: | | Zip: | | | | | | | | | | | | | | | | | | | |
| Sample Name: Cohen BTEX test | | | | Phone #: 572-739-7874 | | Fax #: | | | | | | | | | | | | | | | | | | | |
| FOR LAB USE ONLY | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lab I.D. | Sample I.D. | (G)RAB OR (C)OMP. | | # CONTAINERS | | MATRIX | | PRESERV | | SAMPLING | | | | | | | | | | | | | | | |
| | | | | | | GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : | | ACID/BASE: ICE / COOL OTHER : | | DATE | | TIME | | | | | | | | | | | | | |
| HA37326 | | 1 AH-1 (0-1') | | G | | 1 | | X | | 1/28/21 | | X | | BTEX 80213 | | BTEX 82603 | | | | | | | | | |
| 2 AH-1 (2-3') | | G | | 1 | | X | | 1/28/21 | | X | | TPH 8015M (GRO-DRO-ORO) | | | | | | | | | | | | | |
| 3 AH-1 (4-5') | | G | | 1 | | X | | 1/28/21 | | X | | Chloride 300.0 4500 | | | | | | | | | | | | | |
| 4 AH-2 (0-1') | | G | | 1 | | X | | 1/28/21 | | X | | | | | | | | | | | | | | | |
| 5 AH-3 (0-1') | | G | | 1 | | X | | 1/28/21 | | X | | | | | | | | | | | | | | | |
| 6 AH-4 (0-1') | | G | | 1 | | X | | 1/28/21 | | X | | | | | | | | | | | | | | | |
| 7 AH-5 (0-1') | | G | | 1 | | X | | 1/28/21 | | 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: Cohen BTEX test | | Date: 1/28/21 | | Received By: Sam Abbott | | Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | Add'l Phone #: | | Remarks: Email inverse results to Sam Abbott | | | | | | | | | | | | | | | |
| Relinquished By: | | Date: | | Received By: | | Verbal Result: | | Add'l Phone #: | | Remarks: | | | | | | | | | | | | | | | |
| Delivered By: (Circle One) | | Observed Temp. °C | | Sample Condition | | CHECKED BY: (Initials) | | Turnaround Time: | | Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Sampler - UPS - Bus - Other: | | Corrected Temp. °C | | Cool Intact | | Thermometer ID #113 | | Bacteria (only) | | Sample Condition | | | | | | | | | | | | | | | |
| | | | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | Observed Temp. °C | | | | | | | | | | | | | | | |
| | | | | | | | | | | Corrected Temp. °C | | | | | | | | | | | | | | | |

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

APPENDIX D

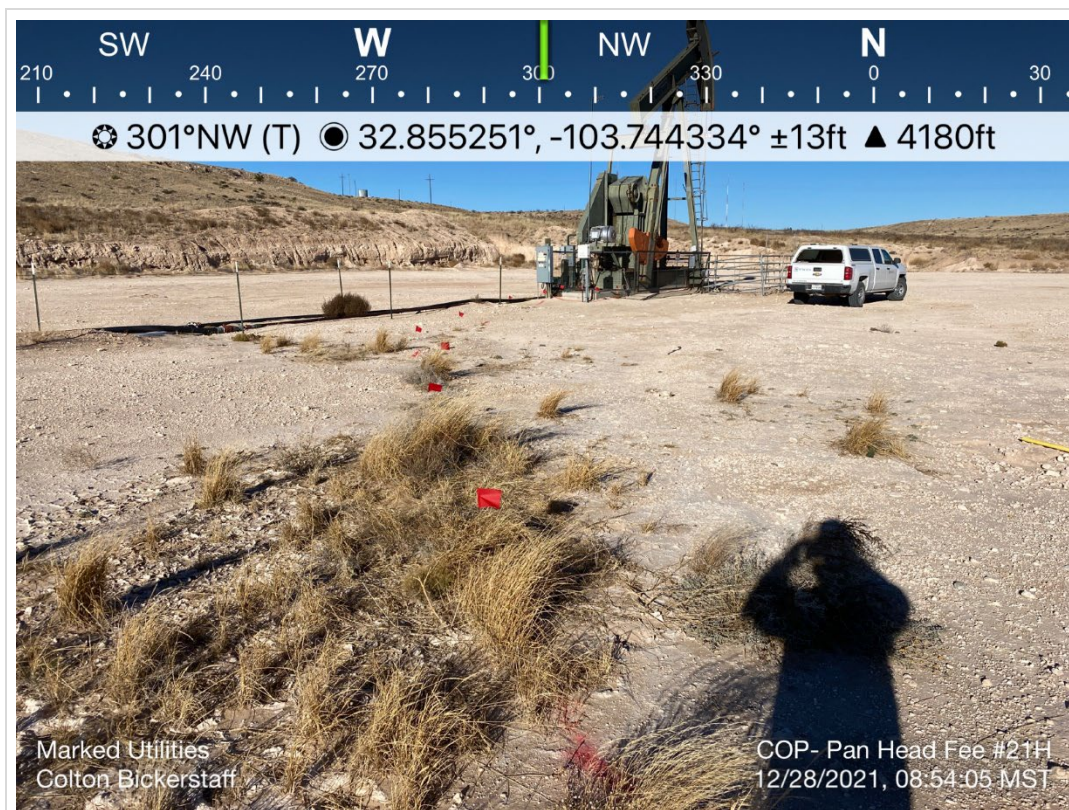
Photographic Documentation



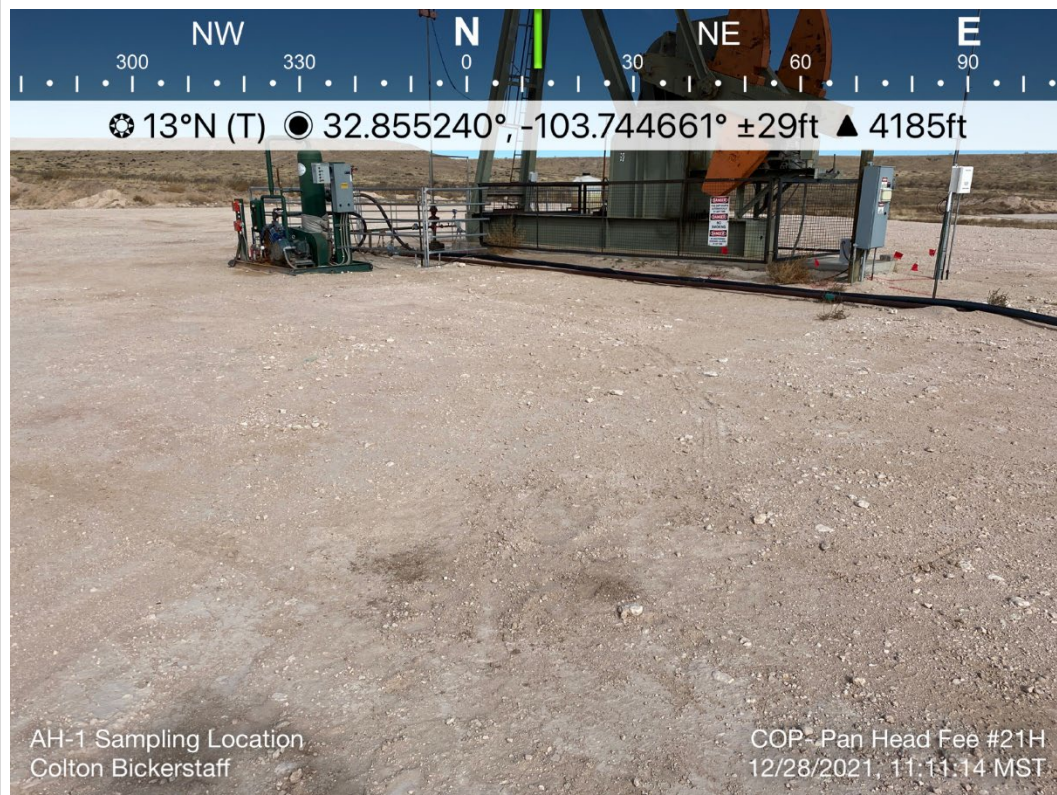
| | | | |
|--|-------------|---|------------|
| TETRA TECH, INC. PROJECT NO. 212C-MD-02618 | DESCRIPTION | View west-southwest. Site signage; operator, location, and various information. | 1 |
| | SITE NAME | Pan Head Fee 21H | 12/28/2021 |



| | | | |
|--|-------------|---|------------|
| TETRA TECH, INC. PROJECT NO. 212C-MD-02618 | DESCRIPTION | View east-southeast. Marked buried utility from pumping unit. | 2 |
| | SITE NAME | Pan Head Fee 21H | 12/28/2021 |



| | | | |
|--|-------------|---|------------|
| TETRA TECH, INC. PROJECT NO. 212C-MD-02618 | DESCRIPTION | View west-northwest. Southeast portion of pad and pumping unit. | 3 |
| | SITE NAME | Pan Head Fee 21H | 12/28/2021 |



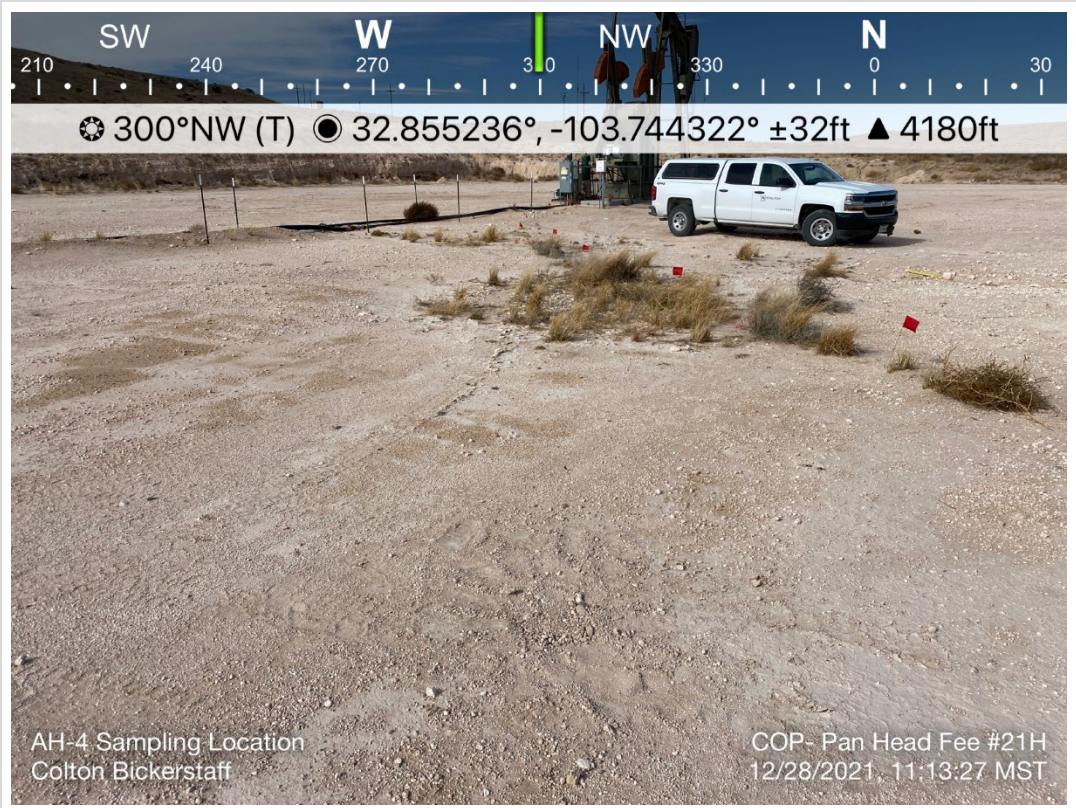
| | | | |
|--|-------------|-------------------------------------|------------|
| TETRA TECH, INC. PROJECT NO. 212C-MD-02618 | DESCRIPTION | View north. AH-1 sampling location. | 4 |
| | SITE NAME | Pan Head Fee 21H | 12/28/2021 |



| | | | |
|--|-------------|------------------------------------|------------|
| TETRA TECH, INC. PROJECT NO. 212C-MD-02618 | DESCRIPTION | View east. AH-2 sampling location. | 5 |
| | SITE NAME | Pan Head Fee 21H | 12/28/2021 |



| | | | |
|--|-------------|-------------------------------------|------------|
| TETRA TECH, INC. PROJECT NO. 212C-MD-02618 | DESCRIPTION | View south. AH-3 sampling location. | 6 |
| | SITE NAME | Pan Head Fee 21H | 12/28/2021 |



| | | | |
|--|-------------|--|------------|
| TETRA TECH, INC. PROJECT NO. 212C-MD-02618 | DESCRIPTION | View west-northwest. AH-4 sampling location. | 7 |
| | SITE NAME | Pan Head Fee 21H | 12/28/2021 |

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 73868

CONDITIONS

| | |
|---|---|
| Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701 | OGRID: 229137 |
| | Action Number: 73868 |
| | Action Type: [C-141] Release Corrective Action (C-141) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|-----------|----------------|
| bbillings | None | 3/7/2022 |